Irvine Ranch Water District Integrated Pest Management Plan

2021 Annual Report

IPM Plan Implementation
Irvine, California

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EXECUTIVE SUMMARY

Endemic Environmental Services, Inc. (EES) has developed this Irvine Ranch Water District (IRWD) Annual Monitoring Report for the calendar year period of January 2021-December 2021 in accordance with the Integrated Pest Management (IPM) Plan that was established as of July, 2019. The purpose of the IPM Plan was to manage long-term pest prevention while protecting human health, nontarget organisms, and the surrounding environment. This Annual Monitoring Report functions to document and account for the chemical and non-chemical treatment methods employed for the land management and maintenance of the San Joaquin Marsh and the 42 Natural Treatment System (NTS) basins. The report also describes the minimization measures that were taken in compliance with the IPM Plan to ensure that the maintenance of these sites utilized environmentally sensitive pest management strategies and least-toxic control methods at each facility. The IPM Plan for IRWD was first implemented in September 2019. This Annual Monitoring Report expands on the results and recommendations that were established in the first report covering September-December 2019 and the most recent report from the previous calendar year from January 2020-December 2020.

The IRWD facilities that are evaluated in this report include Rattlesnake Reservoir, San Joaquin Reservoir, Sand Canyon Reservoir, and Syphon Reservoir, with a focus on the San Joaquin Marsh Zones 1-4, and the 42 Natural Treatment System (NTS) basins throughout Irvine, California.

EES field biologists conduct monthly non-native plant surveys at each site for the San Joaquin Marsh and the 42 NTS basins. During the non-native plant survey, the biologists identify the native, non-native, and invasive plant species and collect geospatial location data through the use of point and polygon data in the ArcGIS Field Maps software. In the Survey Report, the biologists provide specific treatment recommendations for each species that prioritize non-chemical removal methods such as manual removal, mechanical removal, mulching and soil solarization. Mechanical removal methods such as hula hoe, weed trimming, and mowing are recommended for large plots of non-native plants where native plants are not present. If native plants are in the area, they are delineated and marked with pink pin flagging. Chemical treatment methods are only recommended for target species that pose a significant threat to the ecosystem and demonstrate continued resistance and resilience to non-chemical removal methods. When target species do need to be treated chemically, spot spraying is employed to minimize the amount of pesticide used. These specific target species have all been documented and justified through the Memoranda Reports at the end of this document (Appendix B). The data that is collected at the sites is then analyzed to inform the weekly reports and identify the sites that have persistent and recurrent non-native species over time.

EES does not survey Rattlesnake Reservoir, San Joaquin Reservoir, Sand Canyon Reservoir, and Syphon Reservoir, which are managed by IRWD's Facilities/Fleet Manager, but acreage and pesticide usage totals from those facilities have been included in this report. Additionally, the IRWD's Facilities/Fleet Manager oversees 147 other facilities that are not individually described in this report. However, these facilities have been included in the acreage totals, though no pesticides were applied at these sites, with the exception of San Joaquin Reservoir.

The chemical pesticides usage at the San Joaquin Marsh and NTS sites has decreased significantly and continuously over the course of the past four years. In 2018, the use of chemical pesticide totaled 78.34 gallons (gal) between the San Joaquin Marsh and NTS basins. In 2019, the San Joaquin Marsh and NTS basin total was reduced to 61.78 gallons and by 2020 the total chemical pesticide application used was only 13.45 gallons. The annual report of 2020 represents the first full year that the IPM was implemented. In 2021, the total chemical pesticide usage for the San Joaquin Marsh and NTS basins was very similar to 2020, with a total of 14.41 gallons, which demonstrates a continued commitment to the minimization of chemical treatment methods. Through the implementation of the IPM Plan, the chemical pesticide use at the IRWD sites has been reduced by roughly 81.6% when comparing the initial totals of 2018 to the current total pesticide use in 2021.

The additional IRWD facilities that are overseen by the Facilities/Fleet Manager also decreased significantly as only 3 gallons of herbicide were applied in 2021. This year the only additional site where herbicide was applied was the San Joaquin Reservoir. This was a very significant decrease when compared to the initial total of 84 gallons in 2018, which demonstrates a 96.4% reduction in herbicide use over the past three years.

LIST OF ABBREVIATIONS & ACRONYMS

ac acre(s)
af acre-foot/acre-feet
Cal-IPC California Invasive Plant Council
EES Endemic Environmental Services
EPA United States Environmental Protection Agency
ft foot/feet
gal gallon(s)
I-5 Interstate 5
I-405 Interstate 405
IPM Integrated Pest Management
IRWD Irvine Ranch Water District
NTS Natural Treatment System
SJM San Joaquin Marsh
SR-133 State Route 133
SR-241 State Route 241
SR-261 State Route 261

INTRODUCTION

The Irvine Ranch Water District (IRWD) Integrated Pest Management (IPM) Plan functions to provide guidelines and measures that effectively carry out the long-term prevention of pests while prioritizing the health and safety of the public and surrounding environment (soil conditions, water quality, etc.). An IPM is defined as a process that manages pests through environmentally and economically responsible strategies that mitigate environmental hazards and protect human health, nontarget organisms, and the circumambient ecosystem (Bright 1999). The primary approach for the IPM program is pest prevention, which is then followed up with management actions that reduce the likelihood that the pest populations will return.

This ecosystem-based management strategy is a science-based decision-making system that leverages non-chemical treatments to minimize and mitigate impacts from target pests. These non-chemical techniques include hand removal, hula hoeing, weed trimming, disking, mowing, mulching, and solarization. The use of chemical treatments such as the use of pesticides, herbicides, and insecticides is reserved only for persistent target species with high spreadability and high likelihood for impact on the surrounding ecosystem. The IPM defines specific tolerance levels to identify when a pest population has reached a level where active pest control is needed. The biologist then provides pest treatment recommendations that provide the most effective and environmentally sustainable solution.

The integration of continuous monitoring and adaptive management also ensures that feedback and improvements can be made to establish the most effective and elegant solutions over time. In order to fulfill the objectives of the IPM, site conditions must be monitored before, during, and after all treatment methods. These methods must also be assessed and revised through active adaptive management in order to ensure the IPM success criteria is being met effectively. This Annual Monitoring Report thus aims to summarize and assess these long-term pest management methods that were employed at the San Joaquin Marsh and IRWD NTS Sites for the calendar year of January 2021-December 2021.

Guiding Principles and Core Elements

Following the lead of other public entities such as the City of Irvine and Irvine Unified School District, Irvine Ranch Water District (IRWD or District) is implementing this Integrated Pest Management (IPM) Plan, which focuses on long-term prevention or suppression of pests while protecting human health, the environment, and nontarget organisms. The District — steward of numerous facilities, wetlands and habitat, much of which is maintained in a native, natural state —adopts this organic-first policy for landscaping and pest control, with specific limitations on the use of pesticides and chemicals.

This IPM Plan includes the following components:

- A framework for implementing IPM practices at IRWD facilities and properties
- Consistency with other Orange County-area agencies' IPM approaches
- Training of staff to encourage a mindset of progressive pest-management principles
- Making the Integrated Pest Management program public (transparency)

- Monitoring and reporting of actions associated with implementation of the IPM Plan

The focus of this IPM Plan is on the pesticides (rodenticides and herbicides) that are used to control insect pests and noxious weed infestations at IRWD facilities. The purpose of this plan is to guide the use of environmentally sensitive pest management strategies and least-toxic control methods at facilities maintained and managed by IRWD. IPM is defined as managing pests (plants, fungi, insects, animals) in a way that protects human health and the surrounding environment in an economically responsible way through the most effective, least-risk option. Core elements of IPM include:

- Pest prevention to avoid the use of pesticides or other pest-control methods
- Non-chemical methods as first choice for pest control
- Use of non synthetic-based herbicides, referred to in this plan as organic
- Use of chemicals and pesticides only in target locations and for targeted species
- Never use EPA Category I or II pesticides or glyphosate in parks, playgrounds or other areas where the public congregates
- Routine inspection, reporting and monitoring
- Transparent communication

When pest prevention is unsuccessful or when noxious weeds are already established, the approach to eliminate these species from an area should follow a systematic decision-making process. This decision-making process is led through an established system of Pesticide Ranking and Use Categories. Use of non-chemical control methods should first be exercised. When physical control methods are not an option, organic control methods may be needed. EPA Category II and III Pesticides should only be used when necessary after supervisorial approval or when the non-chemical methods conflict with the regulatory requirements. High-potential-hazard pesticide applications may only be considered in emergency situations that present a public health or environmental threat (ESA 2019, LSA 2020).

METHODS

EES biologists conducted ground-based non-native plant field surveys on a monthly basis at the San Joaquin Marsh and at IRWD's Natural Treatment System (NTS) basins (Baldwin 2017). All site locations that were surveyed as part of this project are identified in the Map 1 in Appendix A. During the non-native plant survey, the biologists identified the native, non-native, and invasive plant species and collected geospatial location data through the use of point and polygon data in the ArcGIS Field Maps software. In the Survey Report, biologists provided specific treatment recommendations for each species that prioritized non-chemical removal methods such as manual removal, mechanical removal, mulching and soil solarization (Ruiz 2003). The data that was collected was then analyzed and presented in order to track non-native growth trends, invasive spreadability, and treatment method efficacy over time. Percent cover, treatment frequency, and total application rate measures were analyzed in order to determine the sites with the most significant non-native plant spread and persistence throughout the year.

Chemical treatment methods such as organic chemical control and prioritized chemical pesticide control were employed only for target species that could not be successfully treated through non chemical removal methods. The specific target species were plants that were listed on the California Invasive Plant Council (Cal-IPC) Inventory, though additional nonnative and invasive species have also been targeted if they demonstrated continuous spreadability and persistence at the sites. The primary target species included Spanish false fleabane (*Pulicaria paludosa*), perennial pepperweed (*Lepidium latifolum*), curly dock (*Rumex crispus*), Bermuda grass (*Cynodon dactylon*), pampas grass (*Cortaderia selloana*), and stinknet (*Oncosiphon piluliferum*). A Memorandum was written for each target species in order to detail the justification and decision-making process for the use of chemical treatment (Appendix B). The EES biologists also provided native seeding recommendations for sites with bare or exposed soil and for sites where non-native removal activities recently took place. The seeding recommendations encourage native establishment and prevent the likelihood of non-native species from rapidly establishing in open areas.

EES biologists did not conduct monthly surveys for Rattlesnake Reservoir, San Joaquin Reservoir, Sand Canyon Reservoir, and Syphon Reservoir as these reservoirs were managed by IRWD's Facilities/Fleet Manager. However, this report does include the chemical pesticide usage totals for all of these reservoirs based on data collected by the IRWD Facilities/Fleet Manager.

INTEGRATED PEST MANAGEMENT APPLICATION SITES

Recycled Water Reservoirs

IRWD owns and operates an extensive recycled water system, which includes four seasonal-storage reservoirs: Rattlesnake, San Joaquin, Sand Canyon, and Syphon. The primary purpose of these reservoirs is to provide public and commercial irrigation. The water is not palatable but is utilized for toilet flushing, for cooling towers, for dust control on construction sites, and for industrial processes such as concrete production and composting. The IRWD reservoirs operate on a seasonal basis, as they are filled with water from the surrounding recycling plants during winter months when the irrigation demand is low. The constructed dams are certified safe, frequently inspected, and restricted from public access.

Rattlesnake Reservoir

The Rattlesnake Reservoir is one such recycled water storage reservoir that is owned and operated by IRWD. Previously, the main function of the reservoir was to provide water for agricultural irrigation. It lies south of Loma Ridge and north of Portola Parkway, in between SR-261 and SR-241. The reservoir operates for both the dry and wet season flows. No chemical pesticides were used at the Rattlesnake Reservoir for the period of January-December 2021.

San Joaquin Reservoir

San Joaquin Reservoir was historically used as a source of drinking-water reservoir by seven cities and water districts, and now the reservoir is used to store recycled water. It is located south of Bonita Canyon Drive and north of Newport Ridge Drive, in between Chambord Street and San Miguel Drive. The reservoir provides roughly 1 billion gallons of seasonal water storage. The operation of this reservoir is designed to maximize water storage during the wet season when irrigation demands are lower. During the dry season, water is used to provide landscape irrigation water for Irvine, Newport Coast, and Newport Beach. Chemical pesticide application was limited to the invasive plant species that persisted along the dam face and around the reservoir that posed a threat to cracking the reservoir liner. Spraying was used in this case due to safety concerns related to manually or mechanically removing the plants on the dam face and slopes. The safety hazard evaluation determined that spraying was the only viable option for safely treating the non-native vegetation and preventing damage to the liner. A total of 3 gallons of Roundup Pro Max Herbicide was used at the reservoir for the period of January-December 2021.

Sand Canyon Reservoir

The Sand Canyon Reservoir lies adjacent to the Strawberry Farms Golf Club, parallel to Ridgeline Drive in Irvine, California. The reservoir takes up a 42 acre (ac) area and has a water storage capacity of 250 million gal and an average depth of 18 feet (ft). The associated watershed makes up roughly 4,288 acres of the surrounding area. This reservoir is used for both seasonal and operational storage and is monitored and surveyed by Endemic on a quarterly basis for non-native vegetation and nesting birds. No chemical pesticides were used at Sand Canyon Reservoir for the period of January-December 2021.

Syphon Reservoir

The Syphon Reservoir is located just west of State Route 133 and north of Portola Highway in Irvine, California. The reservoir has historically been used to store irrigation water and is now also used in the IRWD recycled water system as a storage facility. The reservoir is made up of a 16.2 acre area that has a water storage capacity of 174 million gallons. No chemical pesticides were used at the Syphon Reservoir for the period of January-December 2021 as all non-native vegetation was removed by manual and mechanical methods.

San Joaquin Marsh

The San Joaquin Marsh (SJM) and Wildlife Sanctuary in Irvine, California is made up of 281.58 acres of coastal freshwater wetlands that provide valuable habitat for local native species while supplying natural water treatment services for the San Diego Creek. Conservation and restoration efforts have restored roughly half of the San Joaquin Marsh to a natural state that helps filter contaminants when the water is cycled through the system. The water from the San Diego Creek is naturally treated through the SJM wetlands before it reaches the protected and preserved Upper Newport Bay and the ocean.

The IRWD managed sections of the San Joaquin Marsh has been divided into four zones as a means to organize and manage the landscaping and non-native treatments. In the past year, IPM activities at the marsh consisted entirely of manual and mechanical removal methods for non-native plants. In alignment with the goals and objectives of the IPM Plan, no chemical pesticides were used to control the non-native species that were present on the site. Target species such as Spanish false fleabane, perennial pepperweed, curly dock, and pampas grass were controlled through a combination of hand pulling, uprooting, weed trimming, and mowing. A total of 44 nonnative plant species were identified at the San Joaquin Marsh between June and December 2021. Table 1 identifies the number of non-native plant species, approximate percent cover, and treatment methods at each of the four zones. No chemical pesticide treatments were employed for the non-native plant species control in these four zones.

Natural Treatment Systems

IRWD's Natural Treatment Systems have been designed from the same successful NTS that has been established at the San Joaquin Marsh. These sites function to provide an environmentally conscious and economical solution to treat dry-weather runoff. The treatment systems naturally remove contaminants from the wastewater that enters through natural and urban runoff. The NTS basins function in a similar way to the San Joaquin Marsh, though they utilize small man-made wetlands that have been integrated throughout the San Diego Creek Watershed. The strategic design treats low-flow runoff and storm flows sourced throughout Irvine by removing contaminants such as nitrogen, phosphorus, and bacteria. The design not only treats the runoff, but also prevents the potential contaminants from ultimately reaching the ecologically sensitive habitat of the Upper Newport Bay. The following section describes the non-native plant treatment methods that were utilized from January 2021-December 2021 for each of the 42 NTS basins that have been integrated into the IPM Plan. Table 1 describes the number of invasive species identified, approximate percent cover, and the treatment recommendations that have been established at each basin from the period of June 2021-December 2021, based on specific EES assessment and consultation.

RESULTS OF 2021 INTEGRATED PEST MANAGEMENT PLAN PRACTICES

Table 1. Summary of Invasive Plants and Treatment Methods in NTS Basins from June to December 2021. These data are based on EES recommendations and not the ultimate amount sprayed.

Basin Name[1]	Total Number of Invasive Species	Treatment Methods Recommended	Average Percent Coverage in Invasive Species Polygons	Target Invasive Species Present On Site	Frequency of Occurrence for Target Invasive Species
Agua Chinon A	7	Hand removal, herbicide	50%	Spanish false fleabane	1
Agua Chinon B	6	Hand removal, herbicide	60%	Spanish false	3

				fleabane	
Aquila Springs	15	Mow, Hand removal, herbicide	35%	Spanish false fleabane & stinknet	5 , 1
Cypress A	10	Hand removal, herbicide	60%	Spanish false fleabane	5
Cypress B	8	Mow, Hand removal, herbicide	40%	Spanish false fleabane	5
Cypress C	8	Mow, Hand removal, herbicide	80%	None	0
Cypress D	8	Herbicide	10%	None	0
District 5A[2]	6	Hand removal, Herbicide	40%	Spanish false fleabane	1
District 5B[2]	5	Hand removal, Herbicide	30%	Spanish false fleabane	2
District 5C[2]	4	Mow, Hand removal, Herbicide	40%	Spanish false fleabane	2
Eastfoot Retarding Basin	10	Mow, Herbicide	90%	None	0
Eastwood	10	Hand removal, Mow, Herbicide	90%	Spanish false fleabane	6
El Modena	9	Hand removal	10%	Spanish false fleabane	2
Floral View	10	Herbicide, Hand removal, Hula Hoe	10%	Spanish false fleabane	2
Forge Meadows	11	Mow, Hand removal, herbicide	80%	Spanish false fleabane	4
Hidden Canyon	20	Hand removal, Mow, Herbicide	90%	None	0
Iluna Springs	14	Mow, Hand removal, herbicide	90%	Spanish false fleabane & Stinknet	6
Laguna Altura North	9	Mow, Hand removal, herbicide	20%	Spanish false fleabane	2
Laguna Altura South	10	Mow, Hand removal, herbicide	55%	Spanish false fleabane	4
Los Olivos	14	Mow, Hand removal, herbicide	75%	Spanish false fleabane	6
Los Olivos South	6	Mow, Herbicide, hand removal	40%	Spanish false fleabane	4

Lower Eastfoot	15	Hand removal, herbicide	90%	Spanish false fleabane	3
Marine Meadows	10	Hand removal, Mow, Herbicide	60%	Spanish false fleabane & Pepperweed	6 , 1
Marshburn	13	Mow, Hand removal, herbicide	99%	Spanish false fleabane	5
Middle Eastfoot	13	Mow, Hand removal, herbicide	80%	Spanish false fleabane	5
Old Laguna	11	Mow, Hand removal, herbicide	75%	Spanish false fleabane	1
Orchard Meadow	14	Mow, spot herbicide treatment	90%	Spanish false fleabane	4
Orchard Retarding Basin	11	Mow, herbicide	90%	None	0
Port Culver	11	Hand removal, Mow, herbicide	40%	Spanish false fleabane	6
Portola Springs	10	Hand removal, Mow, Herbicide	90%	Spanish false fleabane	4
Quail Meadows	9	Mow, Hand removal, herbicide	60%	Spanish false fleabane	3
Quail Springs	13	Mow, Hand removal, herbicide	90%	Spanish false fleabane	4
Ridge Valley A	16	Hand removal, Mow, Herbicide	30%	Spanish false fleabane	5
Ridge Valley B	7	Hand removal, Mow, Herbicide	98%	Spanish false fleabane	3
Ridge Valley C	7	Hand removal, hula hoe, herbicide	35%	Spanish false fleabane	3
Sand Canyon	5	Hand removal	5%	None	0
Sports Park	11	Mow, Hand removal, herbicide	40%	Spanish false fleabane	5
Trabuco	10	Mow, Hand removal, herbicide	50%	Spanish false fleabane	6
Trabuco East	9	Hand removal, herbicide	30%	Spanish false fleabane	5
Turtle Ridge	12	Hula hoe, Mow, Hand removal, herbicide	20%	None	0
Twisted Oak	9	Mow, herbicide	95%	Spanish false	2

				fleabane	
Upper Eastfoot	13	Hand Removal, herbicide	50%	Spanish false fleabane	3
Zone 1: San Joaquin Marsh	14	Hand removal, herbicide	15%	Spanish false fleabane	5
Zone 2: San Joaquin Marsh	15	Mow, Hand removal, herbicide	30%	Spanish false fleabane	7
Zone 3: San Joaquin Marsh	13	Hand removal, Mow, Herbicide	20%	Spanish false fleabane	7
Zone 4: San Joaquin Marsh	19	Hand removal, herbicide	40%	Spanish false fleabane	7, 1

1. Refer to Map 1 in Appendix for a map of basin locations.
2. District 5 A-C are new sites and therefore the site data covers only the period from September-December 2021.

Summary of Integrated Pest Management Usages

In alignment with the goals established in the IPM, chemical pesticide application has been significantly reduced at the San Joaquin Marsh, NTS basins, and other IRWD facilities when compared to pre-implementation years. Table 2 summarizes and compares the chemical pesticide use from 2018-2021. The IPM activities were first established in September 2019. Initially, chemical pesticide use totalled 162.24 gallons for the pre-establishment year of 2018. Since then, the total pesticide use has decreased significantly for both the SJM and NTS basins and for the Other IRWD Facilities. For the year of 2021 the total pesticide use was reported at only 17.41 gallons.

Table 2. Pesticide Usage Comparison.

Period	Sites	Prioritized chemical pesticides (gal)	Organic pesticides (gal)	Total (gal)
2018	**SJM/NTS Basins**	78.34	-	162.34
	Other IRWD Facilities	84.00	-	
Jan-June 2019	**SJM/NTS Basins**	60.53	-	60.53
	Other IRWD Facilities	N/A	N/A[1]	
Sept-Dec 2019	**SJM/NTS Basins**	0.05	1.20	1.97
	Other IRWD Facilities	0.72	-	
Jan-Dec 2020	**SJM/NTS Basins**	13.45	-	15.70
	Other IRWD	2.25	-	

	Facilities			
Jan-Dec 2021	**SJM/NTS Basins**	14.41	-	17.41
	Other IRWD Facilities	3	-	

1. This information was not tracked by the Fleet/Facilities Manager in 2019.

gal=gallon(s)
IRWD= Irvine Ranch Water District
N/A= Not Available
NTS= Natural Treatment System
SJM= San Joaquin Marsh

DISCUSSION AND RECOMMENDATIONS

The IPM activities in 2021 focused primarily on reducing the non-native plant species at each site through manual and mechanical treatments. The use of herbicide was reserved only for target plants at the NTS sites, which was minimized through spot-treatment and selective avoidance. The chemical herbicides were applied to specific species based on past experience where the non-chemical treatments did not reduce the abundance or spread of these aggressive non-natives. The only two target species that required herbicide use throughout the period of June 2021-December 2021 were stinknet and Spanish false fleabane. The usage of chemical herbicide for these species has continued to be a necessary form of control and has reduced the amount of non-native species throughout the year. The use of chemical herbicide to spot treat non-native plant species will likely be able to be reduced in time as the existing seed bank is exhausted. Restoration has taken place in several NTS basins in order to increase native plant species cover and establishment and in turn reduce the non-native plant species cover and opportunistic spread of invasive plants.

The Pesticide Usage Comparison demonstrates a continuous decline in the use of pesticides at the San Joaquin Marsh and NTS sites from 2018 to 2021 (Table 2). For the period of January 2021-December 2021, no pesticides were used at the San Joaquin Marsh. Tables 3 and 4 present detailed information for the quantity, frequency, average pesticide rate, and total area of pesticide use at the various NTS sites as documented by LandCare. These results differ slightly from the EES results of Table 1 based on the herbicide application during the period of January 2021-June 2021 and based on differences between EES recommendations and LandCare applications. The five sites with the highest quantity of pesticide use included: Cypress Meadow, Middle Eastfoot, Ridge Valley A, Hidden Canyon, and Los Olivos. The four sites with the highest frequency of pesticide use included: Middle Eastfoot, Ridge Valley A, Laguna Altura South, and Eastwood. The primary target invasive species present at these sites was Spanish false fleabane. The higher frequency and spread of invasive species could be attributed to a variety of factors such as open space availability, water access, prior disturbance agents, and proximity to high traffic areas.

EES recommends that IRWD continues to strive to minimize the use of chemical pesticides while ensuring the prevention of invasive species to avoid further potential ecological and economic regional impact from invasive species. In these sites with high persistence of aggressive target species, it is recommended that the spot treatments continue to prevent further spread, while also leveraging native habitat restoration methods after the species have been cleared in order to support local ecosystem resilience.

Table 3. Pesticide Usage in the NTS as reported by LandCare in the Chemical Pesticide Usage Reports from January-December 2021.

Basin Name	Pesticide Name (Active ingredients)	Total Amount Applied (gal)
Agua Chinon A	Lifeline (Glufosinate)	0.33
Agua Chinon B	Lifeline (Glufosinate)	0.19
Aquila Springs	Lifeline (Glufosinate)	0.45
Cypress A	Lifeline (Glufosinate)	0.34
Cypress B	Lifeline (Glufosinate)	0.14
Cypress C	Lifeline (Glufosinate)	0.23
Cypress D	Lifeline (Glufosinate)	0.16
Cypress Meadow A	Lifeline (Glufosinate)	1.23
Cypress Meadows B	Lifeline (Glufosinate)	0.22
Eastfoot Basin	Lifeline (Glufosinate)	0.27
Eastwood	Lifeline (Glufosinate)	0.74
Floral View	Lifeline (Glufosinate)	0.19
Forge Meadows	Lifeline (Glufosinate)	0.11
Hidden Canyon	Lifeline (Glufosinate)	0.89
Illuna Springs	Lifeline (Glufosinate)	0.42
Laguna Altura North	Lifeline (Glufosinate)	0.38
Laguna Altura South	Lifeline (Glufosinate)	0.49
Los Olivos	Lifeline (Glufosinate)	0.79
Lower Eastfoot	Lifeline (Glufosinate)	0.16
Marine Meadows	Lifeline (Glufosinate)	0.04
Marshburn	Lifeline (Glufosinate)	0.22

Middle Eastfoot	Lifeline (Glufosinate)	1.00
Old Laguna	Lifeline (Glufosinate)	0.19
Orchard Meadows	Lifeline (Glufosinate)	0.25
Orchard Retarding Basin	Lifeline (Glufosinate)	0.11
Port Culver	Lifeline (Glufosinate)	0.13
Portola Spring	Lifeline (Glufosinate)	0.23
Quail Meadows	Lifeline (Glufosinate)	0.33
Quail Spring	Lifeline (Glufosinate)	0.31
Ridge Valley A	Lifeline (Glufosinate)	0.98
Ridge Valley B	Lifeline (Glufosinate)	0.43
Ridge Valley C	Lifeline (Glufosinate)	0.52
Sand Canyon	Lifeline (Glufosinate)	0.09
Sports Park	Lifeline (Glufosinate)	0.69
Trabuco	Lifeline (Glufosinate)	0.59
Trabuco East	Lifeline (Glufosinate)	0.28
Turtle Ridge	Lifeline (Glufosinate)	0.2
Twisted Oak	Lifeline (Glufosinate)	0.06
Upper Eastfoot	Lifeline (Glufosinate)	0.03
Total Usage:	**Lifeline (Glufosinate)**	**14.41**

Table 4. List of the ten NTS sites with the highest pesticide usage based on total amount and total area applied.

Basin Name	Number Treatments in a Year	Average Application Rate	Total area applied (sq. ft.)	Total Amount Applied (gal)
Cypress Meadow A	8	19.75	245,000	1.23
Middle Eastfoot	8	16	329,000	1.0
Ridge Valley A	8	15.60	280,800	0.98

Hidden Canyon	4	26.75	148,000	0.89
Los Olivos	5	20.40	265,000	0.79
Eastwood	8	11.90	297,000	0.74
Sports Park	5	17.60	210,000	0.69
Trabuco	4	19	175,000	0.59
Ridge Valley C	5	13.40	118,000	0.52
Laguna Altura South	8	7.90	154,000	0.49

Non-Chemical Treatment Methods

The primary treatment methods that were employed at the SJM and NTS Sites included manual and mechanical methods that led to successful eradication. A variety of physical methods exist to treat non-native plant species, including hand removal, mechanical removal, mulch, and solarization. These methods are often used in combination to best control non-native plant species. Hand removal of individual non-native species proved to be the control method with the greatest selectivity and cost effectiveness with the least indirect impacts. This had the added benefit of preservation of native species and lower impact to the surrounding environment. These manual methods also included hand digging, cutting, uprooting, and hula hoe. The manual removal strategy is most effective on newly established and small populations with limited distributions.

In addition to manual removal, mechanical removal methods such as weed trimming, disking, and mowing were also employed for large patches of non-native plants that did not have native plants mixed in. These methods were effective in clearing large sections that were impacted, but the technique is most effective when followed up with native habitat restoration so that the cleared areas are not quickly populated by pioneer invasive species. Both mechanical and manual removal techniques made up the majority of the non-native treatment strategy in order to minimize the use of chemical pesticides as much as possible and utilize efficient alternatives that provide successful pest management.

Recommendations

Throughout the IPM implementation period for June-December 2021, several recommendations were suggested in order to minimize the use of chemical pesticides while controlling the non-native plant populations at the NTS sites:

- In the NTS sites, the open areas and bare ground areas should be prioritized as areas of native restoration and seeding to prevent future non-native species establishment. Native habitat restoration techniques such as container planting, seeding, hydromulching, and irrigation system establishment will increase native plant biodiversity and native plant coverage. These habitat restoration methods will help support native establishment by lowering the competition for space from non-native species.

- It is recommended that irrigation systems be established in the dry basin regions of the NTS sites in order to encourage native plant growth in the early spring and summer seasons. This will allow the native plants and seeding to establish and develop resiliency to potential flooding in winter months.
- Lowering the weed abundance and establishing native grasses with strong root systems will help to lower erosion on the slopes and handle inundation in the basins. Examples of native grasses with strong root systems include rushes (*Juncus mexicanus*), salt grass (*Distichlis spicata*), and western sea-purslane (*Sesuvium verrucosum*).
- Flaming is not recommended as a treatment method for invasive plant areas within NTS basins as it is ineffective for many of the perennialnon-native plant species. Flaming in Southern California also poses dangers associated with wildfires.
- It is recommended that the Chemical Pesticide Usage field-monitoring forms include information in regard to the area of the site where the spray was applied. It would be helpful to track the locations of species to which the chemical pesticides were applied. This can be done on the field form or by recording the object ID corresponding to the Field Data Tracking Sheet. Maintaining detailed records of the quantity, location, and species that the chemical pesticide was applied to would be very helpful information that could later be analyzed to assess the effectiveness and continued target areas at each site. A one-time training to cover what information needs to be recorded could also be helpful in ensuring that data collection is standardized.
- EES recommends that maintenance continue to avoid native plant species during the non-native species removal and treatment process. It is also recommended that native plant restoration be implemented in many of the basin bottoms that contain recently mowed areas, low cover, and bare ground. Some basins that exhibit low cover by native species in the basin bottoms that would be crucial in outcompeting invasive plants include Eastfoot Retarding Basin, Quail Springs, Marshburn, Trabuco, Los Olivos South, Eastfoot, and Orchard Meadow. Many other additional NTS sites would benefit from restoration, especially in the basin bottoms. Native habitat restoration techniques would diminish cover by nonnatives and reduce the necessity of using chemical pesticides.
- The use of organic herbicides is not recommended as a method for treating non-native plant species in the NTS basins and it is not recommended as a viable method for the IPM treatment plan. Conventional herbicides have been found to be more effective for controlling non-native plant growth when compared to organic herbicides. Organic herbicides are primarily applicable for young and budding non-native species, but most non-native species in the NTS sites are already established (Ferguson 2004). Organic herbicides are also less cost effective and require higher application rates throughout the year. The higher application rates and physical contact of organic herbicides can also have potential impacts on native pollinators, soil, and water quality (Smith-Fiola and Gill 2017). Mechanical removal methods and spot treated chemical herbicide treatment are therefore recommended to control for the non-native species. As new technologies and organic herbicides develop, EES will continue to test and research the efficacy of new methods in order to ensure the most effective and up-to-date treatment methods are being employed.

REFERENCES

Baldwin, Bruce G., Douglas H. Goldman, David J. Keil, Robert Patterson, Thomas J. Rosatti, and Dieter H. Wilken, eds. 2012. The Jepson Manual: Vascular Plants of California. 2nd ed. Berkeley: *University of California Press.*

Bright, C. 1999. Invasive species: pathogens of globalization. *Foreign Policy*, 50-64.

Environmental Science Associates (ESA). 2019. Integrated Pest Management Plan. *Irvine Ranch Water District.*

Ferguson, James. 2004. Evaluation of Organic Herbicides. HortScience 39(4):876B–876. Website: https://www.researchgate.net/publication/330790627_Evaluation_of_Organic_Herbicides (accessed February 2020).

LSA. 2021. Irvine Ranch Water District Integrated Pest Management Plan 2020 Annual Report. *Irvine Ranch Water District.*

OC-CNPS. 2022. Emergent Invasive Plant Management Program. *Orange County Chapter California Native Plant Society.*

Ruiz, G. M., & Carlton, J. T. 2003. *Invasive species: vectors and management strategies*. Island Press.

Smith-Fiola, D., and Stanton Gill. 2017. Vinegar: An Alternative to Glyphosate? Website: https://extension.umd.edu/sites/extension.umd.edu/files/_docs/programs/ipmnet/Vinegar-AnAlternativeToGlyphosate-UMD-Smith-Fiola-and-Gill.pdf

NATURAL TREATMENT SYSTEMS
(42 Sites)

Forge Meadow

Forge Meadow is a 2.38 ac NTS basin located adjacent to Portola Parkway in north Irvine. This basin consists of two ponds connected by a long channel. In May 2021 the basin was mowed to remove invasive plant cover of 60% or more. Hand removal of invasives between June and September 2021 allowed for more native plants to grow in the area, though the basin still had high cover by nonnative annual species on both the slopes and basin bottom and algae in the water throughout the year. Prevalent species included oxtongue, prickly lettuce, horseweed, and scarlet pimpernel. The only species that was chemically treated was Spanish false fleabane, which was hand-pulled for the majority of the year. In January and November, several areas with Spanish false fleabane were chemically treated.

Figure 1. Pond covered with 80% of algae (left), overview of Forge Meadow as of 10/6/21 (right).

Port Culver

Port Culver is a 1.74 ac basin located north of Portola Parkway and adjacent to a large agricultural area in north Irvine. This basin consists primarily of a pilot channel, but water often overflows from the channel and spreads throughout the bottom of the basin. The slopes of this basin exhibited high cover by annual nonnative species, and mowing in July 2021 followed by successive hand removal reduced the total cover of invasive plants, though some species continue to persist onsite. Chemical herbicide was used three times throughout the year to control Spanish false fleabane, with the greatest application in July covering 25,000 square feet.

Figure 2. Overview of Port Culver as of 10/6/21.

Orchard Meadow

Orchard Meadow is a 2.29 ac basin located north of Portola Parkway and adjacent to a large agricultural area in north Irvine. This basin consists primarily of a pilot channel, but water often overflows from the channel and spreads throughout the bottom of the basin creating a pond. The site exhibited high cover by annual nonnative species, and hand removal reduced the total cover of invasive plants, though some continue to persist onsite. Prevalent species included oxtongue, prickly sowthistle, shortpod mustard, prickly lettuce, flax-leaved horseweed, and scarlet pimpernel. Chemical herbicide was used three times during the year to control Spanish false fleabane at the site, but minimized to the extent feasible.

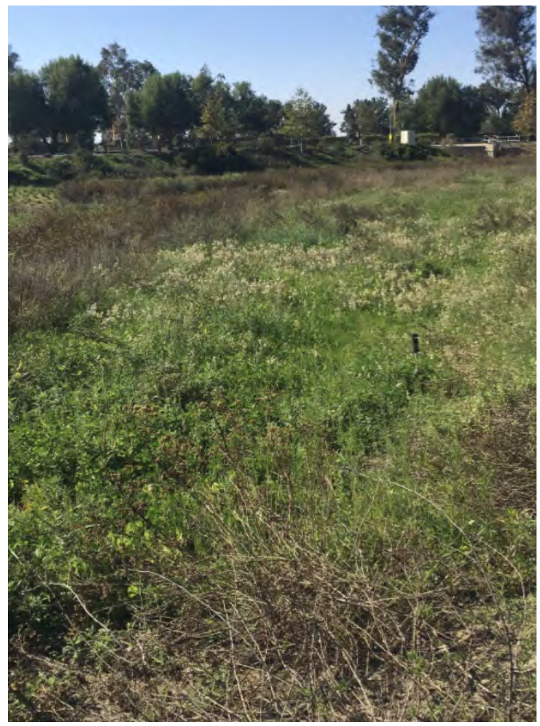



Figure 3. Overview of Orchard Meadow as of 7/14/21 (left), and overview of Orchard Meadow as of 12/01/21 (right).

Lower Eastfoot

Lower Eastfoot is a 2.13 ac basin located north of Portola Parkway and adjacent to residential housing and the 261 freeway in north Irvine. This basin consists primarily of a pilot channel connected with two ponds on each side of the site. The site exhibited high cover by annual nonnative species, and mowing in July 2021 followed by successive hand removal reduced the total cover of invasive plants, though some continue to be present onsite. Prevalent species included oxtongue, prickly lettuce, horseweed, and scarlet pimpernel. One treatment of chemical herbicide was used in July over 15,000 square feet to control Spanish false fleabane at the site.

Figure 4. Overview of Lower Eastfoot as of 10/6/21.

Middle Eastfoot

Middle Eastfoot is a 3.16 ac basin located north of Settlers Road, adjacent to residential housing, the 261 freeway, and adjacent to a large agricultural area in north Irvine. This basin consists primarily of a pilot channel, but water often overflows from the channel and spreads throughout the bottom of the basin creating a pond. The site exhibited high cover by annual nonnative species, and hand removal reduced the total cover of invasive plants, though some continue to persist onsite. Prevalent species included oxtongue, prickly lettuce, horseweed, and scarlet pimpernel. Bulrush overgrowth was mechanically removed in December 2021 with heavy machinery, and native plant vegetation was impacted, leaving behind bare areas in need of restoration. Chemical pesticides were used 8 times throughout the year to control Spanish false fleabane, with each application covering between 20,000 and 65,000 square feet of the site.

Figure 5. Emerging sweetclover and bristly oxtongue along Middle Eastfoot (left), and mowed sedge along Middle Eastfoot 12/8/2 (right).

Upper Eastfoot

Upper Eastfoot is a 1.35 ac basin located east of the 261 freeway, and adjacent to residential housing in north Irvine. This basin consists primarily of a pond on the bottom of the slope. The site exhibited high cover by annual nonnative species, and hand removal reduced the total cover of invasive plants, though some species continue to persist onsite. Prevalent species included oxtongue, prickly lettuce, horseweed, and scarlet pimpernel. One treatment of chemical herbicide was used during the year to control Spanish false fleabane at the site in February 2021.

Figure 6. Overview of Upper Eastfoot as of 5/31/21.

El Modena

El Modena is a 1.60 ac NTS basin located adjacent to S. Hewes St. in north Irvine, and consists of one pond, adjacent to residential housing. High abundance of non-native wildlife such as red-eared sliders and American bullfrogs were present in July 2021. Non-native plant species were present on site throughout the year. Prevalent species included Mexican primrose, fountain grass, birdsfoot trefoil, cheese weed, and European bramble complex. Water levels in the pond decreased in August 2021 and non-native species emerged around the pond, which were removed manually. No chemical treatment was reported for this site.

Figure 7. Canada geese along El Modena pond.

Trabuco

Trabuco is an 18.06 ac basin located north of Trabuco Rd and adjacent to residential housing in north Irvine. This basin consists of two pilot channels connected with three ponds in the West side of the NTS. The slopes and the basin exhibited high cover by annual nonnative species, and mowing in June 2021 reduced the total cover of invasive plants, though some species continue to persist onsite. Prevalent species include shortpod mustard, horseweed, and prostrate bindweed. Non-native species of American bullfrogs were present on site in June, July, and September 2021. Chemical herbicide was used 4 times during the year to control Spanish false fleabane.

Figure 8. Trabuco overview of project area as of 12/8/21.

Trabuco East

Trabuco East is located North of Great Park Blvd. This basin consists primarily of a pilot channel, but water often overflows from the channel and spreads throughout the bottom of the basin. The slopes and the basin exhibited high cover by annual nonnative species, and chemical and manual methods were used to reduce the total cover of invasive plants, though many continue to persist onsite. Prevalent species included rabbitsfoot grass, prickly sowthistle, horseweed, and yellow sweetclover. Herbicide was used three times throughout the year to remove Spanish false fleabane.

Figure 9. Mature horseweed at Trabuco East as of 10/13/21.

Cypress Meadows A

Cypress Meadow A is a 6.03 ac basin located north of the 5 freeway and adjacent to residential housing in north Irvine. This basin consists primarily of three pilot channels connected by a pond at the bottom of the basin. The slopes and the basin exhibited high cover by annual nonnative species, and although chemical and manual methods were used to reduce the total cover of invasive plants, they still exist onsite. Prevalent species included oxtongue, rabbitsfoot grass, prickly sowthistle, horseweed, yellow sweet clover, and Mexican primrose. Non-native wildlife such as American bullfrogs were present in the waterway in May, July and September 2021. Herbicide treatment was used almost monthly to control Spanish false fleabane, totalling 8 applications with the highest instance of spraying covering 80,000 square feet. The site contains a large amount of bare ground, which is vulnerable to invasive species establishment. Native habitat restoration and seeding is recommended.


Figure 10. Overview of Cypress Meadows A as of 10/6/21 (left) and bare ground for recommended seeding as of 12/1/21 (right).

Cypress Meadows B

Cypress Meadow B is a 1.99 ac basin located north of the 5 freeway and adjacent to residential housing in north Irvine. This basin consists primarily of a pilot channel at the bottom of the basin. The slopes and the basin exhibited high cover by annual nonnative species, and mowing and hand removal were used to reduce invasive plants, with demonstrative success over the year. Prevalent species included oxtongue, rabbitsfoot grass, prickly sowthistle, horseweed, yellow sweetclover, and Mexican primrose. Herbicide was sprayed in July, August, and December to control Spanish false fleabane at the site, but it still remains present on site.

Figure 11. Overview of Cypress B as of 12/1/21.

Cypress Meadows C

Cypress Meadow C is a 2.61 ac basin located north of the 5 freeway and adjacent to residential housing in north Irvine. This basin consists primarily of a pilot channel at the bottom of the basin. The slopes and the basin exhibited high coverage of annual nonnative species, and a mixture of mowing and hand removal was recommended to reduce the total cover of invasive plants, though some species continue to persist onsite. Prevalent species included oxtongue, rabbitsfoot grass, prickly sowthistle, horseweed, yellow sweet clover, and Mexican primrose. Chemical herbicides were used in July, August and October to control Spanish false fleabane at the site. Spanish false fleabane continues to emerge in small patches throughout the site.

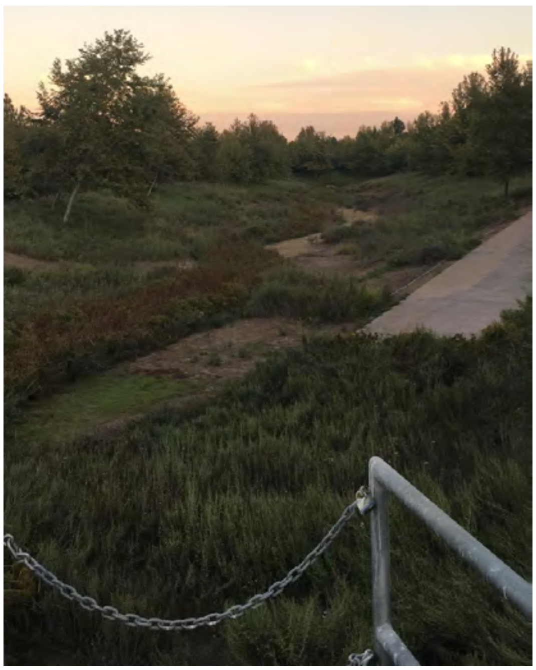


Figure 12. Overview of Cypress Meadows C as of 10/6/21 (left) and as of 12/1/21 (right).

Cypress Meadows D

Cypress Meadow D is a 3.19 ac basin located north of the 5 freeway and adjacent to residential housing in north Irvine. This basin consists primarily of a pilot channel at the bottom of the basin. The slopes and basin exhibited high cover by annual nonnative species, and manual removal was recommended to reduce the total cover of invasive plants, though many species still persist onsite. Prevalent species included oxtongue, rabbitsfoot grass, prickly sowthistle, horseweed, yellow sweet clover, and Mexican primrose. Water in the channel started to dry out in June 2021 and by July 2021 the channel was completely dry until the end of the year. One treatment of chemical herbicide was applied in October to control Spanish false fleabane.

Figure 13. Cypress Meadows D overview as of 10/6/21.

Eastfoot Retarding Basin

Eastfoot Retarding Basin is a 9.96 ac basin located east of Leafy Pass and adjacent to a large agricultural area and residential housing in north Irvine. This basin consists primarily of a pilot channel connected to three ponds at the bottom of the basin. The slopes and the basin exhibited very high cover by annual nonnative species and mowing was recommended most of the year to reduce the total cover of invasive plants, though they still exist in high densities onsite. Prevalent species included oxtongue, rabbitsfoot grass, prickly sowthistle, horseweed, yellow sweetclover, Russian thistle, curly dock, brome, short pod mustard, and Mexican primrose. The ponds and channel dried out by October and remained dry until the end of the year. Five treatments of chemical herbicide were applied during the year to control Spanish false fleabane.

Figure 14. Overview of the Eastfoot Retarding basin as of 9/29/21(left), and emerging white sweetclover, bristly oxtongue, rabbitsfoot grass as of 12/22/21 (right).

Quail Springs

Quail Springs is a 10.85 ac basin located south of the I-405 freeway and adjacent to a large open field area and residential housing in north Irvine. This basin consists primarily of a pilot channel connected to four ponds. The slopes and the basin exhibited high cover by annual nonnative species, and mowing occurred in October 2021 to help reduce the total cover of invasive plants, though some species persist on site. Prevalent species included oxtongue, rabbitsfoot grass, prickly sowthistle, horseweed, yellow sweetclover, Russian thistle, short pod mustard, and Mexican primrose. By September 2021 the west pond was completely dry and by October 2021 the waterway that still contained water was completely covered in algae and duckweed. Chemical pesticides were used four times throughout the year to control Spanish false fleabane.

Figure 15. Emerging invasives at Quail springs as of 11/10/21.

Orchard Retarding Basin

Orchard retarding basin is a 0.79 acre basin located adjacent to a housing development and the Orchard Hills Staging Area. The area consists of a main basin connected to a channel, and slopes that join together with a paved walkway around the edges. In June 2021 the site had a high coverage of invasive plants (up to 90%), and after mowing and continual invasive hand removal, the coverage was reduced to 20% coverage by the end of the year. Prevalent invasive species included rabbitsfoot grass, curly dock, prickly sowthistle, prickly oxtongue, yellow sweetclover and horseweed. Water in the basin was low and stagnant during summer months, but became filled with vegetation growth by December 1st. Native plants in the channel were washed away by storms at the end of December (Figure 16). Two treatments of chemical herbicide were used to remove Spanish false fleabane.

Figure 16. Orchard Retarding Basin overview as of 9/29/21 (left), and waterway after rain (right) as of 12/29/21.

Twisted Oak

Twisted Oak is a 0.33 ac NTS basin located northeast of Northwood High School. It consists of one circular pond. A mixture of mowing and hand removal on the slopes and basin were used to reduce the invasive plant cover, though some species still persist on site. Prevalent invasive species include rabbitsfoot grass, stinknet, English plantain, curly dock, yellow sweetclover, oxtongue, and horseweed. Bare patches on the west side were present in December 2021 and seeding of natives is recommended. One treatment of chemical herbicide was used in November to reduce the persistence of Spanish false fleabane.

Figure 17. Twisted Oak pond covered with duckweed and algae as of 7/14/21(left) and bare patch near the waterway as of 12/22/21 (right).

Agua Chinon A

Aqua Chinon A is a 1.90 ac NTS basin located near a housing development off of Portola Spring road and adjacent to SR-241. The basins and surrounding area required hand removal to reduce the amount of invasive plant species onsite, the most prevalent being horseweed, shortpod mustard, prickly sowthistle, bristly oxtongue, yellow sweetclover, lantana, and tree tobacco. Three treatments of chemical herbicide were used to remove Spanish false fleabane in the basin and on the slopes.

Figure 18. Overview of Aqua Chinon as of 10/6/21.

Aqua Chinon B

Aqua Chinon A is a 1.98 ac NTS basin located near a housing development off of Portola Spring road and adjacent to SR-241. The basins and upper areas exhibited moderate cover by annual nonnative plant species, and hand removal was employed to rid the area of these species, though some species persist on site. The most prevalent invasive plants were horseweed, bristly oxtongue, shortpod mustard, yellow sweetclover, and brittlebush. In June and August chemical herbicides were used to control Spanish false fleabane.

Figure 19. Overview of Aqua Chinon B as of 10/6/21.

Aquila Springs

Aquila Springs is a 1.17 ac basin located in the Altair Community development east of Irvine Boulevard, consisting of one channel. This basin exhibits native vegetation on slopes; however, portions of the basin and slopes have nonnative annual vegetation as well. Hand removal was recommended to remove moderate coverage of invasive plants. The dominant invasive species were horseweed, prickly sowthistle, and Russian thistle, and bristly oxtongue, shortpod mustard, and fountain grass. Ornamental plants such as miss verbena and striped treasure flower were identified in August 2021 and were still found on site in December 2021. Herbicide use was frequent onsite to control Spanish false fleabane, with eight treatments of varying volumes of herbicide throughout the year.

Figure 20. Aquila Springs waterway as of 10/27/21.

Floral View

Floral View is a 2.98 ac basin located east of SR-133 and west of Floral View. It consists of one channel leading to a circular pond. The site had a very high amount of annual nonnative plants both in the basin and the surrounding areas, with percent non-native cover as high as 95% cover in June. A combination of mowing and hand removal was used to reduce the amount of invasives but many still persisted onsite. The most prevalent species were horseweed, white and yellow sweetclover, oxtongue, shortpod mustard, and rabbitsfoot grass. Three treatments of chemical herbicide were applied to control Spanish false fleabane.

Figure 21. Site overview of Floral View as of 9/22/21.

Hidden Canyon

Hidden Canyon is a 3.31 ac NTS basin located adjacent to the Hidden Canyon residential development and south of Lake Forest Drive. It consists of two inlets flowing into one pond. This basin exhibits high percent cover by nonnative species on both the basin bottom and the south-facing slopes, Mowing, hand removal, and chemical treatments were used to control invasives. The most prevalent invasive species were curly dock, prickly lettuce, matted sandmat, horseweed, prickly and common sowthistle, bristly oxtongue, cheeseweed mallow, shortpod mustard, willow dock, and curly dock. Chemical herbicide was applied at moderately high concentrations four times across this site to control for Spanish false fleabane.

Figure 22. Bulrush growth in Hidden Canyon as of 11/24/21.

Iluna Springs

Iluna Springs is a 2.68 ac basin located in the Altair Community development north of Irvine Boulevard in the northeastern corner of Irvine. This basin consists of two inlet channels. The basin had a very high coverage of annual nonnative plants throughout the year, as did the surrounding slopes. Prevalent invasive species included stinknet, prickly sowthistle, curly dock, horseweed, prickly lettuce, sprangletop, fountain grass, common dandelion and bristly oxtongue. The watershed had an abundance of algae, and high bulrush which was maintained with mechanical treatment methods in the fall. Chemical herbicides were used 8 separate times in varying quantities to control for Spanish false fleabane and stinknet.

Figure 23. Overview of Iluna Springs as of 12/15/21.

Laguna Altura North

Laguna Altura North is a 0.86 ac basin located north of the Laguna Altura housing development and south of I-405. The basin and slopes were interspersed with annual nonnative plants, which were managed by hand removal. Invasive species found include bristly oxtongue, rabbitsfoot grass, shortpod mustard, and scarlet pimpernel. Six treatments of varying amounts of chemical herbicide were applied to control Spanish false fleabane between the months of May and December.

Figure 24. Algae present in Laguna Altura North open water streams as of 9/15/21.

Laguna Altura South

Laguna Altura South is a 0.75 ac basin located west of the Laguna Altura housing development and east of SR-133. A high percentage of annual nonnative plant species covered the basin. The basin was mowed in July and hand removal was recommended after the mowing to control a lower density of selected invasive species. Prevalent species included, prickly sowthistle, oxtongue, prickly lettuce, and horseweed, and pink ladies and dandelions were also present in the latter part of the year. Chemical herbicide was used on a frequent basis to control Spanish false fleabane for a total of nine treatments of varying quantities.

Figure 25. Overview of Laguna Altura South with high bulrush growth as of 12/15/21.

Los Olivos

Los Olivos is a 3.19 ac NTS basin located adjacent to the Los Olivos housing development and east of San Diego Creek. This basin has two inlet channels flowing into one pond. The basin and slopes were covered with a high percentage of annual nonnative plant species, which were managed by mowing and hand removal. Prevalent invasive species include horseweed, oxtongue, goosefoot, yellow and white sweetclover, Spanish sunflower, prickly sowthistle, shortpod mustard, and curly dock. Spanish false fleabane was particularly abundant and pervasive throughout the site, and five treatments of chemical herbicide were used to control it.

Figure 26. Los Olivos slope with Spanish false fleabane (foreground) as of 10/27/21.

Los Olivos South

Los Olivos South is a 2.70 ac basin east of SR-133 and adjacent to the Laguna Altura housing development. A high density of annual nonnative plant species were found in the basin, with a substantial number of species found on the slopes. The primary invasive species included rabbitsfoot, prickly sow thistle, shortpod mustard, prickly oxtongue, *Bromus spp.*, prickly lettuce, and scarlet pimpernel. Mowing and hand removal were used to control invasive plant species. Pampas grass was also found onsite and was dug up by the roots. Invasive red eared sliders were spotted in August. No chemical treatment was reported for this site.

Figure 27. Watershed in the northern part of Los Olivos South, completely covered with algae.

Marine Meadows

Marine meadows is a 1.66 ac NTS basin found west of SR-133 and I-5 highways and adjacent to Great Park and a housing development. The basin and slopes were covered with a high amount of annual nonnative plant species, but after mowing in June, the density was reduced and hand removal was recommended for the remainder of the year. Prevalent invasive plant species include rabbitsfoot grass, prickly sowthistle, prickly lettuce, bristly oxtongue, and horseweed. Pampas grass was also present (Figure 28), and there was algae in the waterway. One treatment of chemical herbicide was applied in December to remove Spanish false fleabane, pampas grass, and pepperweed.

Figure 28. Pampas grass at Marine Meadows as of 9/22/21.

Marshburn

Marshburn is a 14.04 ac basin located at the intersection of Irvine Boulevard and Ridge Valley in Irvine. This basin also serves as a flood retention basin. It consists of two channels flowing into one large pond. This basin and slopes had a high amount of annual nonnative riparian plant species, reaching up to 99% cover. Prevalent species include yellow sweet clover, shortpod mustard, horseweed, curly dock, Russian thistle, field bindweed, and English plantain. Upon being mowed in November, the basin is bare and seeding of natives is recommended. Non-native American bullfrogs were also frequently identified in the waterways. There was high bulrush growth which was mechanically removed outside of the nesting bird season. Two treatments of chemical herbicide were applied in December to remove Spanish false fleabane.

Figure 29. Overview of Marshburn as of 12/8/21.

Old Laguna

Old Laguna is a 2.81 ac basin located west of Laguna Canyon Road and south of I-405. This basin consists of two small channels flowing into one large pond. The slopes and the basin exhibited moderate cover by annual nonnative species, and chemical, mowing and hand removal treatment were all used to reduce the total cover of invasive plants, though many species still persist onsite. Prevalent nonnative species include flax-leaved horseweed, prickly lettuce, yellow sweetclover, curly dock, rabbitsfoot grass, prickly sowthistle, floating primrose willow, and scarlet pimpernel. In December, bare patches and open areas were identified onsite (Figure 30) and seeding native plants was suggested. Two treatments of chemical herbicide were used to remove Spanish false fleabane.

Figure 30. Overview of Old Laguna with bare patches suggested for seeding as of 12/15/21.

Portola Springs

Portola Springs Meadow is a 0.89 ac NTS basin located north of Irvine Boulevard and east of SR-133. This basin consists of two inlets. The basin had over 90% cover of invasive rabbitsfoot grass, which persisted from June until mowing occured in October. Other nonnative annuals onsite include horseweed, prickly lettuce, Mexican evening primrose, golden wreath wattle, and bristly oxtongue. Chemical herbicide was used four times throughout the year to remove Spanish false fleabane.

Figure 31. Portola Springs overview as of 9/29/21.

Quail Meadow

Quail Meadow is a 1.40 ac NTS basin located north of Quail Hill Shopping Center in Irvine. This basin consists of a small sediment catchment pond at the inlet, after which water percolates into the ground. The slopes of the basin had 99% *Bromus spp.* cover and mowing occurred in July to remove it. The majority of the area was then bare, and invasive bristly oxtongue, brome, and prickly sowthistle began sprouting in the bare areas (Fig 32). Manual methods were primarily employed to remove annual nonnative plants thereafter. Two treatments of chemical herbicide were applied to remove Spanish false fleabane.

Figure 32. Bare basin at Quail Meadow as of 10/13/21.

Ridge Valley A

Ridge Valley A is a 6.44 ac basin located east of SR-133. It consists of two inlets flowing into one pond. The slopes and basin had only a moderate percentage of annual nonnative cover in the summer months, but coverage increased as the year went on, eventually requiring mowing. A large diversity of invasive plants were growing including bristly oxtongue, prickly sowthistle, horseweed, yellow and white sweetclover, shortpod mustard, rabbitsfoot grass and curly dock. A large patch of floating primrose willow covered 100% of the waterway during part of the year, and was later replaced with algae and duckweed coverage. In December, a storm led to significant erosion, which removed native vegetation and has left open areas for potential invasive species establishment. Chemical herbicide was used 8 times to remove Spanish false fleabane.

Figure 33. Overview of Ridge Valley A as of 7/14/21 (left) and overview as of 12/22/21 (right).

Ridge Valley B

Ridge Valley B is a 1.65 ac basin located east of SR-133 and adjacent to Ridge Valley A. It consists of a channel that flows into Ridge Valley A. The slopes of Ridge Valley B exhibit relatively high cover by annual nonnative plants, including horseweed, prickly sowthistle, shortpod mustard, and yellow sweetclover in the basin. Mowing in June greatly reduced the nonnative coverage onsite, and hand removal maintained this reduction. Chemical herbicide was used 8 times to remove Spanish false fleabane.

Figure 34. Overview of Ridge Valley B as of 9/22/21

Ridge Valley C

Ridge Valley C is a 4.68 ac NTS basin located east of SR-133 and adjacent to Ridge Valley B. It consists of one long channel with a pond in the center. The west-facing slope of this basin has high cover by nonnative annual species. Prevalent species include horseweed, prickly sowthistle, yellow sweetclover and shortpod mustard. The waterway had high algae coverage and excessive bulrush growth that was maintained after the nesting season. Chemical herbicide was applied 5 separate times to remove Spanish false fleabane.

Figure 35. Overview of Ridge Valley C on 7/14/21 (left), and 100% algae cover in the basin as of 12/22/21 (right).

Sports Park

Sports Park is a 1.95 ac NTS basin located at the corner of Marine Way and Skyhawk, north of the I-5 freeway. The site exhibited high cover by annual nonnative species, and mowing in June and August 2021 reduced the total cover of invasive plants, though some species continue to persist on site. Prevalent species include horseweed, prickly sowthistle, yellow sweetclover, scarlet pimpernel, rabbitsfoot grass, oxtongue and shortpod mustard (Figure 36). Chemical herbicide was reserved only for target species and applied on site throughout the year to remove Spanish false fleabane.

Figure 36. Mature horseweed in the Sports Park waterway, in need of mowing as of 10/13/21.

Turtle Ridge

Turtle Ridge is a 1.97 ac NTS basin located south of Shady Canyon Dr. and adjacent to an open field and residential housing. It consists of a pond surrounded by vegetated slopes (Figure 37). The site exhibited high cover by annual nonnative species and chemical herbicide was applied on site four times to remove Spanish false fleabane. Total cover of invasive plants still exist onsite and the prevalent species include horseweed, prickly sowthistle, yellow sweetclover, scarlet pimpernel, rabbitsfoot grass, matted sandmat, blue water speedwell, flax-leaved horseweed, oxtongue and shortpod mustard. Dense stands of bullrush were trimmed back in the fall after the nesting bird season and in November the waterway was cleared of algae and duckweed. Chemical herbicide treatment was minimized and only used on Spanish false fleabane when large patches developed.

Figure 37. Overview of Turtle Ridge site as of 9/29/21.

Eastwood

Eastwood is a 1.88 ac NTS basin located east of Ridgeline Drive. The site exhibited high cover by annual nonnative species and the prevalent species found on site included curly dock, horehound, white sweetclover, prickly sowthistle, rabbitsfoot grass, yellow sweetclover, flax-leaved horseweed, prickly lettuce, and oxtongue. Chemical herbicide was applied on site throughout the year to remove Spanish false fleabane. Dense stands of bullrush were trimmed back in the fall after the nesting bird season. Non-native American bullfrogs were heard on site in August 2021. The chemical herbicide applications were implemented only when Spanish false fleabane stands demonstrated a significant rate of spread.


Figure 38. Overview of Eastwood as of 7/14/21 (left) and as of 12/29/21 (right).

Sand Canyon

Sand Canyon is a 43.50 ac NTS basin located East of Ridgeline Drive and adjacent to a golf course area in north Irvine. NTS consists of a large pond and a riparian habitat south of the pond. The site exhibited high cover by annual nonnative species around the perimeter of the pond and the prevalent species found on site include white and yellow sweetclover, prickly sowthistle, flax-leaved horseweed, and oxtongue. Chemical herbicide was applied in May to remove noxious weeds. Dense stands of bullrush were trimmed back in the fall after the nesting bird season and non-native American bullfrogs were heard on site in June 2021. Spot spraying for Spanish false fleabane and pepperweed was kept to a minimum and only implemented when necessary to prevent continued spread.

Figure 39. Overview of the Sand Canyon waterway.

District 5A

District 5A is a 3.21 ac NTS site that is located to the southeast of the Great Park Sports Complex, northeast of the I-5 freeway. The site has been newly established for maintenance and ecological management through IRWD, and EES surveys began in September 2021. The site exhibited high cover by annual nonnative species and the prevalent species found on site included shortpod mustard, prickly sowthistle, flax-leaved horseweed, and oxtongue. Mowing for this site was not recommended due to tall plants and dense native vegetation growth. Due to the presence of bare areas, seeding was recommended for the following native plant species on site: scarlet monkeyflower, yerba mansa, seep monkeyflower, vervain, spiny rush, and saltgrass. Bullrush was identified in the middle of the site in September 2021, and the waterway was covered with duckweed and algae which persisted until the end of the year (Figure 40). In September and November 2021 a large portion of the basin was not receiving water due to overgrowth of vegetation and irrigation not reaching the site. No chemical herbicides were applied to the site for non-native species management.

Figure 40. District 5A with dense horseweed mixed with natives as of 9/22/21 (left) and pond with heavy duckweed cover as of 9/22/21 (right).

District 5B

District 5B is a 2.27 ac NTS site that is located to the southeast of the Great Park Sports Complex, northeast of the I-5 freeway and adjacent to District 5A. The site has been newly established for maintenance and ecological management through IRWD, and EES surveys began in September 2021. The site exhibited high cover by annual nonnative species and the prevalent species found on site include shortpod mustard, flax-leaved horseweed, and oxtongue. Due to the presence of bare areas and an empty dry patch (Figure 41), seeding was recommended for the following native plant species: scarlet monkeyflower, yerba mansa, seep monkeyflower, vervain, spiny rush, and saltgrass. The basin on the west side of the site was found dry in the months of September and November 2021. No chemical herbicides were applied to the site for non-native species management.

Figure 41. Bare patch at District 5B as of 12/22/21.

District 5C

District 5C is a 2.97 ac NTS site that is located to the southeast of the Great Park Sports Complex, northeast of the I-5 freeway and adjacent to District 5C. The site has been newly established for maintenance and ecological management through IRWD, and EES surveys began in September 2021. The site exhibited high cover by annual nonnative species and the prevalent species found on site included tomato, curly dock, Spanish false fleabane, shortpod mustard, flax-leaved horseweed, and oxtongue. Mowing was not recommended for the site despite the high density of non-native plant species due to the height and dense growth of vegetation. Due to the presence of bare areas, seeding was recommended for the following native plant species: scarlet monkeyflower, yerba mansa, seep monkeyflower, vervain, spiny rush, and saltgrass. The basin on the south side of the site was found dry in the months of September and November 2021. The basin on the north side of the site was not receiving enough water due to irrigation being unable to reach the native plant areas in September and November 2021. No chemical herbicides were applied to the site for non-native species management.

Figure 42. Overview of District 5C as of 9/22/21.

SAN JOAQUIN MARSH AND WILDLIFE SANCTUARY

Zone 1: San Joaquin Marsh Landscaping

San Joaquin Marsh Landing Zone 1 is a 90.7 ac section of the San Joaquin Marsh and Wildlife Sanctuary, which is a restoration area and natural treatment system for water from San Diego creek (Figure 43). Zone 1 exhibited high cover by annual nonnative species and the prevalent species found on site included horseweed, prickly sowthistle, rabbitsfoot grass, white bladder flower, rock rose, herb of grace, lamb quarters, goosefoot, Russian thistle, Spanish false fleabane, Mexican primrose, Brazilian pepper tree, flax-leaved horseweed, and oxtongue. Dense stands of bullrush were trimmed back in the fall after the nesting bird season and least Bell's vireo nesting season. Non-native American bullfrogs were heard and spotted on site in the months of June, July, and September 2021. No chemical herbicides were applied to the site for non-native species management.

Figure 43. Basin in San Joaquin Marsh Zone 1.

Zone 2: San Joaquin Marsh Landscaping

San Joaquin Marsh Landing Zone 2 is a 60.8 ac section of the San Joaquin Marsh and Wildlife Sanctuary, which is a restoration area and natural treatment system for water from San Diego Creek. Zone 2 exhibited high cover of annual nonnative species and the prevalent species found on site include horseweed, prickly sowthistle, bull thistle, creeping saltbush, rabbitsfoot grass, Russian thistle, yellow sweetclover, horseweed, smartweed (Figure 44), and oxtongue. Dense stands of bullrush were trimmed back in the fall after the nesting bird season and least Bell's vireo nesting season. Non-native American bullfrogs were heard and spotted on site in the months of August, September, and October 2021. In December 2021 it was suggested to seed the following native plant species in the site: Hooker's evening primrose, western vervain, mugwort, marsh fleabane, marsh aster, alkali mallow, alkali heath, and alkali heliotrope. No chemical herbicides were applied to the site for non-native species management.

Figure 44. Smartweed found on site in San Joaquin Marsh Zone 2.

Zone 3: San Joaquin Marsh Landscaping

San Joaquin Marsh Landing Zone 3 is a 35.6 ac section of the San Joaquin Marsh and Wildlife Sanctuary, which is a restoration area and natural treatment system for water from San Diego creek. Zone 3 exhibited high cover by annual nonnative species and the prevalent species found on site include horseweed, shortpod mustard, curly dock, herb of grace, matted sandmat, Mexican primrose, salt cedar, castor bean, blue water speedwell, cheeseweed, wild celery, stinging nettle, lamb's quarters, prickly sowthistle, bull thistle, creeping saltbush, rabbitsfoot grass, Russian thistle, yellow sweet clover, horseweed, butterfly bush tree, stinknet, Spanish fleabane, and oxtongue. Dense stands of bullrush were trimmed back in the fall after the nesting bird season and least Bell's vireo nesting season. Non-native American bullfrogs were heard and spotted on site in the months of July to October 2021. Water levels in the basin was low starting in the month of June with a high presence of algae in the channels and continued through the month of October. By October one of the basins was found completely dry, but the remaining basins still consisted of water. No chemical herbicides were applied to the site for non-native species management.

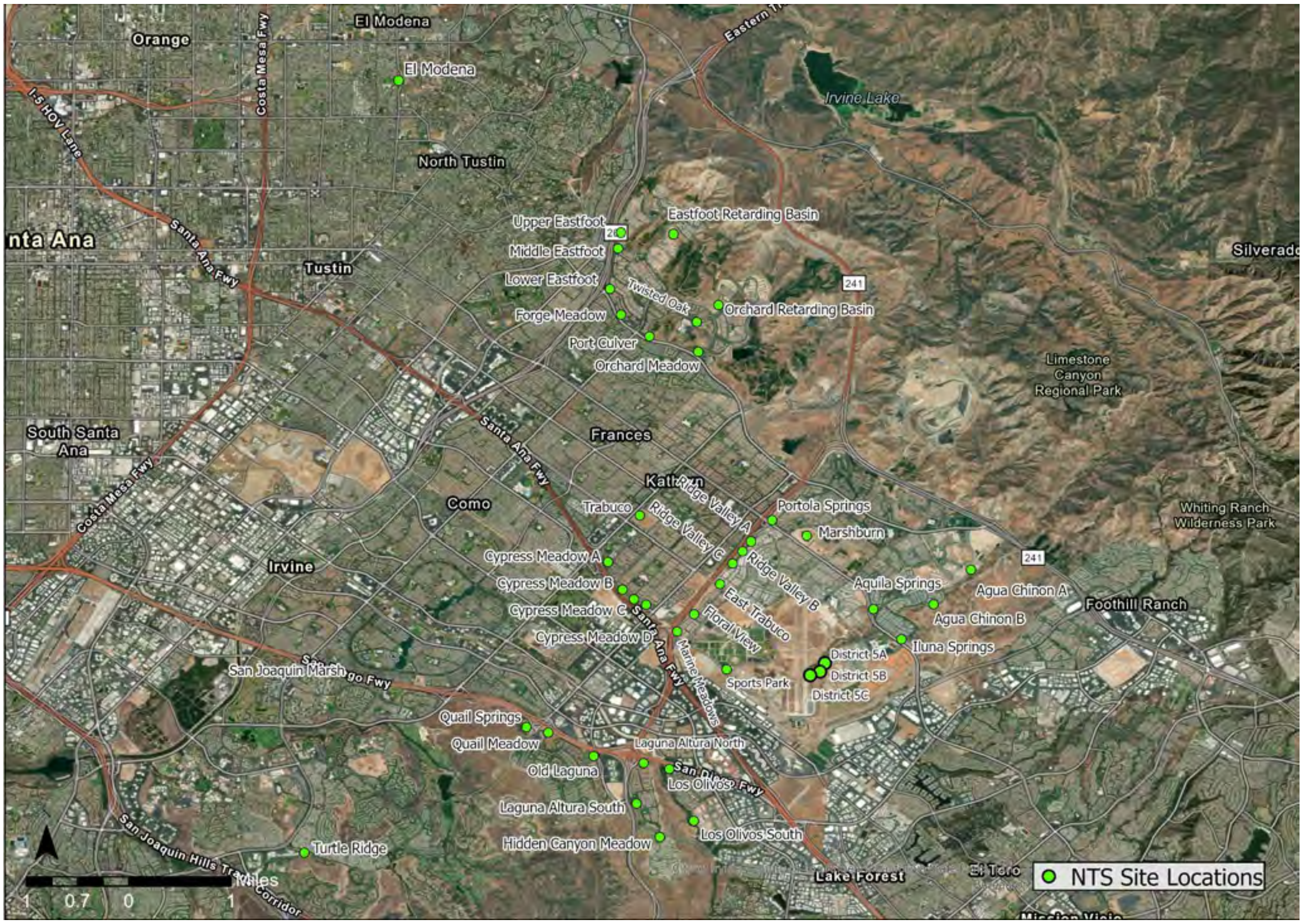
Figure 45. One flooded basin in SJ Marsh Zone 3 as of 10/27/21.

Zone 4: San Joaquin Marsh Landscaping

San Joaquin Marsh Landing Zone 4 is a 62.3 ac section of the San Joaquin Marsh and Wildlife Sanctuary, which is a restoration area and natural treatment system for the water from the San Diego Creek. Zone 4 exhibited high cover by annual nonnative species and the prevalent species found on site include horseweed, shortpod mustard, curly dock, herb of grace, matted sandmat, horehound, water smartweed, scarlet pimpernel, tomato plant, Virginia pepperweed, salt cedar, lamb's quarters, prickly sowthistle, rabbitsfoot grass, Russian thistle, yellow sweet clover, horseweed, stinknet, and oxtongue. Dense stands of bullrush were trimmed back in the fall after the nesting bird season and least Bell's vireo nesting season. Non-native American bullfrogs were heard and spotted on site in the months of June and July 2021. Throughout the month of December, bulrush was targeted around the site in order to reduce the overgrowth. No chemical herbicides were applied to the site for non-native species management.

Figure 46. Vegetation at SJ Marsh Zone 4 as of 12/1/21.

APPENDIX A- SITE MAPS



Map 1. Overview of Map Locations throughout Irvine, California.

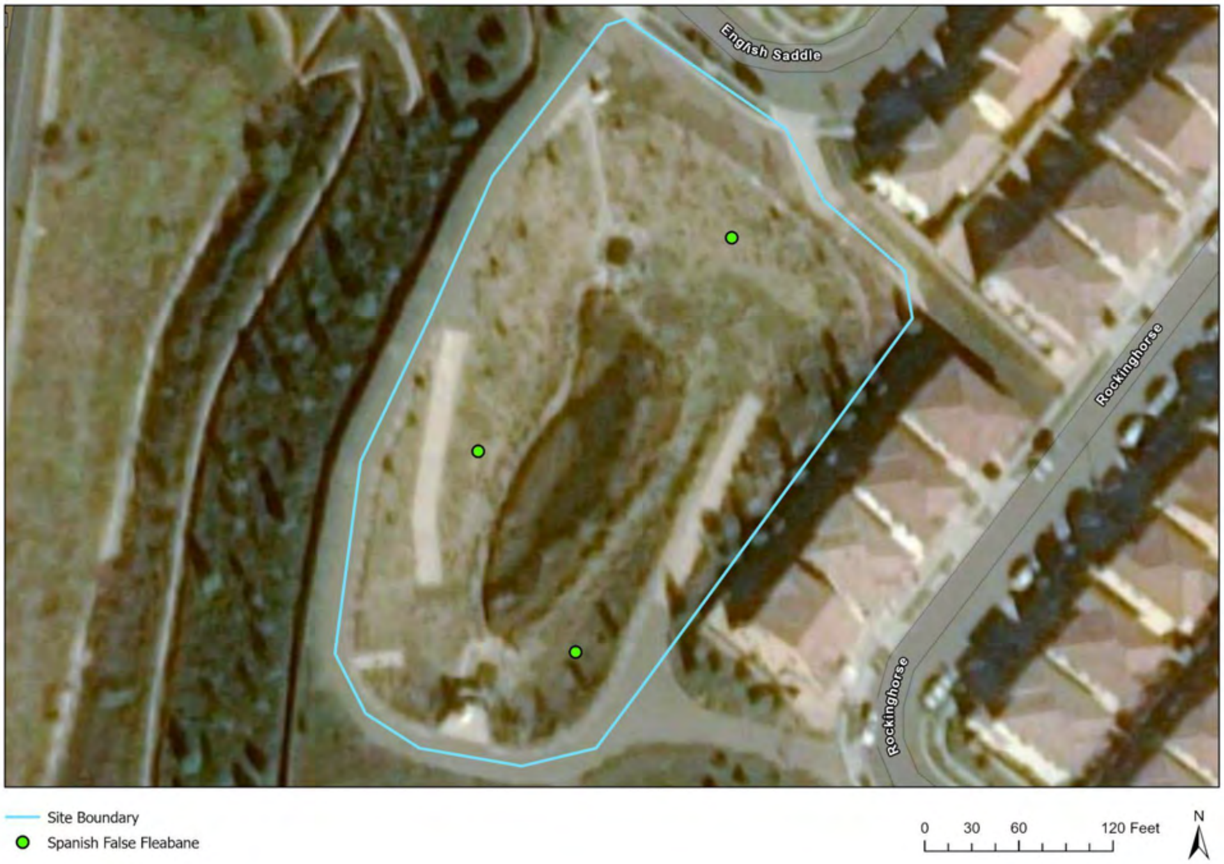
Map 2. Forge Meadow Herbicide Application Areas between June-December 2021.

Map 3. Port Culver Herbicide Application Areas between June-December 2021.

Map 4. Orchard Meadow Herbicide Application Areas between June-December 2021.

Map 5. Lower Eastfoot Herbicide Application Areas between June-December 2021.

Map 6. Middle Eastfoot Herbicide Application Areas between June-December 2021.



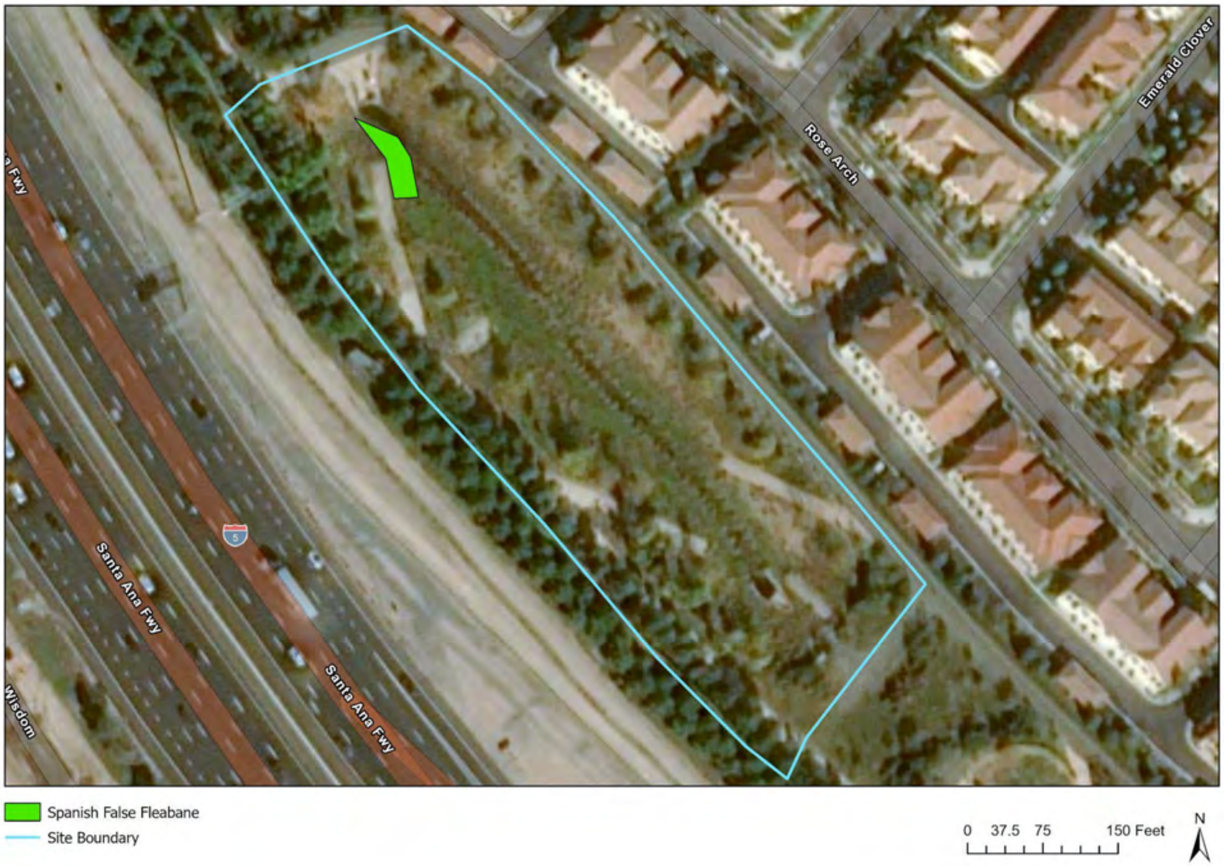
Map 7. Upper Eastfoot Herbicide Application Areas between June-December 2021.

Map 8. El Modena Herbicide Application Areas between June-December 2021.

Map 9. Trabuco Herbicide Application Areas between June-December 2021.

Map 10. Trabuco East Herbicide Application Areas between June-December 2021..

Map 11. Cypress Meadows A Herbicide Application Areas between June-December 2021.

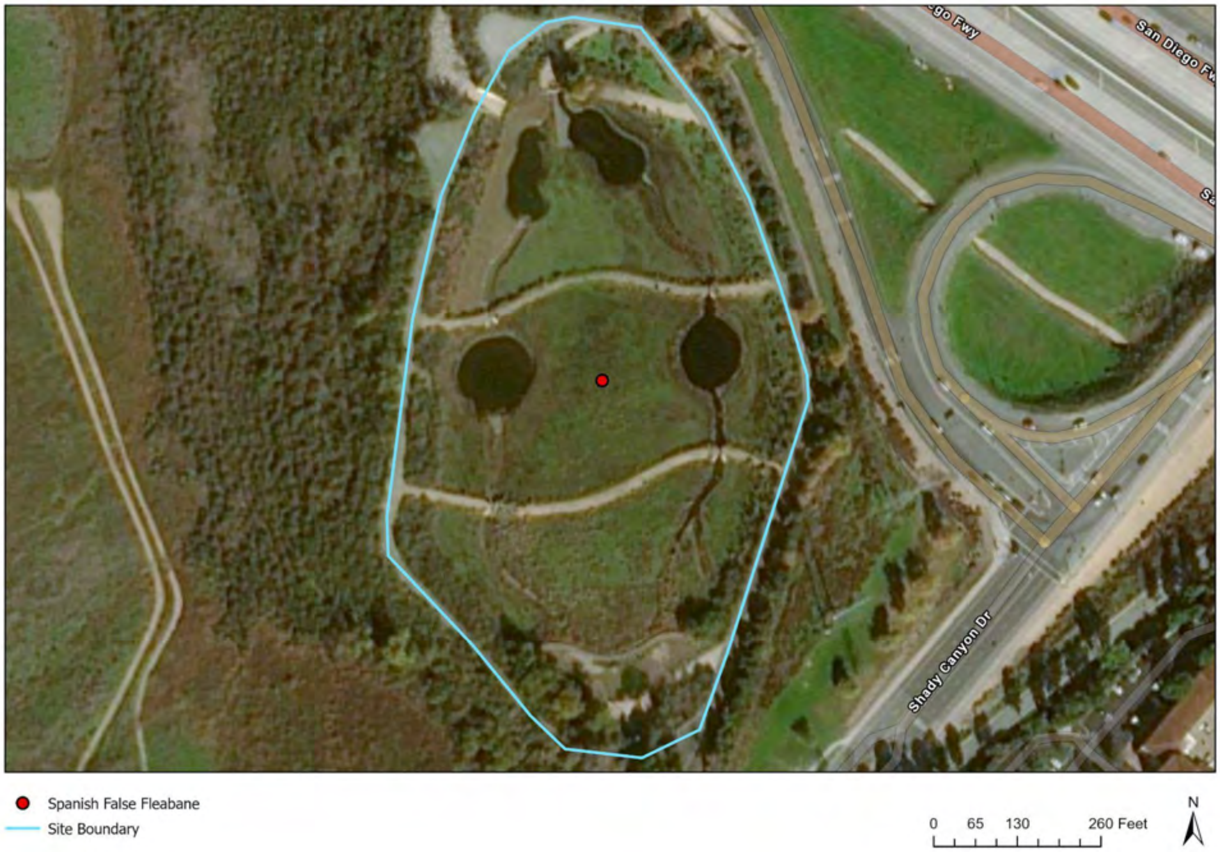


Map 12. Cypress Meadows B Herbicide Application Areas between June-December 2021.

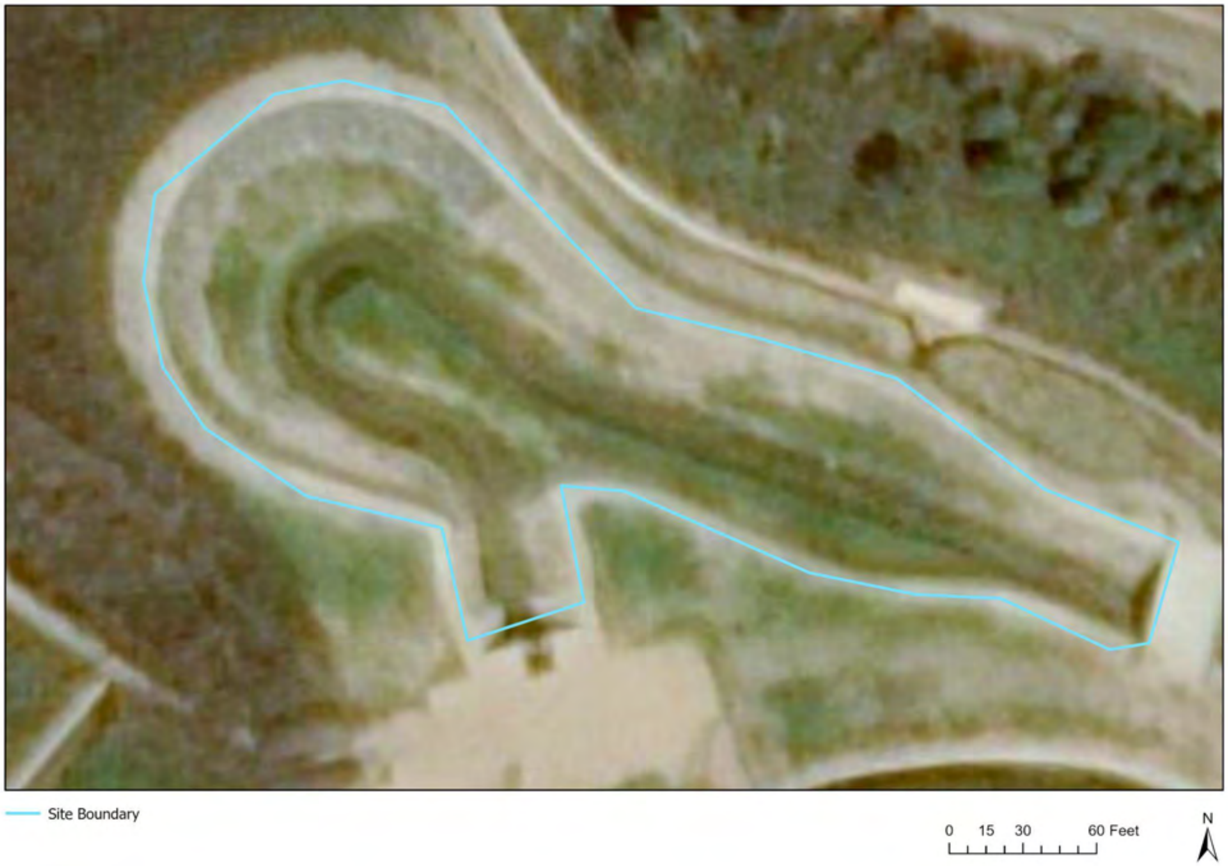
Map 13. Cypress Meadows C Herbicide Application Areas between June-December 2021 (none).

Map 14. Cypress Meadows D Herbicide Application Areas between June-December 2021 (none).

Map 15. Eastfoot Retarding Basin Herbicide Application Areas between June-December 2021.



Map 16. Quail Springs Herbicide Application Areas between June-December 2021.



Map 17. Orchard Retarding Basin Herbicide Application Areas between June-December 2021 (none).

Map 18. Twisted Oak Herbicide Application Areas between June-December 2021.

Map 19. Agua Chinon A Herbicide Application Areas between June-December 2021 (none).

Map 20. Agua Chinon B Herbicide Application Areas between June-December 2021.

Map 21. Aquila Springs Herbicide Application Areas between June-December 2021.

Map 22. Floral View Herbicide Application Areas between June-December 2021.

Map 23. Hidden Canyon Herbicide Application Areas between June-December 2021.

Map 24. Iluna Spring Herbicide Application Areas between June-December 2021.

Map 25. Laguna Altura North Herbicide Application Areas between June-December 2021.

Map 26. Laguna Altura South Herbicide Application Areas between June-December 2021.

Map 27. Los Olivos Herbicide Application Areas between June-December 2021.

Map 28. Los Olivos South Herbicide Application Areas between June-December 2021.

Map 29. Marine Meadows Herbicide Application Areas between June-December 2021.

Map 30. Marshburn Herbicide Application Areas between June-December 2021.

Map 31. Old Laguna Herbicide Application Areas between June-December 2021 (none).

Map 32. Portola Springs Herbicide Application Areas between June-December 2021.

Map 33. Quail Meadow Herbicide Application Areas between June-December 2021.

Map 34. Ridge Valley A Herbicide Application Areas between June-December 2021.

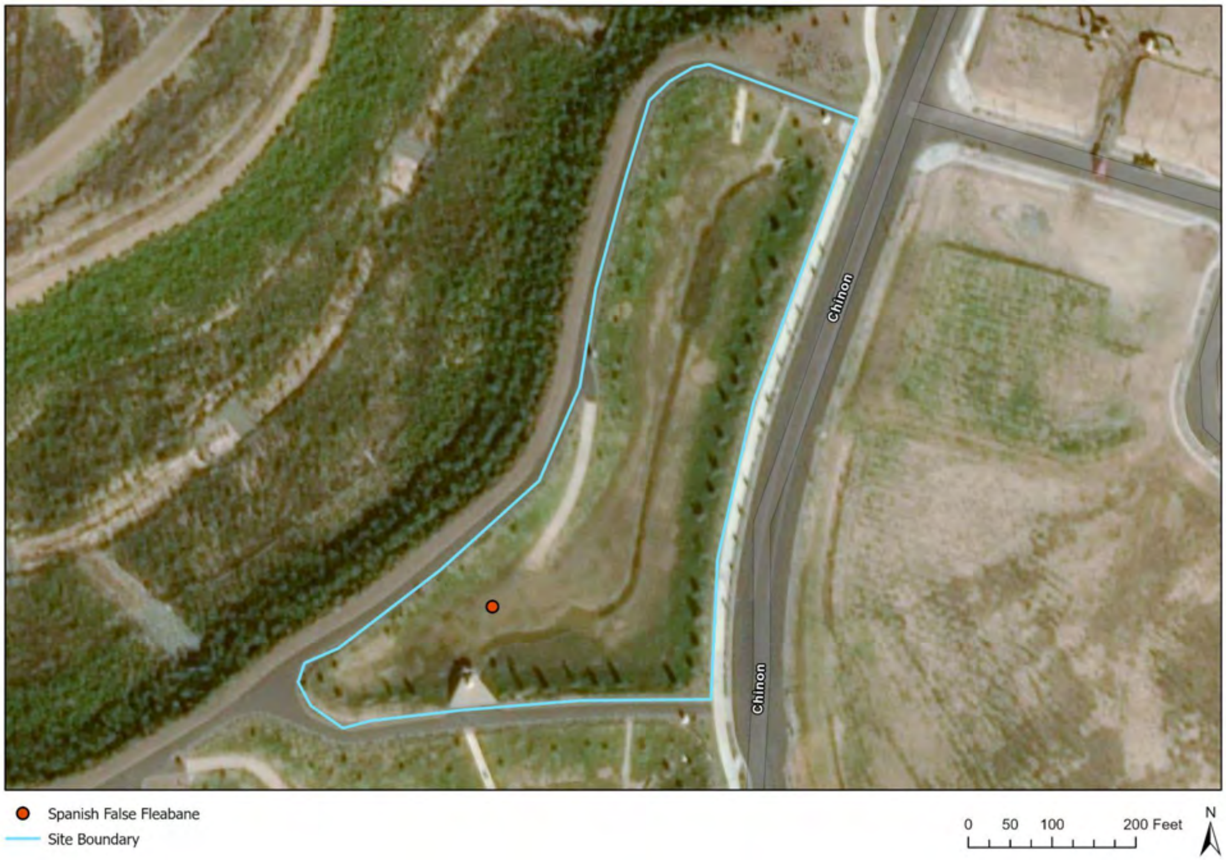
Map 35. Ridge Valley B Herbicide Application Areas between June-December 2021.

Map 36. Ridge Valley C Herbicide Application Areas between June-December 2021..

Map 37. Sports Park Herbicide Application Areas between June-December 2021..

Map 38. Turtle Ridge Herbicide Application Areas between June-December 2021 (none).

Map 39. Eastwood Herbicide Application Areas between June-December 2021.



Map 40. District 5A Herbicide Application Areas between September-December 2021.

Map 41. District 5B Herbicide Application Areas between September-December 2021.

Map 42. District 5C Herbicide Application Areas between September-December 2021.

APPENDIX B- Memoranda and Chemical Pesticide Usage Reports

LSA

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MEMORANDUM

DATE: January 23, 2020

TO: Ian Swift, Natural Resources Manager, Irvine Ranch Water District

FROM: Jessica Lieuw, Assistant Biologist, LSA

SUBJECT: Chemical Pesticide Treatment Justification for Bermuda Grass

This memorandum documents the results of treatment methods for Bermuda grass (*Cynodon dactylon*) within the Irvine Ranch Water District (IRWD) natural treatment system (NTS) sites. Bermuda grass is a species of perennial grass in the *Poaceae* family that is native to Africa and has been introduced as a turf grass or livestock forage in California but has become an invasive weed in some habitats. This species is a low-growing perennial that is difficult to control, as it often spreads through stolons and rhizomes. Non-chemical methods were tested for removal of the nonnative herb, which have proven unsuccessful in reducing infestations. Moving forward, LSA recommends the use of prioritized chemical pesticides to facilitate removal of Bermuda grass in order to maintain native habitat within the NTS sites.

NON-CHEMICAL REMOVAL

Beginning in September 2019, LSA biologists identified Bermuda grass growing in several of the 34 NTS sites surveyed as part of the IRWD Integrative Pest Management Plan Implementation Project (project). LSA biologists initially prescribed manual removal for the species. Manual removal for Bermuda grass involved hand pulling plants. Other non-chemical removal methods, such as withholding water or mulching, were not prescribed because the habitats were not amenable to these methods. Non-chemical removal methods were not effective in treating areas infested by Bermuda grass as new plants would regenerate from any leftover stolons or rhizomes.

RECOMMENDATIONS

Bermuda grass is listed by the California Invasive Plant Council as an invasive species, with a “Moderate” rating. As the infestations are not responding to non-chemical treatment methods, LSA recommends spot treatment with prioritized chemical pesticides as a management strategy for Bermuda grass. Literature reviews support the aforementioned experiential conclusion that it is difficult to control Bermuda grass by manual removal methods due to its tendency to regenerate from leftover stolons and rhizomes. Withholding water is often recommended as a treatment strategy for Bermuda grass; however, this strategy is not feasible within the NTS sites as the basins are designed to receive urban runoff. LSA biologists have determined that mulching and soil solarization would not be a feasible treatment method within the NTS sites, as infestations are distributed amongst areas that host desirable native species. Flaming would likely also be ineffective due to the rhizome system; flaming as a treatment method in Southern California’s dry climate is generally not recommended because of the possibility of brush fires. LSA has also determined that organic chemical control methods would not be effective as a treatment method for Bermuda grass because of the rhizome system. Organic control methods are best suited for newly emerged weeds and treat mainly above-ground biomass, which would not affect the roots of this species, thus allowing the plant to regenerate. Moreover, recent studies have revealed that organic pesticides can have a higher environmental impact than conventional pesticides, especially towards invertebrates. Application of prioritized chemical pesticides should be conducted in a manner that avoids disturbance to installed and recruited native species to the fullest extent practicable. Maintenance over the next few months (early in the growing season) will be most effective in reducing cover by Bermuda grass, as the species blooms from April to May.

Please contact Eric Krieg or Jessica Lieuw at (949) 553-0666 if you have any questions regarding these recommendations.

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MEMORANDUM

DATE: February 7, 2020

TO: Ian Swift, Natural Resources Manager, Irvine Ranch Water District

FROM: Jessica Lieuw, Assistant Biologist, LSA

SUBJECT: Chemical Pesticide Treatment Justification for Perennial Pepperweed

This memorandum documents the results of treatment methods for perennial pepperweed (*Lepidium latifolium*) within the Irvine Ranch Water District (IRWD) natural treatment system (NTS) sites. Perennial pepperweed is a species of flowering plant in the Brassicaceae family that is native to southeastern Europe and Asia and has been introduced in California where it grows as a weed in disturbed areas. This species is a perennial herb that thrives in seasonally wet areas or areas with a high water table. Plants reproduce from perennial roots or seed. Established perennial pepperweed plants develop an extensive root system that can spread up to 10 feet vertically and laterally, and are capable of producing new shoots from root segments. The root system is the foundation of this species' competitiveness and the major target of control efforts. Perennial pepperweed can quickly form large, dense stands that displace desirable vegetation. Populations easily spread along waterways, and once established this plant is persistent and difficult to control. Moving forward, LSA recommends the use of prioritized chemical pesticides to facilitate removal of perennial pepperweed in order to maintain native riparian habitat within the NTS sites and prevent accumulation of the seed bank.

NON-CHEMICAL REMOVAL

Beginning in September 2019, LSA biologists identified perennial pepperweed growing in a few of the 34 NTS sites surveyed as part of the IRWD Integrative Pest Management Plan Implementation Project (project). LSA biologists initially prescribed manual removal for the species. Manual removal for perennial pepperweed involved pulling individual plants. Other mechanical removal methods, such as tillage or mowing, were not prescribed because the habitats were not amenable to these methods. Perennial pepperweed plants were observed regenerating from portions of the root left in the soil. Furthermore, IRWD personnel have extensive past experience managing perennial pepperweed in the San Joaquin Marsh, and have noted that manual removal methods were not effective.

RECOMMENDATIONS

Perennial pepperweed is listed by the California Invasive Plant Council as an invasive species, with a High rating. As the infestations are known to be difficult to control with mechanical methods and typically require multiple applications of chemical pesticides for full control, LSA recommends spot treatment with prioritized chemical pesticides as a management strategy for perennial pepperweed.

Literature reviews indicate that it is difficult to control perennial pepperweed by hand-pulling past the seedling stage, as plants can regenerate from root fragments as small as one inch. Mowing, mulching, and soil solarization are not effective treatment strategies due to the species' root system and presence of neighboring native species. Flaming is also ineffective due to the root system and perennial nature of the plant. LSA has also determined that organic chemical control methods would not be effective for perennial pepperweed as this species has such an extensive root system. Organic control methods are best suited for newly emerged weeds and treat mainly above-ground biomass, which would not affect roots of this species, thus allowing the plant to regenerate. Moreover, recent studies have revealed that organic pesticides can have a higher environmental impact than conventional pesticides, especially on invertebrates. Due to the highly invasive nature of perennial pepperweed, it is imperative to manage small invasions before they become established. Chemical pesticides are the most effective method to control infestations. Application of prioritized chemical pesticides should be conducted in a manner that avoids disturbance to installed and recruited native species to the fullest extent practicable. Maintenance before individual plants flower will be the most effective way to reduce cover and prevent accumulation of the seed bank.

Please contact Eric Krieg or Jessica Lieuw at (949) 553-0666 if you have any questions regarding these recommendations.

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MEMORANDUM

DATE: January 23, 2020

TO: Ian Swift, Natural Resources Manager, Irvine Ranch Water District

FROM: Jessica Lieuw, Assistant Biologist, LSA

SUBJECT: Chemical Pesticide Treatment Justification for Spanish False Fleabane

This memorandum documents the results of treatment methods for Spanish false fleabane (*Pulicaria paludosa*) within the Irvine Ranch Water District (IRWD) natural treatment system (NTS) sites. Spanish false fleabane is a species of flowering plant in the *Asteraceae* family that is native to Europe and has been introduced in California, where it grows as a weed in damp, disturbed areas. This species is an annual or perennial herb with a rhizomatous root system and an inflorescence that bears many flower heads. Multiple non-chemical methods were tested for removal of the nonnative herb over several months, which have proven unsuccessful in reducing infestations. Moving forward, LSA recommends the use of prioritized chemical pesticides to facilitate the removal of Spanish false fleabane in order to maintain native riparian habitat within the NTS sites.

NON-CHEMICAL REMOVAL

Beginning in September 2019, LSA biologists identified Spanish false fleabane growing in more than 20 of the 34 NTS sites surveyed as part of the IRWD Integrative Pest Management Plan Implementation Project (project). Literature reviews of Spanish false fleabane did not indicate any established management strategies. Thus, LSA biologists prescribed manual removal for the species. Manual removal methods for the species included pulling (sometimes with the help of a weed wrench), or cutting shoots in areas where the infestation was too dense to employ the use of a weed wrench without substantial soil disturbance that would negatively impact desirable native plant species. In three sites (Los Olivos Meadow, Quail Springs, and Middle Eastfoot) that exhibited higher cover by Spanish false fleabane, black plastic mulching was tested in flat areas where feasible. The above methods did not significantly reduce cover by Spanish false fleabane. In fact, in some areas, cutting the plants encouraged more growth, as several offshoots regenerated from the parent plant and/or root fragments.

RECOMMENDATIONS

Although Spanish false fleabane is not listed by the California Invasive Plant Council as an invasive species, it exhibits indicators of being an invasive plant. In areas where the infestations are severe, Spanish false fleabane appears to be displacing native species. As the infestations are not responding to non-chemical treatment methods, LSA recommends spot treatment with prioritized chemical pesticides as a management strategy for Spanish false fleabane. LSA biologists have determined that soil solarization would not be an effective treatment method due to the species' extensive root system and the presence of native species. Flaming would also likely be ineffective due to the rhizomatous roots and perennial nature of the plant. Furthermore, flaming as a treatment method in Southern California's dry climate is generally not recommended because of the possibility of starting brush fires. LSA has also determined that organic chemical control methods would not be effective as a treatment method for Spanish false fleabane as this species can have woodier stems and an extensive root system. Organic control methods are best suited for newly emerged weeds and treat mainly above-ground biomass. Moreover, recent studies have revealed that organic pesticides can have a higher environmental impact than conventional pesticides, especially towards invertebrates. Application of prioritized chemical pesticides should be conducted in a manner that avoids disturbance to installed and recruited native species to the fullest extent practicable. Maintenance over the next few months (early in the growing season) will be most effective in reducing cover by Spanish false fleabane, as the species flowers from July to October.

Please contact Eric Krieg or Jessica Lieuw at (949) 553-0666 if you have any questions regarding these recommendations.

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MEMORANDUM

DATE: February 7, 2020

TO: Ian Swift, Natural Resources Manager, Irvine Ranch Water District

FROM: Jessica Lieuw, Assistant Biologist, LSA

SUBJECT: Chemical Pesticide Treatment Justification for Curly Dock

This memorandum documents the results of treatment methods for curly dock (*Rumex crispus*) within the Irvine Ranch Water District (IRWD) natural treatment system (NTS) sites. Curly dock is a species of flowering plant in the Polygonaceae family that is native to Europe and Western Asia and has been introduced in California, where it grows as a weed in disturbed areas. This species is a perennial herb with a large, forking taproot that may extend as deep as 4 feet with side branches up to 3 feet long. Flowers and seeds are produced in clusters and range from 100 to over 60,000 seeds per plant. Nonchemical methods were tested for removal of the nonnative herb over several months but proved unsuccessful in reducing large infestations. Moving forward, LSA recommends the use of prioritized chemical pesticides to facilitate removal of large infestations of curly dock in order to maintain native riparian habitat within the NTS sites and prevent accumulation of the seed bank.

NONCHEMICAL REMOVAL

Beginning in September 2019, LSA biologists identified curly dock growing in several of the 34 NTS sites surveyed as part of the IRWD Integrative Pest Management Plan Implementation Project (project). One site in particular, Hidden Canyon, had a large infestation of curly dock. LSA biologists initially prescribed manual removal for the species. Manual removal for curly dock involved pulling individual plants. Other mechanical removal methods, such as tillage or mowing, were not prescribed because the habitats were not amenable to these methods. Manual removal did not significantly reduce cover by curly dock in large infestations, such as in Hidden Canyon, and plants were observed regenerating from portions of the root left in the soil.

RECOMMENDATIONS

Curly dock is listed by the California Invasive Plant Council as an invasive species, with a Limited rating. As the large infestation in Hidden Canyon is not responding to nonchemical treatment methods, LSA recommends spot treatment with prioritized chemical pesticides as a management strategy for curly dock. Literature reviews indicate that it is difficult to control curly dock by hand-pulling due to the deep taproot, as plants can regenerate if portions of the root are left behind. However, roots may be cut at two inches beneath the soil surface, as only the upper portion of the root is capable of regenerating. Thus, small infestations and single individuals of curly dock may be effectively controlled by manual removal methods as long as the root is cut at the appropriate depth and the top of the plant is removed. However, this method would not be feasible in an area with a large infestation, such as Hidden Canyon, as it would cause a substantial amount of soil disturbance. Other mechanical removal methods such as continual mowing may reduce seed production; however, this method is not feasible for locations where curly dock has been observed within the NTS sites since individual plants are dispersed among desirable native species. LSA biologists have determined that mulching and soil solarization would not be an effective treatment method due to the species' large taproot and presence of neighboring native species. Flaming is also ineffective due to the large taproot and perennial nature of the plant. LSA has also determined that organic chemical control methods would not be effective for curly dock, as this species has such a deep taproot. Organic control methods are best suited for newly emerged weeds and treat mainly above-ground biomass, which would not affect roots of this species, thus allowing the plant to regenerate. Moreover, recent studies have revealed that organic pesticides can have a higher environmental impact than conventional pesticides, especially on invertebrates. Due to the reasons mentioned above, LSA recommends manual removal for small infestations and chemical pesticides for larger infestations. Application of prioritized chemical pesticides should be conducted in a manner that avoids disturbance to installed and recruited native species to the fullest extent practicable. Maintenance before individual plants flower will be the most effective way to reduce cover and prevent accumulation of the seed bank.

Please contact Eric Krieg or Jessica Lieuw at (949) 553-0666 if you have any questions regarding these recommendations.

MEMORANDUM

Date: November 27, 2021

To: Ian Swift, Natural Resources Manager, Irvine Ranch Water District

From: Barry Nerhus, President, Endemic
1100 West Arroyo Drive
Fullerton, CA 92833

Subject: Chemical Pesticide Treatment Justification for Pampas Grass

This memorandum documents the results of treatment methods for pampas grass (*Cortaderia selloana*) within the Irvine Ranch Water District (IRWD) natural treatment system (NTS) sites. In 2021, biologists with Endemic Environmental Services Inc. (Endemic) identified pampas grass growing in NTS basins as part of the IRWD Integrated Pest Management Plan Implementation Project (project). In subsequent months, Endemic biologists discovered it in additional NTS basins.

Pampas grass is a perennial grass-like herb in the Poaceae (grass) family and native to Argentina, Brazil, and Uruguay where it grows in moist conditions in riverine areas (Lean, 2021). This large, densely tufted perennial grass with feather-like inflorescence is located in coastal and inland areas of California and Oregon, and Utah. Pampas grass is a fast-growing grass that develops large clump in disturbed areas, dunes, bluffs, roadsides, and logged forests influenced by fog and maritime conditions, as well as inland riparian areas, marshes, and shrub lands that receive sufficient moisture (UC Davis, 2013).

ORIGIN

It was brought to California as a landscape ornamental and for erosion control but has since escaped cultivation and become a noxious weed in native habitat. It is believed pampas grass was introduced in California in 1848 at nurseries in Santa Barbara, California. Commercial cultivation of the plant began in California in 1874. In the 1890s, nurserymen near Santa Barbara were the primary commercial producers of pampas grass as ornamental plants. In 1946, the Soil Conservation Service throughout Ventura and Los Angeles counties planted pampas grass for dryland forage and to prevent erosion (DiTomaso et al.1999). Pampas grass continues to be used as an ornamental in California gardens, and it can live for over a decade.

CHARACTERISTICS

Pampas grass (*Cortaderia selloana*) are tall, densely tufted perennial grasses with long, erect basal leaves and showy, feather-like inflorescence. A pampas grass plant grows as high as 6-13 feet and spreads to about 6 feet wide, which is a significant area for a grass plant. The long leaves of the grass are sharp-edged, and the stems are rigid. The fluffy plumes grow to 1-3 feet and are white, light silvery, or light pink. Female plants have lighter plumes than males. Historically, the female plants were considered more attractive and therefore the focus of cultivation. Pampas grass has long, deep, fibrous roots that grow laterally from shallow rhizomes. The root system grows quickly making it difficult to eliminate the plant. If it cuts down, the roots regrow in a matter of weeks (UC Davis, 2013).

An individual pampas grass stand can produce millions of seeds annually that travel many miles by wind and birds (CDFW, 2021). Seeds usually survive for less than 6 months and can become established without fertilization. Seedling growth occurs well on sandy soil and exposed road cuts, but typically require a cool, foggy climate and moist soil. Germination occurs after the first rains and continues through spring. Seeds are produced sexually and flowers within 2-3 years after germination. The species is dioecious; the flowers of only one sex occur on an individual plant. Flowering usually occurs from late August through September, but occasionally in winter (DiTomaso et al., 1999). These grasses are very tolerant of intense sunlight, drought, and frost. They are very efficient at establishing in many habitat types. Pampas grass is flammable; as the leaves dry, they are ready fodder for a fire.

Invasive plants such as pampas grass displace native plants and create habitats that are lower in biodiversity. Furthermore, pampas grass has leaf blades that are undesirable as food or shelter to birds and other wildlife, and can cause physical harm to animals, and humans, because the leaves are extremely sharp.

MECHANICAL REMOVAL

Mechanical removal is necessary for pampas grass due to the high accumulation of biomass in the established stands. Hand-weeding pampas grass is effective removal for seedlings. Use of a pulaski (axe on one end and hoe on the other), mattock (pick on one end and hoe on the other), and/or long-bladed shovel are effective for removal of established clumps of the plant. It is important to remove the entire crown and top section of the roots to prevent resprouting. Regrowth from the lower roots isn't anticipated. To prevent re-rooting of detached plants left lying on the soil surface under moist soil conditions, turning the clump upside down so the roots are exposed to the air is recommended. To expose the base of the plant, allow better access for removal of the crown, and make disposal of the removed plant more manageable, a large chainsaw or weed eater has been shown to work. (Cal-IPC and UC Davis WEED Research & Information Center). To prevent seed dispersal of pampas grass during the growing season, cutting, collecting, bagging, and removal of the pampas grass inflorescence is effective (Lean, 2021).

Seedling survival is low in shaded areas or in competition with grasses or sedges. Therefore, using mulches in disturbed sites can prevent pampas grass infestations. Ideally, hydroseeding disturbed sites with desirable vegetation can hinder the establishment of pampas grass seedlings.

CHEMICAL REMOVAL

Cal-IPC provides guidance for eradication of pampas grass with herbicide. Spot treatment with a post-emergence application of a glyphosate herbicide at about 2 percent solution or 8 qts/100 gal is recommended for effective control. Addition of a non-ionic or silicone-based surfactant may enhance foliar penetration of the herbicide. Plants should be sprayed to wet but not to the level of herbicide runoff. Control is achievable in the first season with spot applications where necessary to prevent rapid reestablishment. Fall applications result in better control compared to summer applications. It may be necessary to apply the herbicide prior to seed maturation if viable seeds. Although studies were conducted on jubatagrass, low-volume (20 gal/ac) treatment with glyphosate at 4 percent is also expected to produce good control of pampas grass. Rope wick applications of glyphosate have also proven effective. Other registered post-emergence herbicides useful for control of *Cortaderia jubata*, may also be effective in the control of pampas grass. For large clumps, the top foliage can be removed by cutting or burning and the regrowth treated with a systemic post-emergence herbicide.

RECOMMENDATIONS

The California Invasive Plant Council (CAL-IPC) lists pampas grass as an invasive species with a “high” rating, having severe ecological impacts on native habitat. Endemic staff recommends both mechanical and chemical removal of the species from IRDW’s NTS sites. Literature review supports this conclusion.

Endemic recommends the use of mechanical and chemical removal of pampas grass to adequately eradicate the plant. A variety of tools discussed in the Mechanical Removal section above are effective at removal. To expose the base of the plant, allow better access for removal of the crown, and make disposal of the removed plant more manageable, a large chainsaw or weed eater has been shown to work. To prevent seed dispersal of pampas grass during the growing season, cutting, bagging, and removal of the pampas grass inflorescence is recommended.

Herbicides are commonly used to limit pampas grass growth. In this method, the grass is cut near the base of the clumps, and herbicide is applied to stop the grass from growing again from the clumps (Lean, 2021). Application of prioritized chemical herbicides should be conducted in a manner that avoids disturbance to installed and recruited native species to the fullest extent practicable. Herbicide application to pampas grass during fall with spot treatment thereafter is effective in reducing cover. Control is achievable in the first season with spot applications were necessary to prevent rapid reestablishment.

It is advisable to remove the plants before they develop mature seeds. Post-emergent herbicide applications applied in fall, after flowering when translocation of herbicide to base of tillers and rhizomes is at its peak is recommended by UC Davis Weed Research & Information Center for effective eradication of pampas grass. Any herbicide applications to pampas grass stands should be performed by a licensed commercial applicator.

Please contact Barry Nerhus at (714) 393-6249 or Luma Fowler at (949) 943-9664 if you have any questions regarding these recommendations.

REFERENCES

California Invasive Plant Council (Cal-IPC). 2021a. *Cortaderia selloana Profile.* Berkeley, California. (https://www.cal-ipc.org/plants/profile/cortaderia-selloana-profile/).

California Invasive Plant Council (Cal-IPC). 2021b. *Cortaderia selloana IPCW Plant Report.* Berkeley, California. (https://www.cal-ipc.org/resources/library/publications/ipcw/report35/).

California Department of Fish and Wildlife (CDFW). 2021. *Invasives to Avoid.* Habitat Conservation Planning Branch. West Sacramento, California. (https://wildlife.ca.gov/Conservation/Plants/Dont-Plant-Me/Pampas-Grass).

DiTomaso, Joseph M., et al. 1999. *Pampasgrass and Jubatagrass: Threaten California Coastal Habitats.* Weed Report. WEED Research & Information Center, University of California, Davis. (https://wric.ucdavis.edu/PDFs/pampasgrass%20and%20jubatagrass%20WRIC%20leaflet%2099-1.pdf).

Green, James C., et al. 1997. *Effects of Preemergence-applied Herbicides on Pampas Grass Grown in Containers.* Horticulture Research Institute. Journal of Horticulture. Columbus, OH. (https://meridian.allenpress.com/jeh/article/15/2/77/79594/Effects-of-Preemergence-applied-Herbicides-on).

Insight Weeds website. 2021. *How to Get Rid of Pampas Grass Permanently by Carter.* (https://insightweeds.com/get-rid-of-pampas-grass/).

Lean, Rachel. 2021. Our Grass Plants. *Your Guide To Pampas Grass: How to Plant, Grow and Care. (*https://ourgrassplants.com/pampas-grass-cortaderia-selloana/).

University of California, Davis (UC Davis). 2013. *Pampasgrass and Jubatagrass.* WEED Research & Information Center, Davis, California. (https://wric.ucdavis.edu/information/natural%20areas/wr_C/Cortaderia_jubata-selloana.pdf).

MEMORANDUM

Date: October 28, 2021

To: Ian Swift, Natural Resources Manager, Irvine Ranch Water District

From: Barry Nerhus, President
1100 West Arroyo Drive
Fullerton, CA 92833

Subject: Chemical Pesticide Treatment Justification for Stinknet

This memorandum documents the results of treatment methods for stinknet (*Oncosiphon pilulifer*) within the Irvine Ranch Water District (IRWD) natural treatment system (NTS) sites. Stinknet is an annual herb in the sunflower (Asteraceae) family and native to South Africa. Stinknet was possibly introduced into Arizona as a cultured desert habitat plant and has since spread to California possibly by way of equipment and fill material. The first records of stinknet in California are in the early 1980s and early 1990s in Arizona. Since its establishment in both states, stinknet has become highly invasive in many habitats, including the desert. It is a great colonizer and demonstrates weedy tendencies in wildlands, disturbed and agricultural areas, especially where irrigated. Infestations spread rapidly along roadways and open fields, dried dense patches are highly flammable, and the smoke is caustic.

This invasive species is a low-growing annual herb that is difficult to control. It germinates from seed with the onset of cool-season rains, usually around late October or November, and can continue to emerge through July in moist years. The plants grow as a basal rosette of feathery green leaves resembling a carrot plant. As the rosette matures, the stems grow horizontally and vertically up to two feet in height. The oil glands in its leaves produce a pungent odor resembling turpentine that makes it unattractive for herbivory. The plant produces bright yellow, spherical flower heads from the top of bolting stems from March through July in California. Each flower in the globe can produce a seed. Therefore, the plant produces thousands of seeds and can grow into dense stands of many hundreds of plants. The plants have been sold at Arizona farmer markets advertised as wild chamomile, although they are not.

NON-CHEMICAL REMOVAL

Beginning in May 2021, biologists with Endemic Environmental Services Inc. (Endemic) identified stinknet growing in NTS basins as part of the IRWD Integrated Pest Management Plan Implementation Project (project). In subsequent months, Endemic biologists discovered stinknet in additional NTS basins.

Endemic biologists initially prescribed manual removal for the species involving hand weeding and use of hand tools. However, manual removal poses a health risk to the laborer because stinknet causes severe dermal and respiratory allergic reactions, particularly when the plant is green and flowering. Furthermore, according to the Sonoran Desert Cooperative Weed Management Area (SDWMA) and the Southwestern Vegetation Management Association (SVMA), after the species has become established for two years it is impossible to control by hand due to its rapid growth into dense patches of many hundreds of plants. Hand pulling will only work on a small scale, and multiple sessions are needed.

Mechanical removal (mowing or string trimmers) is limited in effectiveness because the cut plants re-sprout and flower closer to the ground. Multiple cuttings close to the ground attenuate this problem and can provide good control, but a simple single cutting is not very effective. Other non-chemical removal methods, such as mulching, flooding, flaming, tilling, and solarizing are not prescribed as the habitats are not amenable to these methods and are also not accepted as methods of removal for stinknet. Mowing is not advised as this species will regrow from the roots and the equipment will spread the seed to new locations unless thoroughly cleaned after each use. Non-chemical methods of removal were tested for this species and have proven ineffective.

RECOMMENDATIONS

The California Invasive Plant Council (CAL-IPC) lists stinknet as an invasive species with a "high" rating, an overall environmental impact grade of "A" and an invasiveness grade of "A". Because the infestations are not responding to non-chemical treatment methods, and because CAL-IPC, SDWMA, SVMA, and the Orange County Native Plant Society (OCNPS) consider manual and mechanical removal to pose a high likelihood of inadvertently spreading the species to other areas, Endemic staff recommends spot treatment with prioritized chemical pesticides as a management strategy before the stinknet population expand to all sites. Literature reviews support this conclusion.

Solarizing, tilling, and mulching would not be a feasible treatment within NTS sites as the stinknet infestations are spread among areas that are host to desirable native species. Methods such as cutting and mowing can be effective, but also increase the probability for spreading the seed to new areas. Flaming is dangerous, as the plant produces a caustic smoke when burned. Flaming is also generally avoided as a treatment in the dry climate of Southern California due to the risk of brush fires.

Endemic also determined that organic chemical control methods would not be effective in controlling stinknet and are not appropriate for NTS sites, as recent studies have found that organic pesticides can have a higher environmental impact than conventional pesticides, particularly on invertebrates.

Endemic recommends the use of prioritized chemical pesticides to facilitate the removal of stinknet in order to maintain native habitat within the NTS sites. Application of prioritized chemical pesticides should be conducted in a manner that avoids disturbance to installed and recruited native species to the fullest extent practicable. Maintenance from November through February will be most effective in reducing cover by stinknet, as the species blooms from March to July; however, year-round control efforts will be necessary.

According to SVMA, it is advisable to remove the plants before they develop mature seeds. But once stinknet is established for a second year, chemical control becomes necessary. Glyphosate with MSO surfactant can be applied to emerged plants before flowering. For areas of 70-100% coverage per square meter, Endemic recommends using pre-emergent and herbicide applications to dense stinknet stands. It should be performed by a licensed commercial applicator. The most effective herbicide strategy is pre-emergent treatment with Esplanade and post-emergent treatment with Transline (Rodriquez et al, 2021) but Transline seems to be more effective in dry years than wet years (McDonald, 2020).

Please contact Barry Nerhus at (714) 393-6249 or Luma Fowler at (949) 943-9664 if you have any questions regarding these recommendations.

REFERENCES

Chamberland, Michael. 2020. *Stinknet: a Weed Advancing in Southern Arizona.* The University of Arizona Cooperative Extension. Tucson, Arizona. (https://www.swvma.org/wp-content/uploads/Chamberland-Stinknet-az1827-2020.pdf).

California Invasive Plant Council. 2021. *Oncosiphon Pilulifer Plant Assessment Form*. Berkeley, California. (https://www.cal-ipc.org/plants/paf/oncosiphon-pilulifer/).

California Invasive Plant Council. 2021. *Oncosiphon Pilulifer Profile.* Berkeley, California. (https://www.cal-ipc.org/plants/profile/oncosiphon-piluliferum-profile/).

Rodriguez, Clarissa, et al. 2021. *Evaluating the Efficacy of Management Options for Oncosiphon Piluliferum (Stinknet).* University of California, Riverside, California. (https://www.rchca.us/DocumentCenter/View/831/UCR-Stinknet-Report-2021-FINAL).

Rodriguez, Clarissa, et al. 2021. *Evaluating the Efficacy of Management Options for Oncosiphon Piluliferum (Stinknet).* University of California, Riverside. (https://www.cal-ipc.org/wpcontent/uploads/2019/11/Cal_IPC_Symposium_2019_Clarissa__Rodriguez_Evaluating-theefficiency-of-herbicides-for-management-for-Oncosiphon-piluliferum-stinknet.pdf).

Southwest Vegetation Management Association. 2020. *Stinknet (Globe Chamomile) Brochure.* Phoenix, Arizona. (https://www.swvma.org/wp-content/uploads/Stinknet-Brochure-220-E-small.pdf).

McDonald, Chris. 2020. *Stinking Stinknet Is Spreading in Southern California. What Does That Mean for You?* University of California, Davis. (https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=41400).

Sonoran Desert Cooperative Weed Management Area. 2021. *Stinknet - Oncosiphon Piluliferum*. Arizona-Sonora Desert Museum. Tucson, Arizona. (https://sdcwma.org/species/stinknet.php).

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IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-13-2021
Time: 8:30 am
Personnel: Zacarias Campos
Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Trabuco					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	8. oz	25000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-19-2021

Time: 1200 pm

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Hidden Canyon					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	20-07	40000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-18-2021

Time: 1:15 pm

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Port Colver					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	3-oz	1000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-14-2021

Time: 9:30 am

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: forge Meadows					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	6 oz	15000 sf

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-16-2021

Time: 1:00 Pm

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Orchard Meadows					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8-oz	30000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-10-2021

Time: 11:00 am

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Illuna Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	6-oz	18000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-20-2021

Time: 2:00 pm

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Aguila Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	6-oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-21-2021

Time: 8:45 am

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura South					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type *(e.g., herbicide, fungicide, pesticide)*	Trade Name *(e.g., Roundup, Garlon 4, Diuron 4L)*	Active Ingredient *(e.g., Glyphosate, Triclopyr, Dichlorophenyl)*	Application Rate *(e.g., 6 oz/300 sq.ft.)*	Total Area Applied
herbicide	lifeline	Glufosinate	16-oz	45000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-17-2020

Time: 12:30 pm

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley B					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	4-oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-26-2021

Time: 1:00pm

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	lifeline	Glufosinate	8-oz	40000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-27-2021

Time: 9:00am

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Floral View					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type *(e.g., herbicide, fungicide, pesticide)*	Trade Name *(e.g., Roundup, Garlon 4, Diuron 4L)*	Active Ingredient *(e.g., Glyphosate, Triclopyr, Dichlorophenyl)*	Application Rate *(e.g., 6 oz/300 sq.ft.)*	Total Area Applied
herbicide	lifeline	Glufosinate	4. oz	16000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 1-26-2021

Time: 1:00 pm

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Eastwood					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16-oz	40000

Summary of Results:

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IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-1-21

Time: 10AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Cypress Meadows A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glofosinate	18 oz	55000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-4-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Trabuco East					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	10 oz	28000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-4-21

Time: 8AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Trabuco East					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 5 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	10 oz	28000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-4-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Sports Park					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type *(e.g., herbicide, fungicide, pesticide)*	Trade Name *(e.g., Roundup, Garlon 4, Diuron 4L)*	Active Ingredient *(e.g., Glyphosate, Triclopyr, Dichlorophenyl)*	Application Rate *(e.g., 6 oz/300 sq.ft.)*	Total Area Applied
herbicide	Lifeline	Glufosinate	24oz	45000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-5-21

Time: 10 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Quail Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 5 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	10 oz	35000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-8-21

Time: 12 PM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: LOS Olivos					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	24 OZ	50000

Summary of Results:

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IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-11-21

Time: 9 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Hidden Canyon					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16 oz	35000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-16-21

Time: 2 PM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: East Fot ReTarding basin					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	3 oz	10000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-18-21

Time: 1 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura South					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	3oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-19-21

Time: 10 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Middle East foot					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	40000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-23-21

Time: 8AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16 oz	43000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-24-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley B					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-25-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: East Wood.					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 8 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8oz	35000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-25-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Portola Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 2-26-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Upper East Foot					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

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Date: 3-1-21

Time: 7 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Cypress Meadow A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	40 oz	10000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-5-21

Time: 8AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Sports Park					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16 oz	40000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-11-21

Time: 10AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Los Olivos					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 OZ	45 000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-16-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Middle East Foot					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	24000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-17-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura South					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-18-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Aguila Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	1000G

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-18-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Illuna Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	6 oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-23-21

Time: 9 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley B					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 8 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	40000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-24-21

Time: 10 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley C					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16 oz	30600

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-25-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	24 OZ	40000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-26-21

Time: 8 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: East Wood					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16 oz	45000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 3-26-21

Time: 12:30 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Portola Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8 oz	10000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

April
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Date: 4-2-21

Time: 10 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Cypress Meadows- A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	30 oz	65000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 4-27-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ea St Wood					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 8 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosindte	12 oz	48000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 4-28-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Hidden Canyon					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 8 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	70 oz	48000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

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Date: 5-3-21

Time: 7:30 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Cypress M - A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Life line	Glufosinate	40 oz	70000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-10-21

Time: 9 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Quial Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8 oz	18000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-11-21
Time: 8 A M
Personnel: Zacarias Campos
Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Sports Park					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 OZ	35000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-11-21

Time: 12:30 PM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Trabuco East					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	38000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-14-21

Time: 9AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Middle East Foot					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	20000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-17-21

Time: 8 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura North					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type *(e.g., herbicide, fungicide, pesticide)*	Trade Name *(e.g., Roundup, Garlon 4, Diuron 4L)*	Active Ingredient *(e.g., Glyphosate, Triclopyr, Dichlorophenyl)*	Application Rate *(e.g., 6 oz/300 sq.ft.)*	Total Area Applied
herbicide	Lifeline	Glufosinate	14 oz	30000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-17-21

Time: 11 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura South					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12oz	25000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-18-21

Time: 8 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Aguila Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 5 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	22000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-18-21

Time: 12:30 PM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Illuna Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 8 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	10 oz	18000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 5-21-21

Time: 9 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					√
Other: Sand Canyon					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
√						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	35000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

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Date: 6-8-21

Time: 12 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Agua Chinon - A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal (e.g., hand pulling, shovel, hoe)	Mechanical Removal (e.g., mowing, string trimmer)	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides (e.g., acetic acid, d-limonene)	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	22006

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-8-21

Time: 1PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Agua Chinon B					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12oz	25000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-10-20

Time: 10 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Quail Meadows					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosonate	8 oz	15000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-14-21

Time: 11AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Middle East Foot					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type *(e.g., herbicide, fungicide, pesticide)*	Trade Name *(e.g., Roundup, Garlon 4, Diuron 4L)*	Active Ingredient *(e.g., Glyphosate, Triclopyr, Dichlorophenyl)*	Application Rate *(e.g., 6 oz/300 sq.ft.)*	Total Area Applied
herbicide	Lifeline	Glufosinate	24 oz	65000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-15-21

Time: 2 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura South					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4 oz	6000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-15-21

Time: 1PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Laguna Altura North.					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	4oz	7006

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-17-21

Time: 10AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Los olivos					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type *(e.g., herbicide, fungicide, pesticide)*	Trade Name *(e.g., Roundup, Garlon 4, Diuron 4L)*	Active Ingredient *(e.g., Glyphosate, Triclopyr, Dichlorophenyl)*	Application Rate *(e.g., 6 oz/300 sq.ft.)*	Total Area Applied
herbicide	Lifeline	Glofosinate	20 OZ	45000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-18-21

Time: 8AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Aguila Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8 oz	25006

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-18-21

Time: 11 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Illona Springs					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8 oz	30000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-22-21

Time: 8AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley C					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	16 oz	30000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-23-21

Time: 7AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley A					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	24 oz	

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-23-21

Time: 12:30 PM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Ridge Valley B					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	12 oz	35000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-24-21

Time: 9 AM

Personnel: Zaccarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: Turtle Ridge					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glu fosinate	8oz	18,000

Summary of Results:

IRWD – Integrated Pest Management Field Monitoring Form

Date: 6-25-21

Time: 10 AM

Personnel: Zacarias Campos

Application Equipment Used: BackPack Spray

Location of Pesticide Application:

San Joaquin Marsh	Rattlesnake Reservoir	San Joaquin Reservoir	Sand Canyon Reservoir	Syphon Reservoir	Natural Treatment Systems
					✓
Other: East Foot ReTarding Base					

Target Pests:

Noxious Weed	Aquatic Plants	Algae	Invertebrates	Rodent	Fungi	Other
✓						

Non-Chemical Control Methods:

Manual Removal *(e.g., hand pulling, shovel, hoe)*	Mechanical Removal *(e.g., mowing, string trimmer)*	Mulch	Beneficial Insects	Trapping	Other

Organic Chemical Control Methods:

Natural Acid Herbicides *(e.g., acetic acid, d-limonene)*	Iron-based Herbicides	Phytotoxic Oils	Other

IRWD – Integrated Pest Management Field Monitoring Form

Non-Organic Chemical Control Methods:

Type (e.g., herbicide, fungicide, pesticide)	Trade Name (e.g., Roundup, Garlon 4, Diuron 4L)	Active Ingredient (e.g., Glyphosate, Triclopyr, Dichlorophenyl)	Application Rate (e.g., 6 oz/300 sq.ft.)	Total Area Applied
herbicide	Lifeline	Glufosinate	8 oz	18000

Summary of Results:

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/30/21 -340

Name & address of property treated / Nomber y domicilio de la proiedad tratada: Orchard Meadows

Name of pesticide and EPA number / Nombre del pesticida y numero de relegro de EPA:

- ☐ Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- ☐ Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-88-64705
- ☐ Herbimax Oil — Onzas usado: — EPA Registration # 35209-50011
- ☐ Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- ☐ Sledgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- ☒ No Foam A — Onzas usado: 1-oz — EPA Registration # 1050775-50015
- ☐ Ronstar G — Onzas usado: — EPA Registration # 62719-113
- ☒ Turf Mark — 1-oz
- ☐ Oryzalin — Onzas usado: — EPA Registration # 72167-16-73220
- ☐ Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-64705
- ☐ Turflon — Onzas usado: — EPA Registration # 464-554
- ☐ Fusilade II — Onzas usado: — EPA Registration # 10182-393
- ☐ Deadline T&O — Lbs. usado: — EPA Registration # 64864-35
- ☐ Orthene T T&O — Onzas usado: — EPA Registration # 239-2427
- ☒ LIFELINE HERBICIDE — Onzas usado: 12-oz — EPA Registration # 70506-310
- ☐ DISMISS SPC 2 L, Aquatic — Onzas usado: — EPA Registration # 2??-625

Size of area treated / Cantidad area treatado: 29000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/28/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada:

Eastwood

Name of pesticide and EPA number / Nombre del pesticida y numero de registro de EPA:

☐ **Alligare Glyphosate 4 Plus**
Onzas usado:
EPA Registration # 81927-9

☐ **Grass Getter Herbicide**
Onzas usado:
EPA Registration # 7969-59-84705

☐ **Herbimax Oil**
Onzas usado:
EPA Registration # 35208-50011

☐ **Speedzone Herbicide**
Onzas usado:
EPA Registration # 2217-833

☐ **Sedgehammer**
Onzas usado:
EPA Registration # 81880-1-10163

☒ **No Foam A**
Onzas usado: 1-oz
EPA Registration # 1050775-50015

☐ **Ronstar G**
Onzas usado:
EPA Registration # 62719-113

☒ Turf Mark
1-oz

☐ **Oryzalin**
Onzas usado:
EPA Registration # 72167-15-73220

☐ **Weed-Hoe**
Onzas usado:
EPA Registration # 19713-42-84706

☐ **Turflon**
Onzas usado:
EPA Registration # 464-554

☐ **Fusilade II**
Onzas usado:
EPA Registration # 10182-393

☐ **Deadline T&O**
Lbs. usado:
EPA Registration # 84884-86

☐ **Ortho T T&O**
Onzas usado:
EPA Registration # 239-2427

☒ LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

☐ Diquat SPC 2 L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 30 000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zecarias Campos

Date of application / Fecha de servicio: 7/27/21

Name & address of property treated / Nombery domiclliode la proiedad tratadad:
East Fort Retarding

Name of pesticide and EPA number / Nombre del pesticida y numero de relegro de EPA:

Product	Onzas usado	EPA Registration #
☐ Aligare Glyphosate 4 Plus		81927-9
☐ Grass Getter Herbicide		7969-58-64705
☐ Herbimax Oil		35209-50011
☐ Speedzone Herbicide		2217-833
☐ Sledgehammer		81880-1-10163
☐ No Foam A	1-oz	1050775-50015
☐ Ronstar G		62719-113
☐ Turf Mark	1-oz.	
☐ Oryzalin		72167-15-73220
☐ Weed-Hoe		19713-42-64705
☐ Turflon		464-554
☐ Fusilade II		10182-393
☐ Deadline T&O (Lbs. usado)		81884-35
☐ Ortho T T&O		239-2427
☐ LIFELINE HERBICIDE	8-oz	70506-310
☐ DISVET SRC 2.L. Aquatic		228-675

Size of area treated / Cantidad area treatado: 25000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zecovias Campos

Date of application / Fecha de servicio: 7/26/21

Name & address of property treated / Nombery domicilliada la proledad tratadad:
~~Turtle Rid~~ Turtle Ridge

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

- ☐ **Aligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- ☐ **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 7969-68-84705
- ☐ **Hardimax Oil** — Onzas usado: — EPA Registration # 35208-80011
- ☐ **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- ☐ **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- ☐ **No Foam A** — Onzas usado: — EPA Registration # 1050775-50015
- ☐ **Ronstar G** — Onzas usado: — EPA Registration # 62719-113
- ☐ Turf Mark
- ☐ **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- ☐ **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-84705
- ☐ **Turflon** — Onzas usado: — EPA Registration # 464-554
- ☐ **Fusilade II** — Onzas usado: — EPA Registration # 10182-393
- ☐ **Dead line T&O** — Lbs. usado: — EPA Registration # 84884-36
- ☐ **Ortho T T&O** — Onzas usado: — EPA Registration # 239-2427
- ☐ LIFELINE HERBICIDE — Onzas usado: 6-62 — EPA Registration # 70506-310
- ☐ DIQUAT SPC 2 L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 12 000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacorias Campos

Date of application / Fecha de servicio: 7/6/21

Name & address of property treated / Nomber y domicilliode la proiedad tratadad: Cypress - D.

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

Alligare Glyphosate 4 Plus
- [ ] Onzas usado:
- EPA Registration # 81927-9

Grass Getter Herbicide
- [ ] Onzas usado:
- EPA Registration # 7969-66-64705

Herbimax Oil
- [ ] Onzas usado:
- EPA Registration # 36208-60011

Speedzone Herbicide
- [ ] Onzas usado:
- EPA Registration # 2217-833

Sedgehammer
- [ ] Onzas usado:
- EPA Registration # 81880-1-10163

No Foam A
- [x] Onzas usado: 2-oz
- EPA Registration # 1050775-50015

Ronstar G
- [ ] Onzas usado:
- EPA Registration # 62719-113

- [x] Turf Mark 2-oz.

Oryzalin
- [ ] Onzas usado:
- EPA Registration # 72167-16-73220

Weed-Hoe
- [ ] Onzas usado:
- EPA Registration # 19713-42-64705

Turflon
- [ ] Onzas usado:
- EPA Registration # 464-554

Fusilade II
- [ ] Onzas usado:
- EPA Registration # 10182-393

Deadline T&O
- [ ] Lbs. usado:
- EPA Registration # 64864-35

Orthene T T&O
- [ ] Onzas usado:
- EPA Registration # 239-2427

LIFELINE HERBICIDE
- [x] Onzas usado: 14-oz
- EPA Registration # 70506-310

Diquat SPC 2 L, Aquatic
- [ ] Onzas usado:
- EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 28000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorias Campos

Date of application / Fecha de servicio: ~~[illegible]~~ 2/7/21

Name & address of property treated / Nombery domicilioda la proiedad tratadad:
~~[illegible]~~ Lower EastFoot

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

☐ **Alligare Glyphosate 4 Plus**
Onzas usado:
EPA Registration # 81927-9

☐ **Grass Getter Herbicide**
Onzas usado:
EPA Registration # 7969-88-54705

☐ **Herbimax Oil**
Onzas usado:
EPA Registration # 36208-50011

☐ **Speedzone Herbicide**
Onzas usado:
EPA Registration # 2217-833

☐ **Sedgehammer**
Onzas usado:
EPA Registration # 81880-1-10163

☐ **No Foam A**
Onzas usado: 1-02
EPA Registration # 1050775-50015

☐ **Ronstar G**
Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark
1-02.

☐ **Oryzalin**
Onzas usado:
EPA Registration # 72167-15-73220

☐ **Weed-Hoe**
Onzas usado:
EPA Registration # 19713-42-84706

☐ **Turflon**
Onzas usado:
EPA Registration # 464-554

☐ **Fusilade II**
Onzas usado:
EPA Registration # 10182-393

☐ **Deadline T&O**
Lbs. usado:
EPA Registration # 84884-35

☐ **Orthene T T&O**
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 18-02
EPA Registration # 70506-310

☐ Diquat SPC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 15000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocarias C. Campos

Date of application / Fecha de servicio: 7/8/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad: Agua Chinon A

Name of pesticide and EPA number / Nombre del pesticida y numéro de relsgro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-64705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 36208-60011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☑ No Foam A
Onzas usado: 2-oz
EPA Registration # 1060775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☑ Turf Mark
2-oz

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 10718-42-54705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-398

☐ Deadline T&O
Lbs. usado:
EPA Registration # 84884-38

☐ Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

☑ LIFELINE HERBICIDE
Onzas usado: 16-oz
EPA Registration # 70506-310

☐ DISWAT SPC 2L, Aquatic
Onzas usado:
EPA Registration # 238-675

Size of area treated / Cantidad area treatado: 50000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/9/21

Name & address of property treated / Nombre y domicilio de la proledad tratadad:

Marshburn

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-84705

Herbimax Oil
Onzas usado:
EPA Registration # 35205-90011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
Onzas usado: 2-oz
EPA Registration # 1050775-50015

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark
2-oz.

Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-84706

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-398

Deadline T&O
Lbs. usado:
EPA Registration # 84694-96

Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
Onzas usado: 2-oz
EPA Registration # 70506-310

Dismiss
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 60000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/16/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad: Old Laguna

Name of pesticide and EPA number / Nombre del pesticida y numéro de relegro de EPA:

Pesticide	Onzas usado	EPA Registration #
Alligare Glyphosate 4 Plus		81927-9
Grass Getter Herbicide		7969-58-64705
Herbimax Oil		35208-50011
Speedzone Herbicide		2217-893
Sedgehammer		81880-1-10163
No Foam A	2-oz	1050775-50015
Ronstar G		62719-118
Turf Marle	2-oz.	
Oryzalin		72167-15-73220
Weed-Hoe		10718-42-64705
Turflon		464-554
Fusilade II		10182-393
Deadline T&O (Lbs. usado)		64864-35
Orthene T T&O		239-2427
LIFELINE HERBICIDE	6-oz	70506-310
DIGVAT SPC 2.L. Aquatic		2.35-675

Size of area treated / Cantidad area treatado:

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/15/21

Name & address of property treated / Nomber y domicilliode la proiedad tratadad:
Laguna Altura North

Name of pesticide and EPA number / Nombre del pesticide y numéro de relsgro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-58-64705
- [ ] Herbimax Oil
  Onzas usado:
  EPA Registration # 36208-50011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-893
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [x] No Foam A
  Onzas usado: 1-oz
  EPA Registration # 1050775-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 62719-113
- [x] Turf Mark
  1-oz
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-54705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-398
- [ ] Deadline T&O
  Lbs. usado:
  EPA Registration # 54864-36
- [ ] Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 6-oz
  EPA Registration # 70506-310
- [ ] DISVAT SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 18000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Cooper

Date of application / Fecha de servicio: 7/15/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:
Laguna Altura South

Name of pesticide and EPA number / Nombre del pesticida y numéro de relsgro de EPA:

☐ **Alligare Glyphosate 4 Plus**
Onzas usado:
EPA Registration # 81927-9

☐ **Grass Getter Herbicide**
Onzas usado:
EPA Registration # 7969-58-84705

☐ **Herbimax Oil**
Onzas usado:
EPA Registration # 35205-80011

☐ **Speedzone Herbicide**
Onzas usado:
EPA Registration # 2217-833

☐ **Sedgehammer**
Onzas usado:
EPA Registration # 81880-1-10163

☒ **No Foam A**
Onzas usado: 1-oz
EPA Registration # 1050775-80015

☐ **Ronstar G**
Onzas usado:
EPA Registration # 62719-118

☒ Turf Mark
1-oz

☐ **Oryzalin**
Onzas usado:
EPA Registration # 72167-16-73220

☐ **Weed-Hoe**
Onzas usado:
EPA Registration # 10718-42-84705

☐ **Turflon**
Onzas usado:
EPA Registration # 464-554

☐ **Fusilade II**
Onzas usado:
EPA Registration # 10182-393

☐ **Deadline T&O**
Lbs. usado:
EPA Registration # 64864-38

☐ **Orthene T T&O**
Onzas usado:
EPA Registration # 239-2427

☒ LIFELINE HERBICIDE
Onzas usado: 6-oz
EPA Registration # 70506-310

☐ Diquat SPC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 15000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/14/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:

Middle East Foot

Name of pesticide and EPA number / Nombre del pesticida y número de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-64705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-893

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☑ No Foam A
Onzas usado: 3-oz
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☑ Turf Mark
3-oz

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-64705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-393

☐ Deadline T&O
Lbs. usado:
EPA Registration # 64864-38

☐ Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

☑ LIFELINE HERBICIDE
Onzas usado: 24-oz
EPA Registration # 70506-310

☐ Dibquat SPC 2L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 65000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/13/21

Name & address of property treated / Nomber y domicilliode la proiedad tratedad: TRABUCO EAST

Name of pesticide and EPA number / Nombre del pesticide y numero de relsgro de EPA:

Product	Onzas usado	EPA Registration #
☐ Alligare Glyphosate 4 Plus		81927-9
☐ Grass Getter Herbicide		7969-66-64705
☐ Herbimax Oil		36208-50011
☐ Speedzone Herbicide		2217-833
☐ Sedgehammer		81880-1-10163
☑ No Foam A	1-oz	1080776-50015
☐ Ronstar G		62719-113
☑ Turf Mark	1-oz	
☐ Oryzalin		72167-16-73220
☐ Weed-Hoe		19713-42-64705
☐ Turflon		464-554
☐ Fusilade II		10182-398
☐ Deadline T&O (Lbs. usado)		64864-36
☐ Orthene T T&O		239-2427
☑ LIFELINE HERBICIDE	12-oz	70506-310
☐ Diquat SPC 2 L, Aquatic		228-675

Size of area treated / Cantidad area treatado: 35000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/13/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad: SPorTs PARK

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

Aligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-54705

Herbimax Oil
Onzas usado:
EPA Registration # 35208-50011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-835

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
Onzas usado: 3-oz
EPA Registration # 1050775-50015

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark
3-oz

Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-54705

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-393

Deadline T&O
Lbs. usado:
EPA Registration # 64864-35

Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
Onzas usado: 20-oz
EPA Registration # 70506-310

DIQUAT SPC 2 L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 66 600-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/12/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Quail Springs

Name of pesticide and EPA number / Nombre del pesticida y numero de registro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 7969-58-54705
- [ ] **Herbimax Oil** — Onzas usado: — EPA Registration # 36208-50011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- [ ] **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [x] **No Foam A** — Onzas usado: 1-oz — EPA Registration # 1050775-50015
- [x] **Ronstar G** — Onzas usado: — EPA Registration # 62719-113
- [x] Turf Mark — 1-ozs
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-54705
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-393
- [ ] **Deadline T&O** — Lbs. usado: — EPA Registration # 64864-36
- [ ] **Ortho T T&O** — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 12-oz — EPA Registration # 70506-310
- [ ] DIQUAT SPC 2L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 55000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/2/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:
Port Culver

Name of pesticide and EPA number / Nombre del pesticida y número de reisgro de EPA:

☐ **Alligare Glyphosate 4 Plus** Onzas usado: EPA Registration # 81927-9	☐ **Oryzalin** Onzas usado: EPA Registration # 72167-15-73220
☐ **Grass Getter Herbicide** Onzas usado: EPA Registration # 7969-58-64705	☐ **Weed-Hoe** Onzas usado: EPA Registration # 19713-42-64705
☐ **Herbimax Oil** Onzas usado: EPA Registration # 36208-60011	☐ **Turflon** Onzas usado: EPA Registration # 464-554
☐ **Speedzone Herbicide** Onzas usado: EPA Registration # 2217-833	☐ **Fusilade II** Onzas usado: EPA Registration # 10182-398
☐ **Sedgehammer** Onzas usado: EPA Registration # 81880-1-10163	☐ **Deadline T&O** Lbs. usado: EPA Registration # 64864-38
☑ **No Foam A** Onzas usado: 1-oz EPA Registration # 1050775-60015	☐ **Orthene T T&O** Onzas usado: EPA Registration # 239-2427
☐ **Ronstar G** Onzas usado: EPA Registration # 62719-118	☑ LIFELINE HERBICIDE Onzas usado: 8-oz EPA Registration # 70506-310
☑ Turf Mark 1-oz.	☐ Dispatch SPC 2.L, Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 25000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/2/21

Name & address of property treated / Nombery domicilliode la proiedad tratadad:
Cypress Meadows B

Name of pesticide and EPA number / Nombre del pesticida y numéro de reiegro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-58-84705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-84705
☐ Herbimax Oil Onzas usado: EPA Registration # 36208-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-333
☐ Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 64864-38
☒ No Foam A Onzas usado: 1-OZ EPA Registration # 1050775-50015	☐ Ortheno T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 62719-113	☒ LIFELINE HERBICIDE Onzas usado: 8-OZ EPA Registration # 70506-310
☒ Turf Mark 1-OZ	☐ DISMISS SPC 2L, Aquatic Onzas usado: EPA Registration # 235-675

Size of area treated / Cantidad area treatado: 28600-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/1/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad:
Cypress M- A

Name of pesticide and EPA number / Nombre del pesticida y numero de relsgro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-58-54705
- [ ] Herbimax Oil
  Onzas usado:
  EPA Registration # 36208-50011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-998
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [x] No Foam A
  Onzas usado: 3-oz
  EPA Registration # 1050775-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 62719-118
- [x] Turf Mark
  3-oz
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-54705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-393
- [ ] Deadline T&O
  Lbs. usado:
  EPA Registration # 64864-38
- [ ] Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 24-oz
  EPA Registration # 70506-310
- [ ] Diquat SPC 2 L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 45000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 6/30/21

Name & address of property treated / Nombery domicilliode la proiedad tratedad:
ORchard MeAdows

Name of pesticide and EPA number / Nombre del pesticida y número de reisgro de EPA:

Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-54705

Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
Onzas usado: 1-oz
EPA Registration # 1050775-50016

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark
1-oz.

Oryzalin
Onzas usado:
EPA Registration # 72167-16-79220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-54705

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-398

Deadline T&O
Lbs. usado:
EPA Registration # 64864-35

Ornamec T T&O
Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

DIQUAT SPC 2 L. Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 22000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 6/28/21

Name & address of property treated / Nomber y domicililloda la proiedad tratadad: Portola Springs

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-88-64705

Herbimax Oil
Onzas usado:
EPA Registration # 36208-60011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
Onzas usado: 1-oz
EPA Registration # 1050775-50015

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark
1-oz.

Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-64705

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-393

Deadline T&O
Lbs. usado:
EPA Registration # 64864-38

Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

DISVAT SPC 2L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 20000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 6/28/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad:
Eastwood

Name of pesticide and EPA number / Nombre del pesticida y numero de relagro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-58-54705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-54705
☐ Herbimax Oil Onzas usado: EPA Registration # 36208-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-893	☐ Fusilade II Onzas usado: EPA Registration # 10182-393
☐ Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 64864-38
☒ No Foam A Onzas usado: 2-oz EPA Registration # 1050775-50016	☐ Orthene T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 62719-113	☒ LIFELINE HERBICIDE Onzas usado: 12-oz EPA Registration # 70506-310
☒ Turf Mark 2-oz	☐ DISVAT SPC 2L, Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 45000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/23/21

Name & address of property treated / Nombery domicilioda la proiedad tratadad:
Ridge Valley - B

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-58-54705
- [ ] Herbimax Oil
  Onzas usado:
  EPA Registration # 35208-60011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-833
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] No Foam A
  Onzas usado:
  EPA Registration # 1050775-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 62719-113
- [ ] Turf Mark
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-54705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-393
- [ ] Dexdline TAO
  Lbs. usado:
  EPA Registration # 84894-38
- [ ] Ohhene T TAO
  Onzas usado:
  EPA Registration # 299-2427
- [ ] LIFELINE HERBICIDE
  Onzas usado: 4-oz
  EPA Registration # 70506-310
- [ ] DISMISS SRC 2 L, Agua
  Onzas usado:
  EPA Registration # 235-675

Size of area treated / Cantidad area trapiado: 10000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/23/21

Name & address of property treated / Nombery domicilioda la proledad tratedad:
Ridge Valley A

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-64705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 35208-60911

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☑ No Foam A
Onzas usado: 1-OZ
EPA Registration # 1050775-60015

☐ Ranger G
Onzas usado:
EPA Registration # 62719-118

☑ Turf Mark
1-OZ

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 10718-42-64705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-393

☐ Dealine T&O
Lbs. usado:
EPA Registration # 64864-36

☐ Chipone T T&O
Onzas usado:
EPA Registration # 239-2427

☑ LIFELINE HERBICIDE
Onzas usado: 12-OZ
EPA Registration # 70506-310

☐ DISVIET SRC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 35 800-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/22/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Ridge Valley C

Name of pesticide and EPA number / Nombre del pesticida y numero de registro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 7969-58-84705
- [ ] **Herbimax Oil** — Onzas usado: — EPA Registration # 35208-50011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- [ ] **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [x] **No Foam A** — Onzas usado: 1-oz — EPA Registration # 1050775-50015
- [ ] **Ronstar G** — Onzas usado: — EPA Registration # 62719-113
- [x] Turf Mark 2-oz.
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-84705
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-393
- [ ] **Deadline T&O** — Lbs. usado: — EPA Registration # 84664-36
- [ ] **Ortho T T&O** — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 12-oz — EPA Registration # 70506-310
- [ ] DISVAT SRC 2.L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 40 000 - SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorics Campos

Date of application / Fecha de servicio: 7/21/21

Name & address of property treated / Nombery domicilioda la proledad tratadad:
Floral View

Name of pesticide and EPA number / Nombre del pesticide y numero de relagro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-58-64705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-64705
☐ Herbimax Oil Onzas usado: EPA Registration # 35208-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-393
☐ Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 84664-35
☒ No Foam A Onzas usado: 1-6 Z EPA Registration # 1050775-50015	☐ Orthene T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 62719-113	☒ LIFELINE HERBICIDE Onzas usado: 6-OZ EPA Registration # 70506-310
☒ Turf Mark 1-62	☐ DISVAT SAC 2 L, Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 30 000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 7/26/21

Name & address of property treated / Nombery domicilioda la proledad tratedad:
Aguila Springs

Name of pesticide and EPA number / Nombre del pesticide y numéro de relsgro de EPA:

☐ **Alligare Glyphosate 4 Plus**
Onzas usado:
EPA Registration # 81927-9

☐ **Grass Getter Herbicide**
Onzas usado:
EPA Registration # 7969-58-84705

☐ **Herbimax Oil**
Onzas usado:
EPA Registration # 35208-50011

☐ **Speedzone Herbicide**
Onzas usado:
EPA Registration # 2217-833

☐ **Sedgehammer**
Onzas usado:
EPA Registration # 81880-1-10163

☑ **No Foam A**
Onzas usado: 1-02
EPA Registration # 1050775-50015

☐ **Ronstar G**
Onzas usado:
EPA Registration # 62719-118

☑ Turf Mark
1-02

☐ **Oryzalin**
Onzas usado:
EPA Registration # 72167-15-73220

☐ **Weed-Hoe**
Onzas usado:
EPA Registration # 19713-42-64705

☐ **Turflon**
Onzas usado:
EPA Registration # 464-554

☐ **Fusilade II**
Onzas usado:
EPA Registration # 10182-393

☐ **Deadline T&O**
Lbs. usado:
EPA Registration # 64864-38

☐ **Ornamec T T&O**
Onzas usado:
EPA Registration # 239-2427

☑ LIFELINE HERBICIDE
Onzas usado: 8-02
EPA Registration # 70506-310

☐ DISMISS SPC 2L, Agustin
Onzas usado:
EPA Registration # 235-675

Size of area treated / Cantidad area treatado: 42600-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocomas Campos

Date of application / Fecha de servicio: 7/20/21

Name & address of property treated / Nombre y domicilio de la proiedad tratadad:

Illuna Springs

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 7969-58-64705
- [ ] **Hardimax Oil** — Onzas usado: — EPA Registration # 35208-60011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- [ ] **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [x] **No Foam A** — Onzas usado: 1-oz — EPA Registration # 1050775-50015
- [ ] **Ranger G** — Onzas usado: — EPA Registration # 62719-113
- [x] Turf Mark 1-oz.
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-54705
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-393
- [ ] **Deadline T&O** — Lbs. usado: — EPA Registration # 64864-35
- [ ] **Ornamental T&O** — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 8-oz — EPA Registration # 70506-310
- [ ] Dismiss SPC 2L, Aquatic — Onzas usado: — EPA Registration # 335-675

Size of area treated / Cantidad area treatado: 40000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocoricas Campos

Date of application / Fecha de servicio: 7/29/21

Name & address of property treated / Nombre y domicilio de la proiedad tratedad: Los Olivos.

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 79676-9-84705
- [ ] **Herbimax Oil** — Onzas usado: — EPA Registration # 36208-50011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- [ ] **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [x] **No Foam A** — Onzas usado: 3-oz — EPA Registration # 1050775-50015
- [ ] **Ronstar G** — Onzas usado: — EPA Registration # 62719-113
- [x] Turf Mark 3-oz.
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-84705
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-393
- [ ] **Deadline T&O** — Lbs. usado: — EPA Registration # 64864-35
- [ ] **Orthene T T&O** — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 24-oz — EPA Registration # 70506-310
- [ ] DISMISS SPC 2L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 65000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocones Compass

Date of application / Fecha de servicio: 8/18/21 -186

Name & address of property treated / Nombre y domicilio de la proiedad tratadad: Muna Springs

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 7969-58-84705
- [ ] **Herbimax Oil** — Onzas usado: — EPA Registration # 35205-50011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- [ ] **Sledgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [ ] **No Foam A** — Onzas usado: — EPA Registration # 1050775-50015
- [ ] **Ronstar G** — Onzas usado: — EPA Registration # 62719-118
- [ ] Turf Marks
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 10718-42-84706
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-398
- [ ] **Dimension T&O** — Lbs. usado: — EPA Registration # 62884-86
- [ ] **Ornamec T T&O** — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 6 oz — EPA Registration # 70506-310
- [ ] DISWAT SPC 2L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area trepiado: 2000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zecovies Campos

Date of application / Fecha de servicio: 8/18/21

Name & address of property treated / Nomber y domiciliode la proiedad tratedad: Aguila Springs

Name of pesticide and EPA number / Nombre del pesticide y numero de relsgro de EPA:

- [ ] Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- [ ] Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-58-84705
- [ ] Herbimax Oil — Onzas usado: — EPA Registration # 35208-50011
- [ ] Specticle Herbicide — Onzas usado: — EPA Registration # 2217-898
- [ ] Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- [ ] No Foam A — Onzas usado: — EPA Registration # 1050775-50015
- [ ] Ronstar G — Onzas usado: — EPA Registration # 62719-113
- [ ] Turf Mark
- [ ] Oryzalin — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-84705
- [ ] Turflon — Onzas usado: — EPA Registration # 464-554
- [ ] Fusilade II — Onzas usado: — EPA Registration # 10182-395
- [ ] Deadline T&O — Lbs. usado: — EPA Registration # 64864-36
- [ ] Ornamec T&O — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 4-oz — EPA Registration # 70506-310
- [ ] DISMISS SPC 2L, Aquatic — Onzas usado: — EPA Registration # 235-675

Size of area treated / Cantidad) area treatado: 15000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/17/21

Name & address of property treated / Nombery domicilioda la proiedad tratedad:
Old Laguna

Name of pesticide and EPA number / Nombre del pesticida y numero de relsgro de EPA:

☐ **Aligare Glyphosate 4 Plus**
Onzas usado:
EPA Registration # 81927-9

☐ **Grass Getter Herbicide**
Onzas usado:
EPA Registration # 7969-88-84705

☐ **Herbimax Oil**
Onzas usado:
EPA Registration # 35208-50011

☐ **Speedzone Herbicide**
Onzas usado:
EPA Registration # 2217-898

☐ **Sledgehammer**
Onzas usado:
EPA Registration # 81880-1-10163

☐ **No Foam A**
Onzas usado:
EPA Registration # 1050775-50015

☐ **Ronstar G**
Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark

☐ **Oryzalin**
Onzas usado:
EPA Registration # 72167-15-73220

☐ **Weed-Hoe**
Onzas usado:
EPA Registration # 19713-42-64705

☐ **Turflon**
Onzas usado:
EPA Registration # 464-554

☐ **Fusilade II**
Onzas usado:
EPA Registration # 10182-393

☐ **Deadline T&O**
Lbs. usado:
EPA Registration # 64864-58

☐ **Orthene T T&O**
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

☐ DISMISS SPC 2 L, Aguatic
Onzas usado:
EPA Registration # 2.75-675

Size of area treated / Cantidad area trapiado: 1500-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/16/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:
Laguna Altura North

Name of pesticide and EPA number / Nombre del pesticide y numéro de reisgro de EPA:

Alligare Glyphosate 4 Plus
☐ Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
☐ Onzas usado:
EPA Registration # 7969-58-54705

Herbimax Oil
☐ Onzas usado:
EPA Registration # 35208-50011

Speedzone Herbicide
☐ Onzas usado:
EPA Registration # 2217-988

Sedgehammer
☐ Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
☐ Onzas usado:
EPA Registration # 1050775-50015

Ronstar G
☐ Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark

Oryzalin
☐ Onzas usado:
EPA Registration # 72167-16-73220

Weed-Hoe
☐ Onzas usado:
EPA Registration # 19713-42-54705

Turflon
☐ Onzas usado:
EPA Registration # 464-554

Fusilade II
☐ Onzas usado:
EPA Registration # 10182-398

Deadline T&O
☐ Lbs. usado:
EPA Registration # 84684-35

Orthene T T&O
☐ Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 4 oz
EPA Registration # 70506-310

☐ DISVAT SPC 2 L, Aquatic
Onzas usado:
EPA Registration # 2.15-675

Size of area treated / Cantidad area trepatado: 10000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/16/21

Name & address of property treated / Nombre y domicilio de la proiedad tratadad:
Laguna Altura South

Name of pesticide and EPA number / Nombre del pesticide y numero de reiagro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-58-54705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-54705
☐ Horsimax Oil Onzas usado: EPA Registration # 35205-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-398
☐ Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Dead line T&O Lbs. usado: EPA Registration # 69804-35
☐ Nufoam A Onzas usado: EPA Registration # 1050775-50015	☐ Ortho T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 52719-113	☒ LIFELINE HERBICIDE Onzas usado: 8-8-8 EPA Registration # 70506-310
☐ Turf Mark	☐ DISMISS SRC 2.L Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 30 000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacorias Campos

Date of application / Fecha de servicio: 8/31/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:
Orchard Retarding basin

Name of pesticide and EPA number / Nombre del pesticida y número de reisgro de EPA:

Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-54705

Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
Onzas usado:
EPA Registration # 1050775-50015

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark

Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-54705

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-398

Deadline T&O
Lbs. usado:
EPA Registration # 64864-35

Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
Onzas usado: 8-0-Z
EPA Registration # 70506-310

DISVET SPC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 20 000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 9/3/21

Name & address of property treated / Nombery domicilioda la proiedad tratadad: Port Culver

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Pesticide	Onzas usado	EPA Registration #
Alligare Glyphosate 4 Plus		81927-9
Grass Getter Herbicide		7969-88-54705
Herbimax Oil		36208-60011
Speedzone Herbicide		2217-833
Sedgehammer		81880-1-10163
No Foam A		1050775-60015
Ronstar G		62719-113
Turf Mark		
Oryzalin		72167-15-73220
Weed-Hoe		19713-42-64705
Turflon		464-554
Fusilade II		10182-398
Deadline T&O (Lbs. usado)		64864-36
Orthene T T&O		239-2427
LIFELINE HERBICIDE	4-oz	70506-310
DIQUAT SPC 2L, Aquatic		228-675

Size of area treated / Cantidad area treatado: 10 000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 9/1/21

Name & address of property treated / Nomber y domicilio de la proiedad tratedad: IBABUCO

Name of pesticide and EPA number / Nombre del pesticide y numéro de relsgro de EPA:

- [ ] Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- [ ] Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-68-54705
- [ ] Herbimax Oil — Onzas usado: — EPA Registration # 36208-50011
- [ ] Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- [ ] Sledgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- [x] No Foam A — Onzas usado: 2-oz — EPA Registration # 1050775-50015
- [ ] Ronstar G — Onzas usado: — EPA Registration # 62719-113
- [x] Turf Mark 2-oz
- [ ] Oryzalin — Onzas usado: — EPA Registration # 72167-16-73220
- [ ] Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-54705
- [ ] Turflon — Onzas usado: — EPA Registration # 464-554
- [ ] Fusilade II — Onzas usado: — EPA Registration # 10182-398
- [ ] Deadline T&O — Lbs. usado: — EPA Registration # 64864-35
- [ ] Orthene T T&O — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 16-oz — EPA Registration # 70506-310
- [ ] DISWAT SPC 2 L, Aquatic — Onzas usado: — EPA Registration # 325-675

Size of area treated / Cantidad area treatado: 70000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Gonzalez

Date of application / Fecha de servicio: 8/27/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad:
Eastwood

Name of pesticide and EPA number / Nombre del pesticida y numero de relegro de EPA:

- [ ] Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- [ ] Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-58-64705
- [ ] Hortimax Oil — Onzas usado: — EPA Registration # 35208-50011
- [ ] Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- [ ] Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- [x] No Foam A — Onzas usado: 1-OZ — EPA Registration # 1050775-50015
- [ ] Ronstar G — Onzas usado: — EPA Registration # 62719-113
- [ ] Turf Mark
- [ ] Oryzalin — Onzas usado: — EPA Registration # 72167-16-73220
- [ ] Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-64705
- [ ] Turflon — Onzas usado: — EPA Registration # 464-554
- [ ] Fusilade II — Onzas usado: — EPA Registration # 10182-398
- [ ] Dasdline TAO — Lbs. usado: — EPA Registration # 64864-36
- [ ] Orthene T TAO — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 2-OZ — EPA Registration # 70506-310
- [ ] DISVAT SRC 2.L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area trasplado: 24 000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/25/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada:
Turtle Ridge

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Glass Getter Herbicide Onzas usado: EPA Registration # 7969-[illegible]-84705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-84705
☐ Hendimax Oil Onzas usado: EPA Registration # 36208-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-398
☐ Sledgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 68884-35
☐ No Foam A Onzas usado: EPA Registration # 1050775-50015	☐ Ortho T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 82719-113	☐ LIFELINE HERBICIDE Onzas usado: 4 oz. EPA Registration # 70506-310
☐ Turf Mark	☐ DISMISS T SRC 2.L. Aquatic Onzas usado: EPA Registration # 2?5-675

Size of area treated / Cantidad area trapiado: 18000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/24/21

Name & address of property treated / Nombery domicilioda la proiedad tratadad:
Ridge Valley - A

Name of pesticide and EPA number / Nombre del pesticida y numero de relagro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 79[illegible]-64705

☐ Hardmax Oil
Onzas usado:
EPA Registration # 38208-90011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ No Foam A
Onzas usado: 1-OZ
EPA Registration # 1050775-80015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-64705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-398

☐ Deadline T&O
Lbs. usado:
EPA Registration # 66664-88

☐ Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 6-OZ
EPA Registration # 70506-310

☐ DISMIT SRC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 22000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/24/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Ridge Valley B

Name of pesticide and EPA number / Nombre del pesticida y número de registro de EPA:

- ☐ Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- ☐ Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-58-84705
- ☐ Herbimax Oil — Onzas usado: — EPA Registration # 35208-90011
- ☐ Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- ☐ Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- ☐ No Foam A — Onzas usado: — EPA Registration # 1050775-50015
- ☐ Ronstar G — Onzas usado: — EPA Registration # 62719-113
- ☐ Turf Mark
- ☐ Oryzalin — Onzas usado: — EPA Registration # 72167-16-73220
- ☐ Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-64705
- ☐ Turflon — Onzas usado: — EPA Registration # 464-664
- ☐ Fusilade II — Onzas usado: — EPA Registration # 10182-398
- ☐ Deadline T&O — Lbs. usado: — EPA Registration # 64864-26
- ☐ Ornamec T&O — Onzas usado: — EPA Registration # 228-2427
- ☐ LIFELINE HERBICIDE — Onzas usado: 6-oz — EPA Registration # 70506-310
- ☐ DISVET SRC 2.L, Aquatic — Onzas usado: — EPA Registration # 2.38-675

Size of area treated / Cantidad area tratado: 15000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/23/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:
Ridge Valley - C

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-15-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-58-84705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-84705
☐ Hasten [illegible] Oil Onzas usado: EPA Registration # 35205-50011	☐ Turlon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-393
☐ Sledgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 84884-35
☑ No Foam A Onzas usado: 1-oz EPA Registration # 1050775-50015	☐ Ortho [illegible] T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 52719-113	☑ LIFELINE HERBICIDE Onzas usado: 12-oz EPA Registration # 70506-310
☐ Turf Mark	☐ DISMIT SRC 2.L. Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area treatado:

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/9/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad: Agua Chinon - A

Name of pesticide and EPA number / Nombre del pesticida y numero de relsgro de EPA:

- [ ] **Alligare Glyphosate 4 Plus**
  Onzas usado:
  EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide**
  Onzas usado:
  EPA Registration # 7969-66-64705
- [ ] **Herbimax Oil**
  Onzas usado:
  EPA Registration # 36208-50011
- [ ] **Speedzone Herbicide**
  Onzas usado:
  EPA Registration # 2217-893
- [ ] **Sedgehammer**
  Onzas usado:
  EPA Registration # 81880-1-10163
- [x] **No Foam A**
  Onzas usado: 1-oz
  EPA Registration # 1050775-50015
- [ ] **Ronstar G**
  Onzas usado:
  EPA Registration # 62719-113
- [x] Turf Mark
  2 oz
- [ ] **Oryzalin**
  Onzas usado:
  EPA Registration # 72167-16-73220
- [ ] **Weed-Hoe**
  Onzas usado:
  EPA Registration # 19713-42-64705
- [ ] **Turflon**
  Onzas usado:
  EPA Registration # 464-554
- [ ] **Fusilade II**
  Onzas usado:
  EPA Registration # 10182-393
- [ ] **Deadline T&O**
  Lbs. usado:
  EPA Registration # 64864-36
- [ ] **Orthene T T&O**
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 8-oz
  EPA Registration # 70506-310
- [ ] Diquat SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 23000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/9/21

Name & address of property treated / Nomber y domicilioda la proiedad tratedad: Agua Chinon -B

Name of pesticide and EPA number / Nombre del pesticide y numero de reisgro de EPA:

Pesticide	Onzas usado	EPA Registration #
Aligare Glyphosate 4 Plus		81927-9
Grass Getter Herbicide		7969-58-64705
Herbimax Oil		35209-50011
Speedzone Herbicide		2217-833
Sedgehammer		81880-1-10163
No Foam A	1-oz	1060776-50015
Ronstar G		62719-113
Turf Mark	1-oz	
Oryzalin		72167-16-73220
Weed-Hoe		19713-42-64705
Turflon		464-554
Fusilade II		10182-398
Deadline T&O (Lbs. usado)		84864-36
Orthene T T&O		239-2427
LIFELINE HERBICIDE	10-oz	70506-310
Diquat SPC 2 L, Aquatic		228-675

Size of area treated / Cantidad area treatado: 25000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/11/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad: Quial Meadows

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Alligare Glyphosate 4 Plus	Onzas usado:	EPA Registration # 81927-9
Grass Getter Herbicide	Onzas usado:	EPA Registration # 7969-88-54705
Herbimax Oil	Onzas usado:	EPA Registration # 36208-50011
Speedzone Herbicide	Onzas usado:	EPA Registration # 2217-833
Sledgehammer	Onzas usado:	EPA Registration # 81880-1-10163
No Foam A	Onzas usado: 1-oz	EPA Registration # 1050775-50016
Ronstar G	Onzas usado:	EPA Registration # 62719-113
Turf Mark	1-oz	
Oryzalin	Onzas usado:	EPA Registration # 72167-16-73220
Weed-Hoe	Onzas usado:	EPA Registration # 19713-42-54705
Turflon	Onzas usado:	EPA Registration # 464-564
Fusilade II	Onzas usado:	EPA Registration # 10182-393
Deadline T&O	Lbs. usado:	EPA Registration # 54664-35
Orthene T T&O	Onzas usado:	EPA Registration # 239-2427
LIFELINE HERBICIDE	Onzas usado: 8-oz	EPA Registration # 70506-310
Diquat SPC 2 L, Aquatic	Onzas usado:	EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 18000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/12/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:
Sports Park.

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Alligare Glyphosate 4 Plus
☐ Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
☐ Onzas usado:
EPA Registration # 7969-88-64705

Herbimax Oil
☐ Onzas usado:
EPA Registration # 35208-50011

Speedzone Herbicide
☐ Onzas usado:
EPA Registration # 2217-833

Sedgehammer
☐ Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
☑ Onzas usado: 1-oz
EPA Registration # 1050775-50015

Ronstar G
☐ Onzas usado:
EPA Registration # 62719-118

☑ Turf Mark
1-oz.

Oryzalin
☐ Onzas usado:
EPA Registration # 72167-16-73220

Weed-Hoe
☐ Onzas usado:
EPA Registration # 19713-42-64705

Turflon
☐ Onzas usado:
EPA Registration # 464-554

Fusilade II
☐ Onzas usado:
EPA Registration # 10182-389

Deadline T&O
☐ Lbs. usado:
EPA Registration # 64864-38

Orthene T T&O
☐ Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
☑ Onzas usado: 8-oz
EPA Registration # 70506-310

Diquat SPC 2L, Aquatic
☐ Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 30000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/13/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Middle EAST Foot

Name of pesticide and EPA number / Nombre del pesticida y numero de registro de EPA:

Pesticide	Onzas usado	EPA Registration #
☐ Alligare Glyphosate 4 Plus		81927-9
☐ Grass Getter Herbicide		7969-58-54705
☐ Herbimax Oil		35208-50011
☐ Speedzone Herbicide		2217-833
☐ Sedgehammer		81880-1-10163
☑ No Foam A	1-oz	1050775-50015
☐ Ronstar G		62719-113
☑ Turf Mark	1-oz	
☐ Oryzalin		72167-16-73220
☐ Weed-Hoe		19713-42-54705
☐ Turflon		464-554
☐ Fusilade II		10182-393
☐ Dexaline T&O (Lbs. usado)		84884-35
☐ Orthene T T&O		239-2427
☑ LIFELINE HERBICIDE	6-oz	70506-310
☐ Dismiss SPC 2.L. Aquatic		228-675

Size of area treated / Cantidad area tratado: 30000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/5/21

Name & address of property treated / Nomber y domicilio de la proiedad tratedad:
Cypress - C

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Alligare Glyphosate 4 Plus
☐ Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
☐ Onzas usado:
EPA Registration # 7969-48-84705

Herbimax Oil
☐ Onzas usado:
EPA Registration # 38208-80011

Speedzone Herbicide
☐ Onzas usado:
EPA Registration # 2217-898

Sedgehammer
☐ Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
☐ Onzas usado: 1-oz
EPA Registration # 1050775-50015

Ronstar G
☐ Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark
1-oz.

Oryzalin
☐ Onzas usado:
EPA Registration # 72167-16-73220

Weed-Hoe
☐ Onzas usado:
EPA Registration # 19713-42-84706

Turflon
☐ Onzas usado:
EPA Registration # 464-554

Fusilade II
☐ Onzas usado:
EPA Registration # 10182-398

Deadline T&O
☐ Lbs. usado:
EPA Registration # 64864-36

Orthene T T&O
☐ Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

☐ DIQUAT SPC 2L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 25000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/4/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad: TRAbuco

Name of pesticide and EPA number / Nombre del pesticide y número de reisgro de EPA:

☐ Allegara Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-58-64705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-64705
☐ Herbimax Oil Onzas usado: EPA Registration # 36208-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-393
☐ Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 84884-85
☒ No Foam A Onzas usado: 4-oz EPA Registration # 1060776-50015	☐ Orthene T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 62719-119	☒ LIFELINE HERBICIDE Onzas usado: 32 oz EPA Registration # 70506-310
☒ Turf Mark 4-oz	☐ DIQUAT SPC 2L, Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 68 688-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorros Campos

Date of application / Fecha de servicio: 8/2/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Cypress - A

Name of pesticide and EPA number / Nombre del pesticida y número de registro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 79689-58-84705
- [ ] **Herbimax Oil** — Onzas usado: — EPA Registration # 36208-50011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-833
- [ ] **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [x] **NoFoam A** — Onzas usado: 1-oz — EPA Registration # 1050775-50015
- [ ] **Ronstar G** — Onzas usado: — EPA Registration # 62719-119
- [x] Turf Mark 1-oz
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-16-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-64706
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-398
- [ ] **Deadline T&O** — Lbs. usado: — EPA Registration # 64864-36
- [ ] **Ortho T T&O** — Onzas usado: — EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 8-oz — EPA Registration # 70506-310
- [ ] DISVUET SPC 2L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area tratado: 40000SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 8/3/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada: Cypress - B

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Product	Onzas usado	EPA Registration #
☐ Alligare Glyphosate 4 Plus		81927-9
☐ Grass Getter Herbicide		7969-58-54705
☐ Herbimax Oil		36208-50011
☐ Speedzone Herbicide		2217-833
☐ Sedgehammer		81880-1-10163
☑ No Foam A	1-oz	1060778-50015
☐ Ronstar G		62719-118
☑ Turf Mark	1-oz	
☐ Oryzalin		72167-16-73220
☐ Weed-Hoe		10718-42-54705
☐ Turflon		464-554
☐ Fusilade II		10182-393
☐ Deadline T&O	Lbs. usado:	64864-36
☐ Orthene T T&O		239-2427
☑ LIFELINE HERBICIDE	4-oz	70506-310
☐ DISWAT SPC 2.L, Aquatic		228-675

Size of area treated / Cantidad area trepiado: 20000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zoorvics Campos

Date of application / Fecha de servicio: 10/19/20 -80

Name & address of property treated / Nomber y domicilliode la proiedad tratadad: Illuna Springs

Name of pesticide and EPA number / Nombre del pesticide y numéro de reisgro de EPA:

- [ ] **Alligare Glyphosate 4 Plus**
  Onzas usado:
  EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide**
  Onzas usado:
  EPA Registration # 7969-58-64705
- [ ] **Herbimax Oil**
  Onzas usado:
  EPA Registration # 36208-50011
- [ ] **Speedzone Herbicide**
  Onzas usado:
  EPA Registration # 2217-898
- [ ] **Sedgehammer**
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] **No Foam A**
  Onzas usado:
  EPA Registration # 1050775-50015
- [ ] **Ronstar G**
  Onzas usado:
  EPA Registration # 62719-113
- [ ] Turf Mark
- [ ] **Oryzalin**
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe**
  Onzas usado:
  EPA Registration # 19713-42-64705
- [ ] **Turflon**
  Onzas usado:
  EPA Registration # 464-554
- [ ] **Fusilade II**
  Onzas usado:
  EPA Registration # 10182-398
- [ ] **Deadline T&O**
  Lbs. usado:
  EPA Registration # 84884-36
- [ ] **Orthene T T&O**
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 8-OZ
  EPA Registration # 70506-310
- [ ] DIQUAT SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 2000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorras Campos

Date of application / Fecha de servicio: 10/19/21

Name & address of property treated / Nomber y domicililoda la proiedad tratadad:
Aguila Springs

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

- ☐ **Alligare Glyphosate 4 Plus**
  Onzas usado:
  EPA Registration # 81927-9
- ☐ **Grass Getter Herbicide**
  Onzas usado:
  EPA Registration # 7969-58-54705
- ☐ **Herbimax Oil**
  Onzas usado:
  EPA Registration # 36208-50011
- ☐ **Speedzone Herbicide**
  Onzas usado:
  EPA Registration # 2217-833
- ☐ **Sedgehammer**
  Onzas usado:
  EPA Registration # 81880-1-10163
- ☐ **No Foam A**
  Onzas usado:
  EPA Registration # 1050775-50015
- ☐ **Ronstar G**
  Onzas usado:
  EPA Registration # 62719-113
- ☐ Turf Mark
- ☐ **Oryzalin**
  Onzas usado:
  EPA Registration # 72167-15-73220
- ☐ **Weed-Hoe**
  Onzas usado:
  EPA Registration # 19713-42-54705
- ☐ **Turflon**
  Onzas usado:
  EPA Registration # 464-554
- ☐ **Fusilade II**
  Onzas usado:
  EPA Registration # 10182-398
- ☐ **Deadline T&O**
  Lbs. usado:
  EPA Registration # 64864-38
- ☐ **Orthene T T&O**
  Onzas usado:
  EPA Registration # 239-2427
- ☑ LIFELINE HERBICIDE
  Onzas usado: 6 oz
  EPA Registration # 70506-310
- ☐ DIQUAT SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 18000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorias Campos

Date of application / Fecha de servicio: 10/11/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Quail - Meadows

Name of pesticide and EPA number / Nombre del pesticida y número de registro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-58-54705
- [ ] Herbimax Oil
  Onzas usado:
  EPA Registration # 36208-50011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-833
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] No Foam A
  Onzas usado:
  EPA Registration # 1050775-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 62719-113
- [ ] Turf Mark
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-54705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-393
- [ ] Deadline T&O
  Lbs. usado:
  EPA Registration # 66664-36
- [ ] Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 8 oz
  EPA Registration # 70506-310
- [ ] DITVIDT SPC 2 L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area tratado: 10'000 - SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 10/14/21

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:
Laguna Altura North

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-88-64705
- [ ] Herbimax Oil
  Onzas usado:
  EPA Registration # 36208-50011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-893
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [x] No Foam A
  Onzas usado: 1-oz
  EPA Registration # 1050775-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 62719-113
- [x] Turf Mark
  1-oz.
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-64705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-393
- [ ] Deadline T&O
  Lbs. usado:
  EPA Registration # 64864-38
- [ ] Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 8-oz
  EPA Registration # 70506-310
- [ ] DISVET SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 3500-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 10/14/21

Name & address of property treated / Nomber y domicilioda la proiedad trataded: Laguna Altura South

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-64705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☒ No Foam A
Onzas usado: 1-oz
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☒ Turf Mark
1-oz.

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-64705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-393

☐ Deadline T&O
Lbs. usado:
EPA Registration # 64864-38

☐ Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

☒ LIFELINE HERBICIDE
Onzas usado: 6-oz
EPA Registration # 70506-310

☐ DIQUAT SPC 2L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado:

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 10/13/21

Name & address of property treated / Nomber y domicililoda la proiedad trataded:

middle East Foot

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

Product	Onzas usado	EPA Registration #
Alligare Glyphosate 4 Plus		81927-9
Grass Getter Herbicide		79887-56-54705
Herbimax Oil		36208-50011
Speedzone Herbicide		2217-833
Sedgehammer		81880-1-10163
No Foam A	2-oz	1050775-50015
Ronstar G		62719-113
Turf Mark	2-oz	
Oryzalin		72167-16-73220
Weed-Hoe		19713-42-54705
Turflon		464-554
Fusilade II		10182-393
Deadline T&O (Lbs. usado)		64864-38
Orthene T T&O		239-2427
LIFELINE HERBICIDE	8-oz	70506-310
DIQUAT SPC 2 L Aquatic		228-675

Size of area treated / Cantidad area treatado: 45000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocovras Campos

Date of application / Fecha de servicio: ~~[illegible]~~ 10/6/21

Name & address of property treated / Nomber y domicilioda la proiedad tratadad:
Cypress- C

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

- [ ] **Alligare Glyphosate 4 Plus** — Onzas usado: — EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide** — Onzas usado: — EPA Registration # 7969-58-64705
- [ ] **Herbimax Oil** — Onzas usado: — EPA Registration # 36208-50011
- [ ] **Speedzone Herbicide** — Onzas usado: — EPA Registration # 2217-893
- [ ] **Sedgehammer** — Onzas usado: — EPA Registration # 81880-1-10163
- [x] **No Foam A** — Onzas usado: 2-oz — EPA Registration # 1050775-50016
- [ ] **Ronstar G** — Onzas usado: — EPA Registration # 62719-113
- [x] Turf Mark 2-oz
- [ ] **Oryzalin** — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] **Weed-Hoe** — Onzas usado: — EPA Registration # 19713-42-64705
- [ ] **Turflon** — Onzas usado: — EPA Registration # 464-554
- [ ] **Fusilade II** — Onzas usado: — EPA Registration # 10182-393
- [ ] **Deadline T&O** — Lbs. usado: — EPA Registration # 64864-36
- [ ] **Ornamec T T&O** — Onzas usado: — EPA Registration # 289-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 6-oz — EPA Registration # 70506-310
- [ ] DISVAT SRC 2L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 55-600-sf

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 10/6/21 ~~[illegible]~~

Name & address of property treated / Nomber y domicilio de la proiedad tratadad:

Cypress- D

Name of pesticide and EPA number / Nombre del pesticida y número de reisgro de EPA:

Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-64705

Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

No Foam A
Onzas usado: 2-oz
EPA Registration # 1050775-50015

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark
2-oz

Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-64705

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-399

Deadline T&O
Lbs. usado:
EPA Registration # 64864-38

Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

LIFELINE HERBICIDE
Onzas usado: 6-oz
EPA Registration # 70506-310

DISVAT SAC 2L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 65000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/24/21

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Name & address of property treated / Nombre y domicilio de la proiedad tratedad: Portola Springs

Name of pesticide and EPA number / Nombre del pesticida y numéro de relagro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 79680-9-64705

☐ Hardmax Oil
Onzas usado:
EPA Registration # 36208-50011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-938

☐ Sledgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ No Foam A
Onzas usado:
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-64705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-368

☐ Deadline T&O
Lbs. usado:
EPA Registration # 64864-36

☐ Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 8 oz
EPA Registration # 70506-310

☐ DISMISS SRC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area trapiado: 33666 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 10/23/21

Name & address of property treated / Nomber y domicilioda la proiedad traiedad: East Foot basin

Name of pesticide and EPA number / Nombre del pesticide y número de reisgro de EPA:

Product	Onzas usado	EPA Registration #
Alligare Glyphosate 4 Plus		81927-9
Grass Getter Herbicide		79676-59-34705
Herbimax Oil		35209-50011
Speedzone Herbicide		2217-833
Sedgehammer		81880-1-10163
Nufoam A		1050775-50015
Ronstar G		62719-118
Turf Mark		
Oryzalin		72167-16-73220
Weed-Hoe		19713-42-34705
Turflon		464-554
Fusilade II		10182-398
Deadline T&O (Lbs. usado)		61884-35
Ornone T T&O		228-2427
LIFELINE HERBICIDE	6 oz	70506-310
DISMISS SRC 2.L, Aquatic		2.35-675

Size of area treated / Cantidad area treatado: 1500-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zoervics Campos

Date of application / Fecha de servicio: 11/24/21

Name & address of property treated / Nombery domicilioda la proiedad tratadad:
Eastwood

Name of pesticide and EPA number / Nombre del pesticida y numéro de relsgro de EPA:

Product	Onzas usado	EPA Registration #
Alligare Glyphosate 4 Plus		81927-9
Grass Getter Herbicide		7969-58-64705
Hasten Oil (?)		36208-50011
Speedzone Herbicide		2217-833 (?)
Sedgehammer		81880-1-10163
NoFoam A		1050775-50015 (?)
Ronstar G		62719-113 (?)
Turf Mark		
Oryzalin		72167-15-73220
Weed-Hoe		19713-42-64705
Turflon		464-554 (?)
Fusilade II		10182-393 (?)
Deadline T40	Lbs. usado:	64864-36 (?)
Orthene T T&O		239-2427
LIFELINE HERBICIDE	8-8.5 (?)	70506-310
DISVIAT (?) SPC 2.L, Aquatic		228-625 (?)

Size of area treated / Cantidad area trepatado: 30000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/22/21

Name & address of property treated / Nombre y domicilio de la proiedad tratedad: Turtle Ridge

Name of pesticide and EPA number / Nombre del pesticida y número de relagro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-58-84705
- [ ] Hardimax Oil
  Onzas usado:
  EPA Registration # 35209-50011
- [ ] Roadzone Herbicide
  Onzas usado:
  EPA Registration # 2217-993
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] No Foam A
  Onzas usado:
  EPA Registration # 1050775-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 52719-113
- [ ] Turf Mark
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-54705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-393
- [ ] Deadline T&O
  Lbs. usado:
  EPA Registration # 64864-35
- [ ] Ornamec T T&O
  Onzas usado:
  EPA Registration # 299-2427
- [ ] LIFELINE HERBICIDE
  Onzas usado: 8 ...
  EPA Registration # 70506-310
- [ ] DISMISS SRC 2L, Aquatic
  Onzas usado:
  EPA Registration # 2 35-675

Size of area treated / Cantidad area treatado: 25 000 sf

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias - Campos

Date of application / Fecha de servicio: 11/22/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:
Twisted OAK

Name of pesticide and EPA number / Nombre del pesticida y numero de relagro de EPA:

☐ **Alligare Glyphosate 4 Plus**
Onzas usado:
EPA Registration # 81927-9

☐ **Grass Getter Herbicide**
Onzas usado:
EPA Registration # 79676-9-84705

☐ **Herbimax Oil**
Onzas usado:
EPA Registration # 35208-50011

☐ **Speedzone Herbicide**
Onzas usado:
EPA Registration # 2217-833

☐ **Sedgehammer**
Onzas usado:
EPA Registration # 81880-1-10163

☐ **No Foam A**
Onzas usado:
EPA Registration # 1050775-50015

☐ **Ronstar G**
Onzas usado:
EPA Registration # 62719-113

☐ TUFF Mark

☐ **Oryzalin**
Onzas usado:
EPA Registration # 72167-15-73220

☐ **Weed-Hoe**
Onzas usado:
EPA Registration # 10718-42-84706

☐ **Turflon**
Onzas usado:
EPA Registration # 464-554

☐ **Fusilade II**
Onzas usado:
EPA Registration # 10182-898

☐ **Deadline T&O**
Lbs. usado:
EPA Registration # 64864-35

☐ **Orthene T T&O**
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

☐ DISVAT SPC 2.L, Aquatic
Onzas usado:
EPA Registration # 2.15-625

Size of area treated / Cantidad area treatado: 20000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacones Campos

Date of application / Fecha de servicio: 11/19/22

Name & address of property treated / Nombery domicilioda la proledad tratadad:
Ridge Valley B

Name of pesticide and EPA number / Nombre del pesticida y numero de relagro de EPA:

Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-[illegible]-84705

Hasten/max Oil
Onzas usado:
EPA Registration # 36208-50011

Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

Nufoam A
Onzas usado:
EPA Registration # 1060776-50015

Ronstar G
Onzas usado:
EPA Registration # 62719-113

Turf Mark

Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-84705

Turflon
Onzas usado:
EPA Registration # 464-554

Fusilade II
Onzas usado:
EPA Registration # 10182-398

Deadline T&O
Lbs. usado:
EPA Registration # 84984-36

Ornamec T T&O
Onzas usado:
EPA Registration # 228-2427

~~LIFELINE HERBICIDE~~
Onzas usado: 8-6
EPA Registration # 70506-310

DISMISS SPC 2 L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 50 000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zecerres Campos

Date of application / Fecha de servicio: 11/19/21

Name & address of property treated / Nombery domicilioda la propiedad tratadad:
Ridge Valley A

Name of pesticide and EPA number / Nombre del pesticide y numéro de reisgro de EPA:

Product	Onzas usado	EPA Registration #
☐ Alligare Glyphosate 4 Plus		81927-9
☐ Grass Getter Herbicide		79689-58-84705
☐ Hardimex Oil		36208-10011
☐ Speedzone Herbicide		2217-933
☐ Sedgehammer		81880-1-10163
☐ No Foam A		1050775-50015
☐ Ronstar G		62719-113
☐ Turf Mark		
☐ Oryzalin		72167-16-73220
☐ Weed-Hoe		19713-42-84705
☐ Turflon		464-554
☐ Fusilade II		10182-383
☐ Dasdline T&O (Lbs. usado)		66664-86
☐ Ornamec T T&O		239-2427
☐ LIFELINE HERBICIDE	S.S.C.	70506-310
☐ DISVAT. SPC 2.L, Aquatic		228-675

Size of area treated / Cantidad area trastado: 35000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/17/21

Name & address of property treated / Nombre y domicilio de la proiedad tratadad:
Illuna Springs

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-[illegible]-84705
- [ ] Horticultural Oil
  Onzas usado:
  EPA Registration # 35205-50011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-833
- [ ] SedgeHammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [x] Nofoam A
  Onzas usado: 2-oz
  EPA Registration # 1050775-80015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 62719-113
- [ ] Turf Mark
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed Hoe
  Onzas usado:
  EPA Registration # 19713-42-64705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-389
- [ ] Deadline T&O
  Lbs. usado:
  EPA Registration # 67564-88
- [ ] Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 8-oz
  EPA Registration # 70506-310
- [ ] Diquat SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area trepiada: 40000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/16/21

Name & address of property treated / Nombery domicilioda la proiedad traiedad:
Los Olivos

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-15-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 7969-[illegible]-84705	☐ Weed-Hoe Onzas usado: EPA Registration # 10718-42-84705
☐ Hardmax Oil Onzas usado: EPA Registration # 35209-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	☐ Fusilade II Onzas usado: EPA Registration # 10182-399
☐ Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Dessline T&O Lbs. usado: EPA Registration # 64864-56
☐ Nofoam A Onzas usado: EPA Registration # 1050775-50015	☐ Orthene T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 62719-113	☐ LIFELINE HERBICIDE Onzas usado: 16-[illegible] EPA Registration # 70506-310
☐ Turf Mark	☐ DISMISS SPC 2 L, Aquatic Onzas usado: EPA Registration # 228-675

Size of area treated / Cantidad area trepiado: 60000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/1/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada: Cypress - A

Name of pesticide and EPA number / Nombre del pesticida y numero de relegro de EPA:

- ☐ **Alligare Glyphosate 4 Plus**
  Onzas usado:
  EPA Registration # 81927-9
- ☐ **Grass Getter Herbicide**
  Onzas usado:
  EPA Registration # 79989-8-84705
- ☐ **Herbimax Oil**
  Onzas usado:
  EPA Registration # 36208-50011
- ☐ **Speedzone Herbicide**
  Onzas usado:
  EPA Registration # 2217-833
- ☐ **Sedgehammer**
  Onzas usado:
  EPA Registration # 81880-1-10163
- ☒ **No Foam A**
  Onzas usado: 2-oz
  EPA Registration # 1050775-50015
- ☐ **Ronstar G**
  Onzas usado:
  EPA Registration # 62719-113
- ☐ **Turf Mark**
- ☐ **Oryzalin**
  Onzas usado:
  EPA Registration # 72167-16-73220
- ☐ **Weed-Hoe**
  Onzas usado:
  EPA Registration # 19713-42-64705
- ☐ **Turflon**
  Onzas usado:
  EPA Registration # 464-554
- ☐ **Fusilade II**
  Onzas usado:
  EPA Registration # 10182-388
- ☐ **Deadline T&O**
  Lbs. usado:
  EPA Registration # 84884-35
- ☐ **Orthene T T&O**
  Onzas usado:
  EPA Registration # 239-2427
- ☒ LIFELINE HERBICIDE
  Onzas usado: 6-oz
  EPA Registration # 70506-310
- ☐ DISVAT SPC 2.L, Aquatic
  Onzas usado:
  EPA Registration # 238-675

Size of area treated / Cantidad area tratado: 60000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/5/21

Name & address of property treated / Nomber y domicilioda la proiedad traiadad:

Forge Meadows

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-54705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-893

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ No Foam A
Onzas usado:
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☐ Turf Mark

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-54705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-393

☐ Deadline T&O
Lbs. usado:
EPA Registration # 61664-36

☐ Orthene T T&O
Onzas usado:
EPA Registration # 239-2427

☒ LIFELINE HERBICIDE
Onzas usado: 8 oz
EPA Registration # 70506-310

☐ DIQUAT SPC 2L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado:

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/27/21

- 188 07

Name & address of property treated / Nombre y domicilio de la proiedad tratedad:

Hiddy Canyon

Name of pesticide and EPA number / Nombre del pesticide y numéro de reiegro de EPA:

☐ **Alligare Glyphosate 4 Plus** Onzas usado: EPA Registration # 81927-9	☐ **Oryzalin** Onzas usado: EPA Registration # 72167-16-73220
☐ **Grass Getter Herbicide** Onzas usado: EPA Registration # 7969-99-84705	☐ **Weed-Hoe** Onzas usado: EPA Registration # 10718-42-84706
☐ **Hardimax Oil** Onzas usado: EPA Registration # 36208-50011	☐ **Turflon** Onzas usado: EPA Registration # 464-554
☐ **Speedzone Herbicide** Onzas usado: EPA Registration # 2217-898	☐ **Fusilade II** Onzas usado: EPA Registration # 10182-398
☐ **Sledgehammer** Onzas usado: EPA Registration # 81880-1-10163	☐ **Deadline T&O** Lbs. usado: EPA Registration # 64864-35
☐ **No Foam A** Onzas usado: EPA Registration # 1050775-50015	☐ **Orthene T T&O** Onzas usado: EPA Registration # 239-2427
☐ **Ronstar G** Onzas usado: EPA Registration # 62719-113	☐ LIFELINE HERBICIDE Onzas usado: 8-oz EPA Registration # 70506-310
☐ Turf Mark	☐ DIQUAT SPC 2 L, Aquatic Onzas usado: EPA Registration # 235-675

Size of area treated / Cantidad area trastado: 25000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorias Campos

Date of application / Fecha de servicio: 12/21/21

Name & address of property treated / Nombre y domicilio de la proiedad tratedad:
Ridge Valley A

Name of pesticide and EPA number / Nombre del pesticide y numero de relegro de EPA:

☐ Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	☐ Oryzalin Onzas usado: EPA Registration # 72167-16-73220
☐ Grass Getter Herbicide Onzas usado: EPA Registration # 79698-59-84705	☐ Weed-Hoe Onzas usado: EPA Registration # 19713-42-64705
☐ Hardimax Oil Onzas usado: EPA Registration # 35202-50011	☐ Turflon Onzas usado: EPA Registration # 464-554
☐ Speedzone Herbicide Onzas usado: EPA Registration # 2217-893	☐ Fusilade II Onzas usado: EPA Registration # 10182-398
☐ Sledgehammer Onzas usado: EPA Registration # 81880-1-10163	☐ Deadline T&O Lbs. usado: EPA Registration # 66684-36
☐ Norgam A Onzas usado: EPA Registration # 1050775-50015	☐ Orthene T T&O Onzas usado: EPA Registration # 239-2427
☐ Ronstar G Onzas usado: EPA Registration # 62719-113	☒ LIFELINE HERBICIDE Onzas usado: 24-oz EPA Registration # 70506-310
☐ Turf Maple	☐ DISMISS SRC S.L. Aguatic Onzas usado: EPA Registration # 2.18-625

Size of area treated / Cantidad area treatado: 65000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/21/21

Name & address of property treated / Namber y domicilio de la proledad tratada: Ridge Valley B.

Name of pesticide and EPA number / Nombre del pesticide y numero de relegro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969058-84705
- [ ] Hardimax GII
  Onzas usado:
  EPA Registration # 35208-50011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-896
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] NuFoam A
  Onzas usado:
  EPA Registration # 1060776-50015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 82719-113
- [ ] Turf Mark
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-84706
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-898
- [ ] Deadline T40
  Lbs. usado:
  EPA Registration # 64864-38
- [ ] Ornamec T T&O
  Onzas usado:
  EPA Registration # 288-2427
- [ ] LIFELINE HERBICIDE
  Onzas usado: 6-02
  EPA Registration # 70506-310
- [ ] DISTINCT SRC 2.L, Aquatic
  Onzas usado:
  EPA Registration # 2.17-625

Size of area treated / Cantidad area treated: 15000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/20/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Ridge Valley - C

Name of pesticide and EPA number / Nombre del pesticide y número de registro de EPA:

- [ ] Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- [ ] Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 75999-58-84705
- [ ] Herbimax Oil
  Onzas usado:
  EPA Registration # 35208-90011
- [ ] Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-833
- [ ] Sedgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] No Foam A
  Onzas usado:
  EPA Registration # 1050775-65015
- [ ] Ronstar G
  Onzas usado:
  EPA Registration # 82719-113
- [ ] Turf Mark
- [ ] Oryzalin
  Onzas usado:
  EPA Registration # 72167-15-73220
- [ ] Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-84705
- [ ] Turflon
  Onzas usado:
  EPA Registration # 464-554
- [ ] Fusilade II
  Onzas usado:
  EPA Registration # 10182-398
- [ ] Dacline T&O
  Lbs. usado:
  EPA Registration # 88884-36
- [ ] Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- [x] LIFELINE HERBICIDE
  Onzas usado: 8-oz
  EPA Registration # 70506-310
- [ ] DIQUAT SPC 2L, Aquatic
  Onzas usado:
  EPA Registration # 2 35-675

Size of area treated / Cantidad area tratado: 18500-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/20/21

Name & address of property treated / Nombery domicilliado la proiedad traiadad:
EastFoot Retarting basin

Name of pesticide and EPA number / Nombre del pesticida y numero de reisgro de EPA:

- ☐ Alligare Glyphosate 4 Plus
  Onzas usado:
  EPA Registration # 81927-9
- ☐ Grass Getter Herbicide
  Onzas usado:
  EPA Registration # 7969-58-84705
- ☐ Herbimax Oil
  Onzas usado:
  EPA Registration # 39208-50011
- ☐ Speedzone Herbicide
  Onzas usado:
  EPA Registration # 2217-833
- ☐ Sledgehammer
  Onzas usado:
  EPA Registration # 81880-1-10163
- ☐ [illegible] A
  Onzas usado:
  EPA Registration # [illegible]
- ☐ [illegible]
  Onzas usado:
  EPA Registration # 62719-139
- ☐ Turf Mark
- ☐ Oryzalin
  Onzas usado:
  EPA Registration # 72167-16-73220
- ☐ Weed-Hoe
  Onzas usado:
  EPA Registration # 19713-42-64705
- ☐ Turflon
  Onzas usado:
  EPA Registration # 464-554
- ☐ Pastrade II
  Onzas usado:
  EPA Registration # 10182-393
- ☐ [illegible] T&O
  Lbs. usado:
  EPA Registration # 84864-35
- ☐ Orthene T T&O
  Onzas usado:
  EPA Registration # 239-2427
- ☐ LIFELINE HERBICIDE
  Onzas usado: 8 oz
  EPA Registration # 70506-310
- ☐ DISMISS SRC 2.L, Agustin
  Onzas usado:
  EPA Registration # 3.35-625

Size of area treated / Cantidad areas treatados: 20 000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocovias Campos

Date of application / Fecha de servicio: 12/17/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:
Floral View

Name of pesticide and EPA number / Nombre del pesticida y numero de relegro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 7969-58-84705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 34209-50011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Sledgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ Norfoam A
Onzas usado:
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 82719-139

☐ Turf Mark

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-15-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-84705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Pustlade II
Onzas usado:
EPA Registration # 10182-398

☐ Dexdline TAO
Lbs. usado:
EPA Registration # 84864-38

☐ Ornone T TAO
Onzas usado:
EPA Registration # 288-2427

☐ LIFELINE HERBICIDE
Onzas usado: 12 oz
EPA Registration # 70506-310

☐ DISMISS SRC 2.L. Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area tratada: ~~SF~~ 45000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/16/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:
Aguila Springs

Name of pesticide and EPA number / Nombre del pesticide y numero de reisgro de EPA:

- ☐ Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- ☐ Grass Getter Herbicide — Onzas usado: — EPA Registration # [illegible]
- ☐ Herbimax Oil — Onzas usado: — EPA Registration # [illegible]
- ☐ [illegible] Herbicide — Onzas usado: — EPA Registration # 2217-[illegible]
- ☐ [illegible] — Onzas usado: — EPA Registration # [illegible]
- ☐ [illegible] — Onzas usado: — EPA Registration # [illegible]
- ☐ Ronstar G — Onzas usado: — EPA Registration # [illegible]
- ☐ Turf Mark
- ☐ Oryzalin — Onzas usado: — EPA Registration # 72167-15-73220
- ☐ Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-54705
- ☐ Turflon — Onzas usado: — EPA Registration # 464-554
- ☐ Fusilade II — Onzas usado: — EPA Registration # 10182-393
- ☐ Dead [illegible] T&O — Lbs. usado: — EPA Registration # [illegible]
- ☐ [illegible] T T&O — Onzas usado: — EPA Registration # 239-2427
- ☐ LIFELINE HERBICIDE — Onzas usado: 8 oz — EPA Registration # 70506-310
- ☐ DISMISS SPC 2.L, Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad areas trapiado: 20000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/13/21

Name & address of property treated / Nombery domicilio de la proiedad tratedad:
Laguna Altura South

Name of pesticide and EPA number / Nombre del pesticide y numéro de relagio de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 78[illegible]-34704

☐ [illegible] Oil
Onzas usado:
EPA Registration # 35[illegible]-50011

☐ [illegible] Herbicide
Onzas usado:
EPA Registration # 2217-[illegible]

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ No Foam A
Onzas usado:
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☐ Tuff Marc

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-34704

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 100-[illegible]

☐ [illegible] T&O
Lbs. usado:
EPA Registration # 66864-35

☐ [illegible] T&O
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 6-oz
EPA Registration # 70506-310

☐ DISMAT SPC 2.L, Aquatic
Onzas usado:
EPA Registration # 2[illegible]-625

Size of area treated / Cantidad area trepiado: 18 oz-Sf

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/13/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada: Laguna Altura North

Name of pesticide and EPA number / Nombre del pesticide y numero de registro de EPA:

- [ ] **Alligare Glyphosate 4 Plus**
  Onzas usado:
  EPA Registration # 81927-9
- [ ] **Grass Getter Herbicide**
  Onzas usado:
  EPA Registration # 79590-18-84708
- [ ] **Herbimax Oil**
  Onzas usado:
  EPA Registration # 35209-30011
- [ ] **Speedzone Herbicide**
  Onzas usado:
  EPA Registration # 2217-833
- [ ] **Sedgehammer**
  Onzas usado:
  EPA Registration # 81880-1-10163
- [ ] **[illegible] A**
  Onzas usado:
  EPA Registration # 1960778-90015
- [ ] **Ronstar G**
  Onzas usado:
  EPA Registration # 62719-113
- [ ] TURF MARK
- [ ] **Oryzalin**
  Onzas usado:
  EPA Registration # 72167-16-73220
- [ ] **Weed-Hoe**
  Onzas usado:
  EPA Registration # 19713-42-84708
- [ ] **Turflon**
  Onzas usado:
  EPA Registration # 464-554
- [ ] **Fusilade II**
  Onzas usado:
  EPA Registration # 10182-398
- [ ] **Deadline T&O**
  Lbs. usado:
  EPA Registration # 64864-35
- [ ] **Ortho T T&O**
  Onzas usado:
  EPA Registration # 239-2427
- [ ] LIFELINE HERBICIDE
  Onzas usado: 8-oz
  EPA Registration # 70506-310
- [ ] DISMISS SRC A.L. Aquatic
  Onzas usado:
  EPA Registration # 228-675

Size of area treated / Cantidad area tratada: 20000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/17/21

Name & address of property treated / Nomber y domicilio de la proiedad tratedad: Marine Meadows

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

- ☐ Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- ☐ Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-58-84705
- ☐ Hydrotex Oil — Onzas usado: — EPA Registration # 36208-50011
- ☐ Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-835
- ☐ Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- ☐ Ad Foam A — Onzas usado: — EPA Registration # 1060776-50015
- ☐ Ronstar G — Onzas usado: — EPA Registration # 82719-133
- ☐ Tuff Mark
- ☐ Oryzalin — Onzas usado: — EPA Registration # 72167-16-73220
- ☐ Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-34704
- ☐ Turflon — Onzas usado: — EPA Registration # 464-554
- ☐ Fusilade II — Onzas usado: — EPA Registration # 10182-398
- ☐ Deadline T&O — Lbs. usado: — EPA Registration # 86864-86
- ☐ Chlhane T T&O — Onzas usado: — EPA Registration # 239-2427
- ☐ LIFELINE HERBICIDE — Onzas usado: 6 oz — EPA Registration # 70506-310
- ☐ DITHIOT SPC 2L, Aquatic — Onzas usado: — EPA Registration # 335-625

Size of area treated / Cantidad areas trastado: 18000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/10/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada:

Middle East Foot

Name of pesticide and EPA number / Nombre del pesticida y numéro de relegro de EPA:

- ☐ Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- ☐ Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-[illegible]-54705
- ☐ Herbimax Oil — Onzas usado: — EPA Registration # 36208-50011
- ☐ Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- ☐ Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- ☐ No Foam A — Onzas usado: — EPA Registration # 1050775-50015
- ☐ Ronstar G — Onzas usado: — EPA Registration # 52719-113
- ☐ Turf Mark
- ☐ Oryzalin — Onzas usado: — EPA Registration # 72167-15-73220
- ☐ Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-54705
- ☐ Turflon — Onzas usado: — EPA Registration # 464-554
- ☐ Fusilade II — Onzas usado: — EPA Registration # 10182-393
- ☐ Deadline T&O — Lbs. usado: — EPA Registration # 64864-36
- ☐ Orthene T T&O — Onzas usado: — EPA Registration # 239-2427
- ☑ LIFELINE HERBICIDE — Onzas usado: 16 oz — EPA Registration # 70506-310
- ☐ DISMISS SPC 2 L, Agustin — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 40000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/8/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:
Quail Meadows

Name of pesticide and EPA number / Nombre del pesticide y numero de reisgro de EPA:

- ☐ **Alligare Glyphosate 4 Plus**
  Onzas usado:
  EPA Registration # 81927-9
- ☐ **Grass Getter Herbicide**
  Onzas usado:
  EPA Registration # 7969-58-84705
- ☐ **Hardimax Oil**
  Onzas usado:
  EPA Registration # 35208-50011
- ☐ **Speedzone Herbicide**
  Onzas usado:
  EPA Registration # 2217-833
- ☐ **Sledgehammer**
  Onzas usado:
  EPA Registration # 81880-1-10163
- ☐ **No Foam A**
  Onzas usado:
  EPA Registration # 1050775-50015
- ☐ **Ronstar G**
  Onzas usado:
  EPA Registration # 62719-113
- ☐ Turf Mark
- ☐ **Oryzalin**
  Onzas usado:
  EPA Registration # 72167-15-73220
- ☐ **Weed-Hoe**
  Onzas usado:
  EPA Registration # 19713-42-84705
- ☐ **Turflon**
  Onzas usado:
  EPA Registration # 464-554
- ☐ **Fusilade II**
  Onzas usado:
  EPA Registration # 10182-398
- ☐ **Dexaline T&O**
  Lbs. usado:
  EPA Registration # 68664-88
- ☐ **Orthene T T&O**
  Onzas usado:
  EPA Registration # 239-2427
- ☐ LIFELINE HERBICIDE
  Onzas usado: 16
  EPA Registration # 70506-310
- ☐ DISVAT SPC 2.L, Aquatic
  Onzas usado:
  EPA Registration # 2.15-675

Size of area treated / Cantidad area trapiado: 35000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorios Campos

Date of application / Fecha de servicio: 12/8/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:

Quail Springs

Name of pesticide and EPA number / Nombre del pesticide y número de reisgro de EPA:

☐ Aligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 79969-83-84705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 36208-90011

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ No Foam A
Onzas usado:
EPA Registration # 1050775-50015

☐ Ronstar G
Onzas usado:
EPA Registration # 82719-133

☐ Turf Mark

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Westi-Hoe
Onzas usado:
EPA Registration # 19713-42-84705

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-393

☐ Deadline T&O
Lbs. usado:
EPA Registration # 64864-36

☐ Ornamec T T&O
Onzas usado:
EPA Registration # 239-2427

☐ LIFELINE HERBICIDE
Onzas usado: 8-oz
EPA Registration # 70506-310

☐ DISTINCT SPC 2.L, Aquatic
Onzas usado:
EPA Registration # 228-675

Size of area treated / Cantidad area treatado: 26000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/3/21

Name & address of property treated / Nombre y domicilio de la proiedad tratada:

TRAbuco

Name of pesticide and EPA number / Nombre del pesticida y número de registro de EPA:

☐	Alligare Glyphosate 4 Plus Onzas usado: EPA Registration # 81927-9	
☐	Grass Getter Herbicide Onzas usado: EPA Registration # 75689-?-84705	
☐	Hardimax ? Onzas usado: EPA Registration # 35209-50011	
☐	Speedzone Herbicide Onzas usado: EPA Registration # 2217-833	
☐	Sedgehammer Onzas usado: EPA Registration # 81880-1-10163	
☐	No Foam A Onzas usado: EPA Registration # 1050775-50015	
☐	Ronstar G Onzas usado: EPA Registration # 62719-113	
☐	Turf Marks	
☐	Oryzalin Onzas usado: EPA Registration # 72167-16-73220	
☐	Weed-Hoe Onzas usado: EPA Registration # 19713-42-84705	
☐	Turflon Onzas usado: EPA Registration # 464-554	
☐	Fusilade II Onzas usado: EPA Registration # 10182-399	
☐	Deadline T&O Lbs. usado: EPA Registration # 66664-36	
☐	Orthene T T&O Onzas usado: EPA Registration # 239-2427	
☐	LIFELINE HERBICIDE Onzas usado: 8 oz. EPA Registration # 70506-310	
☐	DISMISS SPC 2L, Agustic Onzas usado: EPA Registration # 235-675	

Size of area treated / Cantidad area treatado: 20000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorros Campos

Date of application / Fecha de servicio: 12/3/21

Name & address of property treated / Nombre y domicilio de la proledad tratada:

MARshDown

Name of pesticide and EPA number / Nombre del pesticide y numéro de reisgro de EPA:

- [ ] Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- [ ] Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-58-84705
- [ ] Herbimax Oil — Onzas usado: — EPA Registration # 35205-50011
- [ ] Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- [ ] Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- [ ] NoFoam A — Onzas usado: — EPA Registration # 1050775-50015
- [ ] Ronstar G — Onzas usado: — EPA Registration # 62719-118
- [ ] Turf Mark
- [ ] Oryzalin — Onzas usado: — EPA Registration # 72167-15-73220
- [ ] Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-84705
- [ ] Turflon — Onzas usado: — EPA Registration # 464-554
- [ ] Fusilade II — Onzas usado: — EPA Registration # 10182-393
- [ ] Dimension TSO (Lbs. usado:) — EPA Registration # 62994-35
- [ ] Chipco Ronstar / Chlorthal TSO — Onzas usado: — EPA Registration # 228-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 12 oz — EPA Registration # 70506-310
- [ ] DISMISS SPC 2L, Agustin — Onzas usado: — EPA Registration # 325-625

Size of area treated / Cantidad area treatado: 40000-SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 12/2/21

Name & address of property treated / Nombery domicilioda la proiedad tratadad: Cypress - B

Name of pesticide and EPA number / Nombre del pesticida y numéro de reisgro de EPA:

Product	Onzas usado	EPA Registration #
☐ Alligare Glyphosate 4 Plus		81927-9
☐ Grass Getter Herbicide		7969-58-54705
☐ Herbimax Oil		35208-50011
☐ Speedzone Herbicide		2217-833
☐ Sedgehammer		81880-1-10163
☐ No Foam A		1050775-50015
☐ Ronstar G		62719-113
☐ Turf Mark		
☐ Oryzalin		72167-15-73220
☐ Weed-Hoe		10718-42-54705
☐ Turflon		464-554
☐ Fusilade II		10182-399
☐ Deadline T&O	Lbs. usado:	64864-38
☐ Orthene T T&O		239-2427
☐ LIFELINE HERBICIDE	2-0Z	70506-310
☐ DISVIT SPC 2L, Aquatic		228-675

Size of area treated / Cantidad area treatado: 46000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zocorias Campos

Date of application / Fecha de servicio: 12/01/21

Name & address of property treated / Nombre y domicilio de la proiedad tratadad:
Cypress- A

Name of pesticide and EPA number / Nombre del pesticide y número de reisgro de EPA:

☐ Alligare Glyphosate 4 Plus
Onzas usado:
EPA Registration # 81927-9

☐ Oryzalin
Onzas usado:
EPA Registration # 72167-16-73220

☐ Grass Getter Herbicide
Onzas usado:
EPA Registration # 79997-8-84705

☐ Weed-Hoe
Onzas usado:
EPA Registration # 19713-42-84705

☐ Herbimax Oil
Onzas usado:
EPA Registration # 36208-50011

☐ Turflon
Onzas usado:
EPA Registration # 464-554

☐ Speedzone Herbicide
Onzas usado:
EPA Registration # 2217-833

☐ Fusilade II
Onzas usado:
EPA Registration # 10182-399

☐ Sedgehammer
Onzas usado:
EPA Registration # 81880-1-10163

☐ Deadline T&O
Lbs. usado:
EPA Registration # 66664-86

☐ No Foam A
Onzas usado:
EPA Registration # 1050775-50015

☐ Ornamental T T&O
Onzas usado:
EPA Registration # 239-2427

☐ Ronstar G
Onzas usado:
EPA Registration # 62719-113

☒ LIFELINE HERBICIDE
Onzas usado: 16 oz
EPA Registration # 70506-310

☐ Turf Mark

☐ DITVIT SRC 2.L. Aquatic
Onzas usado:
EPA Registration # 228-625

Size of area treated / Cantidad area treatado: 48000 SF

RECORD OF PEST CONTROL OPERATIONS
RECORD DE OPERATIONS DE CONTROL DE PLAGAS

Name / Nombre: Zacarias Campos

Date of application / Fecha de servicio: 11/29/21

Name & address of property treated / Nombre y domicilio de la propiedad tratada:
Orchard Retarting Basin

Name of pesticide and EPA number / Nombre del pesticide y numero de registro de EPA:

- [ ] Alligare Glyphosate 4 Plus — Onzas usado: — EPA Registration # 81927-9
- [ ] Grass Getter Herbicide — Onzas usado: — EPA Registration # 7969-[illegible]-84705
- [ ] Hardmax Oil — Onzas usado: — EPA Registration # 36208-50011
- [ ] Speedzone Herbicide — Onzas usado: — EPA Registration # 2217-833
- [ ] Sedgehammer — Onzas usado: — EPA Registration # 81880-1-10163
- [ ] Novagam A — Onzas usado: — EPA Registration # 1050776-50015
- [ ] Ronstar G — Onzas usado: — EPA Registration # 62719-113
- [ ] Turf Marie
- [ ] Oryzalin — Onzas usado: — EPA Registration # 72167-16-73220
- [ ] Weed-Hoe — Onzas usado: — EPA Registration # 19713-42-84705
- [ ] Turflon — Onzas usado: — EPA Registration # 464-564
- [ ] Fusilade II — Onzas usado: — EPA Registration # 10182-398
- [ ] Deadline T&O — Lbs. usado: — EPA Registration # 84884-35
- [ ] Ornamec T&O — Onzas usado: — EPA Registration # 299-2427
- [x] LIFELINE HERBICIDE — Onzas usado: 6 oz — EPA Registration # 70506-310
- [ ] Dismiss SRC Q.L. Aquatic — Onzas usado: — EPA Registration # 228-675

Size of area treated / Cantidad area tratado: 18000-SF