



# Memorandum

Date: August 25, 2025  
To: Climate and Environmental Justice Commission  
From: Jonathon Milanese, Environmental Compliance Specialist  
John McNerney, Ecological Resources Program Manager  
Subject: Annual Integrated Pest Management Report for years 2023 and 2024

---

## **Recommendation**

Receive this informational report of Integrated Pest Management (IPM) activities for the 2023 and 2024 maintenance seasons.

## **Background**

The City of Davis has an IPM Policy and Procedures (IPM Policy) that directs how pests are managed by City staff and contractors on City properties. The goal of the City's IPM policy is to utilize the most environmentally sound approaches to pest management, and to reduce the volume and toxicity of chemical pest control treatments. The key objectives of the IPM Policy are to outline the required steps for planning, development and coordination of the IPM program for all City departments; and to provide procedural guidelines for implementation of a coordinated IPM program. The IPM program is managed within the Public Works Utilities and Operations Department, Environmental Resources Division.

The IPM Policy (adopted by City Council in 2017) requires that staff provide an annual report on the City's IPM program to the Natural Resources Commission. With the combining of the Natural Resources Commission with the Tree Commission in March of last year, the annual IPM report is now provided to the Climate and Environmental Justice Commission. This report summarizes IPM activities by city staff, volunteers and contractors during the 2023 and 2024 service years, and proposes 2025 program goals.

## **Highlights**

- Hiring of a new Environmental Compliance Specialist in 2024 to coordinate the IPM Program.
- Held quarterly meetings of the inter-departmental IPM Coordination Group.
- Reduction in pesticide usage from 2023 to 2024.
- Discovery and correction of additional pest services contracts that were not in alignment with the IPM Policy.
- The Open Space Division utilized prescriptive fire at the South Fork Preserve.
- Expanded grazing into storm basins and conveyance channels.
- Open Space Division collecting and reseeding desirable natives to over shade and outcompete growing weeds in city-managed areas.

- Parks Department averaged over 5,500 staff hours annually of irrigation repairs and adjustments to volume output to city managed landscapes
- Over 2,600 cubic yards of mulch were applied to park, facility, and greenbelt landscapes.
- Mechanical clearing of root intrusions (i.e. “rodding”) in sewer lines continued to be widely used as an alternative to chemical control.

### **Program Challenges and Solutions**

The IPM Policy as currently written requires the development and approval of a Reduced-Risk Pesticide List (RRPL) and the formation of an IPM Technical Advisory Committee (IPM-TAC). The RRPL identifies and approves useable pesticides considered to have the least risk to human and ecological health, while the IPM-TAC was intended for the following:

- assist in creating and updating a Reduced Risk Pesticide list annually
- provide general guidance on the IPM Program
- ensure transition of “green”/ least-toxic control methods to manage pests in parks, greenbelts, and other high use areas.

Due to the prior vacancy of the IPM coordination position, the IPM-TAC has not been developed nor the RRPL. Instead, staff worked with an independent IPM consultant (Helix Environmental, Inc.) to analyze and develop a RRPL using the hazard ranking process identified in the IPM Policy.

During the vacancy of the IPM Environmental Compliance Specialist – IPM position (prior to January 2024), the Public Works Utilities and Operations Department Director created an interim IPM Program Coordination Team (IPM-PCT) to assist with day-to-day program operations and to coordinate the hazard rankings of proposed pesticides submitted by staff or contractors for use on City property. In January 2024 the PCT welcomed the hiring of the new Environmental Compliance Specialist – IPM to the team.

The IPM-PCT has utilized the services of IPM consultants to provide the essential functions that were envisioned for the IPM-TAC. Additionally, staff continue to operate under the City Council's direction and interim pesticide use restrictions, including the ban on products containing neonicotinoids, ceased use of products containing glyphosate in high public use areas, and required all pesticide use to undergo the justification process identified in the IPM Policy. This IPM-PCT has provided effective oversight of the IPM program and the model may be considered a suitable long-term solution for the program.

The IPM-PCT will continue to analyze the benefits and constraints of formalizing the above interim elements of coordination and advising of the IPM program and consider associated updates to the IPM Policy and Procedures. Any proposed update to the IPM Policy and Procedures will be brought to this commission for review and discussion.

**Non-Chemical Pest Control Activities in 2023 and 2024**

Mulching, hoeing, mowing, string trimming, mechanical rodding, irrigation repair, grazing, and prescribed fire were used by staff, volunteers, and contractors in parks, greenbelts, facility landscaping and street medians, open space habitat, sewer lines, and other utility areas. Staff and contractors relied heavily on cultural and mechanical pest management methods during the reporting period.

The following table illustrates labor hours associated with the city’s non-chemical pest control activities for the 2023 and 2024 service years.

**Table 1. 2023 and 2024 IPM Non-chemical Labor Hour per Division**

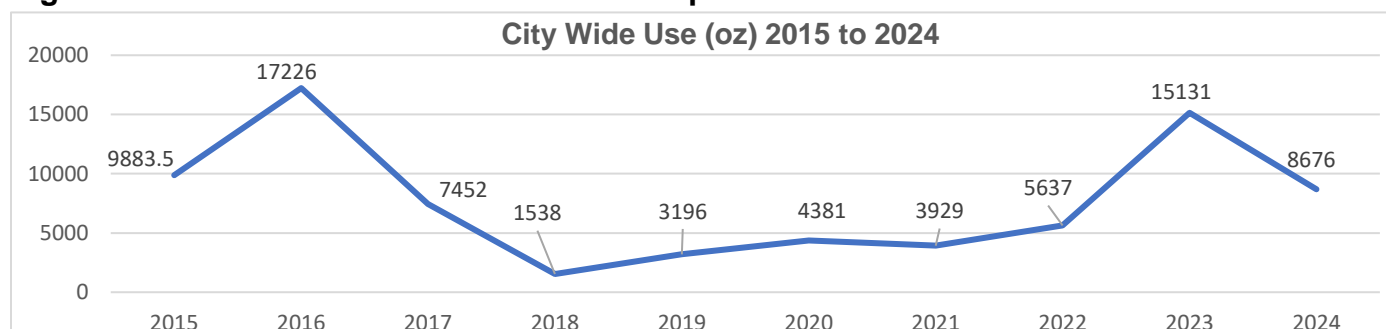
		LABOR HOURS						
		Stormwater	Wastewater/ Collections	Streets	Wastewater Treatment Plant	Open Space	Parks	Citywide TOTAL
Mechanical	2023	481	403	524	567	625	1,628	<b>4,228</b>
	2024	691	344	493	649	1,498	1,132	<b>4,807</b>
Cultural	2023	0	0	0	0	300	5,520	<b>5,820</b>
	2024	0	0	0	0	900	5,520	<b>6,420</b>

**Citywide Pesticide Use 2023 and 2024**

Pesticide usage was lower from 2023 to 2024 largely due to continued utilization of cultural and mechanical pest management methods, and with the onboarding of the Environmental Compliance Specialist to coordinate and assess the effectiveness of pesticide applications for the IPM program in early 2024.

The following figures show total volume (in ounces, oz.) for city wide use from 2015 to 2024 (Figure 1), total pesticide volume (oz.) by product and department in 2023 and 2024 (Table 2), and pesticide information (Table 3). Granular products are reported in pounds; for the purposes of this figure they have been plotted as oz.

**Figure 1. 2015-2024 Total Pesticide Use Comparison**



**Table 2. 2023 and 2024 Pesticide Use by Product (Herbicides) and Division (oz.)**

DEPT	YEAR	Round Up	Ortho-Weed-B-Gone	Snapshot (Pounds)	Cheetah Pro	Life line	Scythe	Capstone	Telar	Vastlan	Trans line	Razo Rooter
PARKS STAFF	2023	0	69	0	0	0	0	0	0	0	0	0
	2024	0	0	500	0	0	0	0	0	0	0	0
PARKS CONTRACT	2023	0	0	0	4,956	0	0	0	0	0	0	0
	2024	0	0	0	544	0	0	0	0	0	0	0
PWUO STAFF	2023	0	0	0	0	520	0	364	0	0	0	305
	2024	0	0	0	0	50	100	0	0	0	0	25
PWUO CONTRACT	2023	4,736	0	0	0	0	0	2,284	0	0	0	0
	2024	3,855	0	0	0	0	0	1,884	0	0	0	0
OPEN SPACE STAFF	2023	16	0	0	0	102	0	23	0	12	0	0
	2024	24	0	0	0	20	0	27	0	30	0	0
OPEN SPACE CONTRACT	2023	0	0	0	0	71	0	1,152	1	8	0	0
	2024	0	0	0	0	0	0	0	508	0	216	0

**Table 3. 2023 & 2024 Pesticide Used in Structural Pest Control**

Dept	Year	Alpine WSG(g)	Advion WDG (oz)	Fendona LV (oz)	Onslaught Fast Cap (oz)	Premise Pro (oz)	Termidor SC (oz)	Demand CS (oz)	Maxforce FC (g)	Essentria IC3 (oz)
Facilities Contract	2023	1,115.50	10.0	6.31	2.58	0.83	1.50	0.14	180.0	0
Facilities Contract	2024	505.5	28.23	3.96	1.06	0.45	0	0	0	6.50

Dept	Year	Talstar (oz)	Advion Ant Gel Bait (g)	Niban Granular Bait (g)	Tekko Pro (fl oz)	Terad3 Blox (oz)	Contrac (oz)	Solentra (oz)	Flatline Soft Bait (oz)	Ditrac Blox (oz)
Facilities Contract	2023	0	0	0	0	22.0	0	32.0	0	1.00
Facilities Contract	2024	6.00	0.20	3,175.15	1.00	8.00	19.0	24.0	134.0	78.0

**Table 4. Information on Pesticides Used in 2023 and 2024**  
(all products are herbicides and insecticides)

Commercial Name	Active Ingredient	Hazard Tier*	Use Characteristics
Roundup	Glyphosate	1 Most Hazardous	Post-emergent, non-selective, used in utility rights-of-way and open spaces. May <u>not</u> be used in areas with high public exposure.
Ortho Weed-B-Gone	Dimethylamine salt	1 Most Hazardous	Post-emergent, non-selective, used in parks. May <u>not</u> be used in areas with high public exposure.
Snapshot	Trifluralin & Isoxaben	1 Most Hazardous	Pre-emergent, selective, used in parks May <u>not</u> be used in areas with high public exposure.
Advion WDG	Indoxacarb	1 Most Hazardous	Broad-spectrum, pro-insecticide used in facilities. May <u>not</u> be used in areas near storm drains or aquatic life.
Advion Ant Gel	Indoxacarb	1 Most Hazardous	Broad-spectrum, pro-insecticide used in facilities. May <u>not</u> be used in areas near storm drains or aquatic life.
Scythe	Pelargonic Acid	2 Less Hazardous	Post-emergent, non-selective, used in utility right-of-way
Capstone	Triclopyr	2 Less Hazardous	Post-emergent, non-selective, used in utility rights-of-way and open spaces
Telar	Chlorsulfuron	2 Less Hazardous	Post-emergent, selective, used in utility rights-of-way and open space
Vastlan	Triclopyr choline salt	2 Less Hazardous	Post-emergent, selective, used in utility rights-of-way and open space
Transline	Clopyralid	2 Less Hazardous	Post-emergent, selective, used in utility rights-of-way and open space
Razorooter	Diquat dibromide	2 Less Hazardous	Post-emergent, non-selective, used in sewer line laterals for root intrusion
Cheetah Pro	Glufosinate Ammonium	3 Least Hazardous	Post-emergent, non-selective, used in utility rights-of-way, parks, and open spaces
Lifeline	Glufosinate Ammonium	3 Least Hazardous	Post-emergent, non-selective, used in utility rights-of-way, parks, and open spaces
EcoVia Wasp & Hornet Killer	Sodium lauryl sulfate Clove oil & Peppermint oil	3 Least Hazardous	Botanical insecticide for stinging insects. Used in rights-of-way, parks, and in areas with high public exposure
Niban Granular Bait	Orthoboric Acid	3 Least Hazardous	Perimeter insecticide for crawling insects. Used at facilities.

\* This Reduced-Risk Pesticide List was developed independently by an IPM Consultant (Helix Environmental) using the hazard ranking process prescribed in the city's IPM Policy and Procedures

### **IPM Outreach and Education**

The sharing of IPM related public outreach and education material was accomplished via departmental tabling events, public signage, mailers, electronic social media communications, and a consulting IPM advocate (Our Water Our World).

Staff continues to utilize an opt-in pesticide application e-mail notification system. With this system, community members may elect to receive notifications on where and when pesticide applications are being made within the city. Pre- and post- pesticide application site posting continues at application sites.

Staff continued to facilitate the Our Water Our World pollution prevention program at local pesticide retail outlets. This program provides in-store information and product identification on least-toxic IPM products to help consumers make least toxic pest control choices.

### **2025 Goals**

- Continue Pesticide Use Reduction Efforts: Continue to investigate efficiency of current approved pesticide products and utilize alternative least toxic and cost-effective pest control methods.
- Support Staff in Obtaining PCA Certification: Support the Environmental Compliance Specialist – IPM with training and examination to receive PCA certification.
- IPM Webpages & NOI Postings: Update the current webpages to include refreshed content and adjust application dates to reflect operations on the Anticipated Pesticide Application Calendar and opt-in email notification system.
- IPM Site Assessments: Support internal divisions with tailored recommendations to address and prevent pest issues based on sites pest pressure.
- Develop and Deploy Educational Signage: Create “Grazing” signage series with flexible messaging as livestock grazing expands to additional city properties to manage weeds as a non-chemical control method of IPM (in addition to fire abatement efforts).
- Update the Pesticide Hazard and Exposure Reduction (PHAER) Mapping: The IPM program coordinator will continue Pesticide Hazard and Exposure Reduction (PHAER) analysis on all publicly accessible and heavily used areas such as parks, bike/ pedestrian paths, sidewalks, and greenbelts.