

Annual Reporting for FY 2025-2026

Supplement for Tracking and Participating in Pesticide Regulatory Efforts

Bay Area Municipal Stormwater Collaborative Phase II Subcommittee



October 2026

Supplement for Tracking and Participating in Pesticide Regulatory Efforts Annual Reporting for FY 2025-2026

INTRODUCTION

This report provides information on regionally implemented activities complying with portions of the Small Municipal Separate Storm Sewer System (MS4) Phase II Permit issued by the State Water Resources Control Board (Water Board). The Phase II Permit covers stormwater discharges from 24 municipalities and special districts (Permittees) in the North San Francisco Bay Area. This report covers pesticide toxicity regulatory modernization activities implemented through the California Stormwater Quality Association (CASQA) related to the following Phase II Permit provisions:

- E.7.a.(ii)(i) – Develop and convey messages specific to proper application of pesticides, herbicides, and fertilizers
- E.11.h. – Permittee Operations and Maintenance Activities (O&M)
- E.11.j. – Landscape Design and Maintenance
- E.15.a. / Attachment G – Implement Pesticide-Related Toxicity Control Program

Effecting regulatory modernization occurs at the State and Federal level. Recognizing that fact, the Permittees have taken an approach to modernizing pesticide regulations that involves cooperating through the California Stormwater Quality Association (CASQA), and/or the Urban Pesticide Pollution Prevention Project (UP3 Project). These entities have determined this cooperative approach is not only the most likely approach but is likely the only approach for local agencies to effect meaningful change in the State and Federal regulatory environments.

Activities and Accomplishments during FY 2025-2026

The actual work of tracking and participating in the ongoing regulatory efforts related to pesticides was accomplished through CASQA. CASQA conducted its activities on behalf of members and coordinated funding contributions and activities through its True Source Control Subcommittee (encompassing the former Pesticide Subcommittee, a group of stormwater quality agencies affected by pesticides or pesticides-related toxicity listings, TMDLs, or permit requirements, as well as others knowledgeable about pesticide-related stormwater issues). The CASQA 2026 Pesticide Annual Report and Effectiveness Assessment (Attachment 1) provides a comprehensive and detailed accounting of efforts to track and participate in relevant regulatory processes as well as accomplishments related to pesticides and stormwater quality.

Attachments

Attachment 1

**2026 Pesticide Annual Report and Effectiveness Assessment
California Stormwater Quality Association
Final Report
September 2026**



California Stormwater Quality Association®

Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

2026 Pesticides Annual Report

Prepared by the California Stormwater Quality Association

September 2026

Preface

ADVANCING SUSTAINABLE STORMWATER MANAGEMENT

The California Stormwater Quality Association (CASQA) is a nonprofit corporation that advances sustainable stormwater management protective of California water resources. With well over 2,000 members, CASQA's membership is comprised of diverse range of stormwater quality management organizations and individuals, including cities, counties, special districts, federal agencies, state agencies, ports, universities and school districts, wastewater agencies, water suppliers, industries, and consulting firms throughout the state. Collectively, CASQA represents over 34 million people in California.

CASQA's [*Vision for Sustainable Stormwater Management*](#)¹ (Vision) defines the actions needed to manage stormwater as an essential component of the state's water resources, support human and ecological needs, protect water quality, and enhance and restore California's waterways. There are four guiding principles to achieve this Vision. Like the legs of a chair, each Principle is essential and all four must be in place to support the whole.

Principle #1: Program Implementation: Projects and programs that use stormwater as a resource, protect water quality and beneficial uses, and efficiently minimize pollution are critical for sustainable stormwater management. Stormwater capture and true source control (identifying and mitigating a pollutant at its source) are the primary drivers of these solutions, with effective BMPs providing an important supportive role.

Principle #2: Permits, Regulations, and Legislation: Permits, regulations, and legislation need to focus on effectiveness and desired outcomes to support sustainable stormwater management. Regulatory and legislative actions must align with and support the other components of the Vision – advancing stormwater capture, true source control, effective BMPs, increasing public education and awareness focused on stormwater as a resource, and securing funding to support these solutions.

Principle #3: Public Education: Public awareness, understanding, and support is essential to sustainable stormwater management. The key shift is viewing stormwater as a resource that must be protected and integrated into overall water resource management.

Principle #4: Funding: Significant financial investment is required to achieve sustainable stormwater management. Stormwater is the most underfunded portion of the water sector and substantial funding is needed to bring these solutions forward.

2026 PESTICIDES ANNUAL REPORT

This report, *2026 Pesticides Annual Report*, advances Principle #1 by addressing pesticide pollution through source control solutions. CASQA has identified Current Use Pesticides as a [*Water Quality Priority*](#), requiring solutions at a statewide scale. To advance true source control for pesticides, CASQA is actively engaged with state and federal regulators in an effort to develop an effective pesticide regulatory system, based primarily on existing statutes, that includes timely identification and mitigation of urban water quality impacts, and proactively prevents additional problems through the registration and registration review processes. This report describes CASQA's regulatory engagement activities from July 2025 through June 2026.

¹ <https://www.casqa.org/wp-content/uploads/2022/10/final - vision for sustainable stormwater management - 10-07-2020.pdf>

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Funding to support this work was provided from Alameda Countywide Clean Water Program, Contra Costa Clean Water Program, Fairfield-Suisun Urban Runoff Management Program, Marin Countywide Stormwater Pollution Prevention Program, Napa Countywide Stormwater Pollution Prevention Program, Sacramento Stormwater Quality Partnership, San Mateo Countywide Water Pollution Prevention Program, Santa Clara Valley Urban Runoff Pollution Prevention Program, Sonoma County Water Agency, and the Solano Stormwater Alliance.

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Section 1. Introduction

1.1 IMPORTANCE OF CASQA'S EFFORTS TO IMPROVE PESTICIDE REGULATION

For decades, the uses of certain pesticides in urban areas – even when applied in compliance with pesticide regulations – have adversely impacted urban water bodies. Currently, several pesticides are present in California urban water bodies at concentrations above aquatic toxicity thresholds.² CASQA member agencies face substantial costs to comply with pesticides-related Total Maximum Daily Loads (TMDLs), California State Water Board Toxicity Provisions, and additional permit requirements. Throughout California, more municipalities will be subject to similar requirements, as additional TMDLs and Basin Plan Amendments are adopted (Table 1). Meanwhile, while local agencies in California have authority over their own use of pesticides, they are pre-empted by state law from regulating pesticide use by consumers and businesses to address these sources of pollution in stormwater.

Consistent with CASQA's [Vision for Sustainable Stormwater Management](#) (Vision), CASQA's efforts focus on reducing pesticide pollution at the source. Minimizing pesticide pollution before it can occur, as opposed to attempting to remove pesticides from the environment, is essential to sustainable stormwater management. True source control (the elimination of a pollutant at its source) and the use of alternative products offers the most effective and economical approach to eliminating pesticides that impair the beneficial uses of California's waterways.

Table 1. California TMDLs, Statewide Water Quality Control Plans, and Basin Plan Amendments Addressing Currently Registered Pesticides and/or Toxicity in Urban Watersheds^{3, 4, 5}

Water Board Region	Water Body	Pesticide	Status
Statewide	Statewide Water Quality Control Plan amendments for urban pesticides reduction ["Urban Pesticides Amendments"] (Inland Surface Waters, Enclosed Bays & Estuaries, and Ocean)	All Pesticides/All pesticide-related toxicity	In preparation
	Sediment Quality Objectives (Enclosed Bays & Estuaries)	Sediment Toxicity ⁶	Approved
	Toxicity Provisions (Inland Surface Waters and Enclosed Bays & Estuaries)	Toxicity	Approved May 2023 ⁷
San Francisco Bay (Region 2)	All Bay Area Urban Creeks	All Pesticide-Related Toxicity	Approved

² California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)

https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html

³ Excludes pesticides that are not currently registered in California, such as organochlorine pesticides.

⁴ https://www.waterboards.ca.gov/water_issues/programs/tmdl/

⁵ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2020_2022state_ir_reports_final/apx_d_adopted_tmdls_list.pdf

⁶ These TMDLs/Plan provisions can trigger toxicity testing stressor source identification studies, and additional follow up, even when toxicity is linked to current pesticides.

⁷ https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.html

Water Board Region	Water Body	Pesticide	Status
Central Coast (Region 3)	Santa Maria River Watershed	Pyrethroids, Toxicity	Approved
	Lower Salinas River Watershed	Pyrethroids, Toxicity, Malathion, Chlorpyrifos, Diazinon ⁹	Amended by Central Coast Water Board, June 2024 ⁸
	San Lorenzo River Watershed (Santa Cruz)	Chlorpyrifos ⁹	Approved
Los Angeles (Region 4)	Marina del Rey Harbor	Copper (Marine antifouling paint) ¹⁰	Approved
	Oxnard Drain 3 (Ventura County)	Bifenthrin, Toxicity	EPA-Adopted Technical TMDL
	Calleguas Creek, its Tributaries and Mugu Lagoon	Water & Sediment Toxicity ⁶ Diazinon & Chlorpyrifos ⁹	Approved
	McGrath Lake (Ventura County)	Sediment Toxicity ⁶	Approved
	Colorado Lagoon (Long Beach)	Sediment Toxicity ⁶	Approved
	Dominguez Channel; Greater Los Angeles & Long Beach Harbor	Sediment Toxicity ⁶	Approved
	Ballona Creek Estuary	Sediment Toxicity ⁶	Approved
Central Valley (Region 5)	Sacramento River and San Joaquin River Basins	Pyrethroids	Approved
	Sacramento-San Joaquin River Delta Waterways	Diazinon & Chlorpyrifos ⁹	Approved
	Sacramento & Feather Rivers	Diazinon & Chlorpyrifos ⁹	Approved
	Sacramento County Urban Creeks	Diazinon & Chlorpyrifos ⁹	Approved
	Lower San Joaquin River	Diazinon & Chlorpyrifos ⁹	Approved
Lahontan (Region 6)	Pesticide Discharge Prohibition	All Pesticides	Approved ¹¹
Santa Ana (Region 8)	Newport Bay	Copper (Marine antifouling paint) ¹⁰	Pending EPA Approval ¹²
	San Diego Creek, and Upper and Lower Newport Bay	Toxicity (Diazinon & Chlorpyrifos) ^{9,13}	EPA-Adopted Technical TMDL
San Diego (Region 9)	Shelter Island Yacht Basin (San Diego Bay)	Copper (Marine antifouling paint) ¹⁰	Approved
	Chollas Creek	Diazinon ⁹	Approved

⁸ https://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/salinas/oppesticides/

⁹ Use prohibited in urban areas (diazinon) or no meaningful use due to use limitations (chlorpyrifos).

¹⁰ Primarily addresses pesticides that are directly discharged and should not ordinarily appear in stormwater (marine antifouling paint).

¹¹ https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/pesticidebpa.shtml

¹² https://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/tmdl_metals.html

¹³ 23 CA Code of Regs 3977

Section 2. Pesticide Program Activities

CASQA's pesticide program activities support the development of an effective pesticide regulatory system based primarily on existing statutes. An effective pesticide regulatory system provides for the timely identification and mitigation of urban water quality impacts and proactively prevents additional problems through the registration and registration review processes.

2.1 REGULATORY TRACKING

CASQA actively tracks a range of regulatory activities to identify potential issues and opportunities for engagement. This effort includes reviewing Federal Register and California Department of Pesticide Regulation (DPR) notices to flag regulatory actions that may affect high-priority active ingredients requiring further review. Through this tracking, CASQA can identify gaps in current procedures and highlight potential urban runoff-related impacts. CASQA also reviews relevant regulatory actions, guidance documents, and work plans from United States Environmental Protection Agency (EPA) and DPR to assess their alignment with urban runoff concerns and determine whether additional input is warranted.

Activities at the State and Regional Water Boards are monitored to identify opportunities for improving TMDLs, Basin Plan Amendments, and National Pollutant Discharge Elimination System (NPDES) permits. A monthly summary titled *Pesticides Regulatory Action Items* documents regulatory tracking efforts and informs future engagement. This summary is distributed to the CASQA True Source Control Subcommittee. See Attachment 1: Pesticides Regulatory Action Items for the most recent update.

2.2 REGULATORY COMMUNICATIONS

To maintain strong working relationships and to provide early input, CASQA maintains communications with both EPA and DPR. These communications may be formal through comment letters in response to regulatory actions or informal to share areas of concern or collaboration. The purpose is to provide information sharing about immediate issues or ongoing efforts and inform EPA and DPR about issues confronting the stormwater community. Early communication on upcoming proceedings can reduce the need for time-intensive letters and add context.

2.3 EDUCATION

CASQA provides presentations and participates in discussions with EPA, DPR, the Water Boards, and CASQA members about pesticide impacts on urban runoff and opportunities to improve regulatory processes. Though these educational activities, CASQA encourages research and monitoring programs to address urban runoff data needs and priorities, stimulate academic, government, or private development of analytical and toxicity identification methods to address anticipated urban runoff monitoring needs, and inform development of new pesticides by manufacturers and selection of pesticides by professional users.

2.4 ENGAGEMENT WITH FEDERAL AND STATE ADVISORY COMMITTEES

CASQA engages with policy and scientific advisory committees convened by EPA and DPR by attending public meetings and providing input through the public participation process. Through these activities, CASQA contributes technical information, identifies data gaps, and fosters collaboration in the development of a more effective pesticide regulatory system. Table 3 lists these committees and summarizes their current status.

2.5 PESTICIDE WATCH LIST

CASQA updates the Pesticide Watch List annually to prioritize regulatory engagement based on current and potential water quality impacts from urban pesticide uses. The update utilizes recent scientific and regulatory literature and relevant monitoring information from DPR, the Water Boards' Surface Water Ambient Monitoring Program (SWAMP), the U.S. Geological Survey (USGS), and MS4 monitoring programs.

2.6 PARTNERSHIPS

CASQA and the Bay Area Clean Water Agencies (BACWA) continue to work on parallel efforts to effect long-term systemic changes in the pesticide regulatory process. CASQA and BACWA combine resources to track stormwater and wastewater priorities into a unified monthly Pesticides Action Plan. Partnering with BACWA to coordinate the review of EPA and DPR pesticide regulatory actions allows for increasing the capacity and value of our collective pesticide program activities.

Section 3. Annual Program Implementation

3.1 REGULATORY ENGAGEMENT

At any given time, there are dozens of pesticides with current or pending actions before EPA or DPR. Addressing these regulatory concerns is critical because some pesticides may pose an immediate threat to water quality and create compliance risks for MS4s. In addition, regulatory decisions made by EPA and DPR often remain in place for many years – typically revisited only once every fifteen years – making early engagement essential to avoid long-term consequences for stormwater programs. Our engagement with EPA and DPR seeks to reinforce source control measures and alternatives as an effective strategy to reduce pesticide pollution.

Table 2 summarizes CASQA's comment activities and regulatory outcomes during the reporting period, including responses to comment letters submitted in prior years. For additional details on ongoing pesticide registrations, see Attachment 2: Regulatory Participation Outcomes and Effectiveness Assessment Summary Tables.

Table 2. Recent Regulatory Activities and Outcomes

Regulatory Action or Concern	CASQA Activity	Support	Outcomes and Notes
Fipronil Preliminary Aquatic Risk Assessment	Comment Letter Submitted July 6, 2020	BACWA CA DPR CA Dept. of Justice SFB Water Board State Water Board	EPA issued a response to comments in November 2025. Although EPA incorporated the monitoring data submitted by CASQA and partners, EPA did not address key CASQA and partner recommendations, including: • Include impervious surfaces in risk modeling, including perimeter treatments and crack-and-crevice treatments. • Add urban mitigation measures after acknowledging that urban concentrations exceed aquatic benchmarks.
Cyhalothrins (gamma and lambda)-Proposed Interim Decision (ID)	Comment Letter to EPA January 11, 2020	BACWA CA DPR SFB Water Board NACWA City of Salinas	EPA issued Clarification and Correction to the (Gamma and Lambda-) Interim Decision in February 2026. EPA retained the urban label language supported by CASQA. The 2026 clarification and correction also added a restriction on applications to residential lawns and turf to address post-application human exposure. This restriction will have a net effect of reduction of use of cyhalothrins in outdoor urban areas, which may protect aquatic life.
Isocycloseram Proposed Registration of a New Active Ingredient	Comment Letter: June 10, 2025	BACWA SFB Water Board NACWA Center for Biological Diversity	EPA issued a response to comments in November 2025. Isocycloseram, a new pesticide with proposed urban outdoor uses, appears to be more toxic than existing pesticides (including pyrethroids) with parallel uses. EPA incorporated several of the warning statements that CASQA suggested for the pesticide label, including a graphic submitted by CASQA and partners (see right)



			and warning statements “Do not apply to storm drains” and “Do not pour down drains or sewers.” EPA did not adopt CASQA’s request to apply narrower pyrethroid perimeter-band restrictions to comparable isocycloseram uses. EPA retained a 7-foot perimeter band for outdoor handheld isocycloseram treatments, explaining that its modeling accounted for impervious areas.
EPA Endangered Species Act (ESA) Draft Fungicides Strategy	Comment Letter to EPA July 2026	BACWA NACWA SFB Water Board	Pending. EPA’s draft Fungicide Strategy addresses conventional agricultural fungicides. The draft Fungicide Strategy does not establish a framework for non-agricultural uses that may discharge to storm drains. CASQA requested a schedule for addressing non-agricultural uses and mitigation measures to minimize exposure to listed species from outdoor residential pesticide uses.

3.2 ENGAGEMENT WITH FEDERAL AND STATE ADVISORY GROUPS

As presented in Table 3, CASQA remains actively involved with various agencies and advisory groups that affect urban pesticide use and pest management. In addition to the PPDC and PMAC, new advisory groups are currently being initiated by DPR, such as a Scientific Advisory Committee, Sustainable Pest Management Committee, and an Environmental Justice Advisory Committee.

Table 3. Engagement with Federal and State Efforts to Support CASQA’s Goals

Agency or Committee	Status and Developments
EPA’s Pesticide Program Dialogue Committee (PPDC)	Before the PPDC’s charter temporarily expired in October 2025, the PPDC served as a 40-member advisory committee chaired by the Director of Office of Pesticide Programs (OPP). The committee included representatives from growers, industry, environmental organizations, public health organizations, farmworker groups, and state, local, and tribal governments. The PPDC held biannual public meetings. Over the last decade, CASQA, BACWA, and others have presented at PPDC meetings and received important updates from EPA on pesticide regulatory activities and priorities. As of July 2026, OPP was seeking renewal of the PPDC charter, with a status update potentially available in the second half of 2026.
DPR’s Pesticide Registration and Evaluation Committee (PREC)	PREC is an interagency committee that advises DPR on the proposed registration, renewal, and reevaluation of pesticide products. The committee may also provide advice to DPR on proposed regulatory development and reform initiatives, evolving public policy and program implementation issues, environmental monitoring data related to pesticide use, and science issues associated with evaluating and reducing risks. The most recent PREC meeting was on May 15, 2026.
DPR’s Sustainable Pest Management (SPM) Advisory Committee	The SPM Advisory Committee was established to advise DPR on goals, tactics, policies, and partnerships that support the implementation of SPM statewide. The newly established, 17-member, limited-term committee will meet quarterly over three years to discuss barriers and opportunities for SPM adoption across California and inform DPR’s work to foster pest management approaches that promote human health and safety, ecosystem resilience, agricultural sustainability, community wellbeing, and economic vitality. This committee held their first meeting on June 15, 2026.
DPR’s Scientific Prioritization and Review Committee (SPARC)	SPARC is a newly created committee that advises DPR on prioritizing actions within its continuous evaluation and mitigation process. The committee provides science-based recommendations to support DPR’s transparent, data-driven identification and mitigation of potential risks to human health and the environment from pesticide use. In April 2026, DPR selected 12 members to serve on the committee. The first committee meeting is scheduled for August 7, 2026.

DPR's Pest Management Advisory Committee (PMAC)	BACWA participates on the PMAC and provides an urban perspective within the committee. Urban participation on the PMAC has contributed to an increased focus on urban pest management and water quality issues, as well as funding for urban IPM research and implementation programs.
DPR's Environmental Justice Advisory Committee (EJAC)	EJAC is a newly established committee that advises DPR on policies and programs that address environmental justice concerns – particularly those of communities living in areas of high pesticide use. The committee held its first meeting in April 2026, with an initial focus on agricultural issues.

3.3 UPDATED PESTICIDE WATCH LIST

CASQA uses the Pesticide Watch List (Watch List) to prioritize efforts on the pesticides of concern to MS4 agencies.¹⁴ To keep the Watch List current, CASQA reviews newly available scientific literature, government reports, and monitoring studies. Pesticide prioritization is based on several considerations, including monitoring results relative to aquatic toxicity thresholds, evidence of surface water toxicity, Clean Water Act section 303(d) listings, pesticide urban use patterns, and pathways to storm drains.

The 2026 Watch List Update addresses two elements. First, selected priority criteria, definitions, and annotations were revised to improve clarity and support consistent tracking. Second, available monitoring data and literature were reviewed, and Watch List prioritization criteria were applied to determine whether pesticide priorities should be added or reassigned. The discussion below describes these revisions, the information evaluated, resulting priority changes, and the complete updated Watch List.

Updates to Priority Criteria, Definitions, and Annotations

- Updated the Priority 3 criteria to address highly toxic pesticides with pathways to the storm drain.** Previously, Priority 3 placement depended primarily on regulatory designations, including whether a pesticide contains a Clean Water Act priority pollutant or is associated with a section 303(d) listing. The revised criteria fill a gap between Priority 2 and Priority 4 by allowing a highly toxic pesticide with a pathway to storm drains and a documented urban monitoring detection to be placed in Priority 3, even when it does not meet Priority 2 criteria and might otherwise remain in Priority 4. The following language was added to implement this change: *“or is highly toxic with a pathway to the storm drain and has been detected in urban monitoring.”*
- Clarified the scope of chromium pesticides included in Priority 3.** A footnote was added specifying that chromium pesticides include dichromic acid/chromic acid, chromated arsenicals, and other chromium pesticides. The footnote expressly identifies dichromic acid because of increasing concern regarding its use and to support consistent Watch List tracking.
- Identified pesticides containing per- and polyfluoroalkyl substances (PFAS).** An asterisk was added to each pesticide identified as containing PFAS.
- Listed MCPA separately from other phenoxy herbicides in Priority 4.** MCPA remains in Priority 4 but is now listed separately from phenoxy herbicides to support individual tracking.

¹⁴ The first Watch List was published by the UP3 in 2005

Monitoring Data Review and Resulting Priority Changes

Table 4 identifies the monitoring data and literature reviewed to evaluate pesticide placements for the 2026 Watch List Update.

Table 4. Monitoring Data and Literature Reviewed for Watch List Update

Source	Monitoring Program or Study
California Department of Pesticide Regulation	(1) Study 329. <i>Surface Water Monitoring for Pesticides in Urban Areas of Northern California (FY2023-2024)</i> , McClanahan 2025 and (2) Study 320. <i>Ambient Surface Water and Mitigation Monitoring in Urban Areas in Southern California (FY2023-2024)</i> , Budd 2025.
San Francisco Estuary Institute (SFEI)	Heberger, Matthew, Rebecca Sutton, Nina Buzby, Jennifer Sun, Diana Lin, Miguel Mendez, Michelle Hladik, James Orlando, Corey Sanders, and Edward T. Furlong. <i>Current-Use Pesticides, Fragrance Ingredients, and Other Emerging Contaminants in San Francisco Bay Margin Sediment and Water</i> . SFEI Contribution No. 934. San Francisco Estuary Institute, Richmond, CA, 2020.
Delta Regional Monitoring Program	Current-use pesticide monitoring data available through the California Environmental Data Exchange Network (CEDEN).
State Water Resources Control Board	Stream Pollution Trends (SPoT) Monitoring Program. Khan, B, et al., Pyrethroid-driven toxicity and its relationships with urban land use: Findings from 15 years of statewide monitoring in California watersheds , <i>Science of The Total Environment</i> , Volume 999, 15 October 2025, 180330.
MS4/NPDES Monitoring Programs	Monitoring conducted by the Bay Area Municipal Stormwater Collaborative and the Southern California Stormwater Monitoring Coalition.
U.S. Geological Survey (USGS)	California Stream Quality Assessment; Sandstrom, M., L. Nowell, B. Mahler, and P. Van Metre. "New-Generation Pesticides Are Prevalent in California's Central Coast Streams." <i>Science of the Total Environment</i> , Volume 806, 2022.

The information summarized in Table 4 was evaluated against the Watch List criteria. Table 5 identifies the resulting priority changes and the basis for each change.

Table 5. Changes to Watch List Priorities

Pesticide or Category	Change	Basis for Change
Dicamba	Priority 4 → Priority 3	Detections in urban monitoring. Dicamba was previously identified in a Priority 4 footnote under phenoxy herbicides.
Propiconazole	Priority 4 → Priority 3	Toxicity to freshwater invertebrates and fish and frequent detections in urban stormwater monitoring.
Boscalid	Added to Priority 4	Inclusion on DPR's urban monitoring priority list.
Diflubenzuron	Added to Priority 4	Inclusion on DPR's urban monitoring priority list.
Isothiazolinones	Added to Priority 4	One compound in this category, 4,5-dichloro-2-octyl-3(2H)-isothiazolone (DCOIT), was already identified as a Priority 4 pesticide. Based on urban use patterns and toxicity, other isothiazolinones of interest include 2-methyl-4-isothiazolin-3-one (MIT), 5-chloro-2-methyl-4-isothiazolin-3-one (CMIT), 1,2-Benzisothiazolin-3-one (BIT), and 2-n-Octyl-4-isothiazolin-3-one (OIT), and 1,2-Benzisothiazol-3(2H)-one,2-butyl (BBIT).
Etoxazole	Added to Priority 4	High toxicity to aquatic invertebrates and urban use patterns.
Tetrapranilprole	Added to Priority 4	High toxicity to aquatic invertebrates and urban use patterns.
Dinotefuran	Keep Watching → Priority 4	Inclusion on DPR's urban monitoring priority list.
Malathion	Priority 1 → Priority 3	No Aquatic Life Benchmark exceedances in recent years.
Simazine	Priority 2 → Priority 3	Recent detected concentrations are no longer approaching Aquatic Life Benchmarks.

Updated 2026 Pesticide Watch List

Table 6 presents the complete 2026 Watch List, incorporating the criteria, definitions, and annotations described above and the priority changes summarized in Table 5.

Table 6. 2026 Pesticide Watch List

Priority	Basis for Priority Assignment	Pesticides
1	Monitoring data exceeding benchmarks; linked to toxicity in surface waters; urban 303(d) listings	Diuron Fipronil* Imidacloprid

Priority	Basis for Priority Assignment	Pesticides	
		Pyrethroids with significant monitoring data: ¹⁵	
		• Bifenthrin* • Cyfluthrin* • Cyhalothrin (lambda)* • Cypermethrin • Deltamethrin/Tralomethrin • Esfenvalerate/Fenvalerate • Permethrin	
2	Monitoring data approaching benchmarks; modeling predicts benchmark exceedances; very high toxicity and broadcast application on impervious surfaces; urban 303(d) listing for pesticide, degradate, or contaminant that also has non-pesticide sources	Carbendazim/Thiophanate-methyl Chlorantraniliprole Clothianidin (Neonic) Copper pesticides ¹⁶ Creosote (PAHs) Indoxacarb* Pendimethalin Polyhexamethylenebiguanidine (PHMB) ¹⁶ Pyrethroids with little or no monitoring data ^{15,*} Thiamethoxam (Neonic, degrades into Clothianidin) Zinc pesticides (including Ziram) ¹⁶ 2,4-D ¹⁷	
3	Pesticide contains a Clean Water Act Priority Pollutant; 303(d) listing for pesticide, degradate, or contaminant in any watershed; or is highly toxic with a pathway to the storm drain and has been detected in urban monitoring	Arsenic pesticides Bensulide Chromium pesticides ¹⁸ Dicamba Dichlorvos (DDVP) Malathion	Naled Naphthenates Propiconazole Silver pesticides ¹⁶ Simazine Trifluralin*
4	High or unknown toxicity (parent or degradate) and urban use pattern associated with water pollution; synergist for higher tier pesticide; on DPR urban monitoring priority list	Antimicrobials in paints/coatings Abamectin Quaternary Ammonium Compounds (QACs) ^{16, 19} Azoxystrobin <i>Bacillus sphaericus</i> ¹⁶ <i>Bacillus thuringiensis</i> (Bti) ¹⁶ Boscalid Bromacil N-Bromosulfamates ¹⁶ Busan-77 ¹⁶ Carbaryl Chlorinated isocyanurates ¹⁶ Chlorine ¹⁶	MCPA Methomyl Methoprene ¹⁶ Mineral bases, weak ¹⁶ Mineral oil (aliphatic) ¹⁶ Methoxyfenozide Methyl anthranilate ¹⁶ MGK-264 Novaluron* Oryzalin Oxadiazon Oxyfluorfen* PCNB Peroxyacetic acid ¹⁶

¹⁵ Pyrethroids with little or no urban monitoring data include Allethrin, Cyphenothrin, Etofenprox, Flumethrin, Imiprothrin, Metofluthrin, Momfluorothrin, Prallethrin, Sumethrin [d-Phenothrin], Tau-Fluvalinate Tetramethrin. Etofenprox is included in SoCal analytes but has not been detected; there continue to be no NoCal monitoring data for etofenprox.

¹⁶ Used in pools, spas, and/or fountains.

¹⁷ These pesticides may have dioxins as contaminants; there are several bay and estuary 303(d) listings for dioxin compounds.

¹⁸ Includes dichromic acid/chromic acid, chromated arsenicals, and other chromium pesticides.

¹⁹ QACs found in stormwater include DDACs, ADBAC, ETMACs, BACs, EBAC, and others. Pools spas, and fountains can be a source of QACs in stormwater but the main sources of QACs in stormwater are undetermined at this time.

Priority	Basis for Priority Assignment	Pesticides	
		Chlorine dioxide ¹⁶ Chlorfenapyr* Chlorothalonil ¹⁷ Chlorsulfuron Isothiazolinones ^{16, 20} DDAC ¹⁶ Dichlobenil Diflubenzuron* Dinotefuran (Neonic) Dithiopyr* Etoxazole* Halohydantoins ¹⁶ Hydramethylnon* Hypochlorites ¹⁶ Imazapyr Isoxaben Mancozeb	Phenoxy herbicides ²¹ Piperonyl butoxide (PBO) Prodiamine* Pyrethrins Pyriproxyfen ¹⁶ Sodium bromide ¹⁶ Sodium chlorite ¹⁶ Sodium percarbonate ¹⁶ Sodium tetraborate ¹⁶ Spinosad/Spinetoram Sulfometuron-methyl Tebuconazole Terbutylazine ¹⁶ Tetrapraniliprole Triclopyr Trimethoxysilyl quats
5	Frequent questions from partners ²²	Glyphosate	Metaldehyde
Keep Watching	Urban pesticides that may threaten water quality depending on approved urban use patterns.	Acetamiprid (Neonic) Cyantraniliprole Flupyradifurone (Neonic-like) Isocycloseram*	Sulfoxaflor (Neonic-like)* Veratridine (pyrethroid replacement)
None	No tracking trigger	Most of the >1,000 existing pesticides	
Unknown	Lack of information. No systematic screening has ever been completed for urban pesticides.	Unknown. EPA will be reviewing many antimicrobials and fungicides in the next decade, so we expect to see more data on these two classes of pesticides.	

3.4 PARTNERSHIPS

CASQA and BACWA continued to combine resources to track stormwater and wastewater priorities into a unified monthly pesticide action plan (see Attachment 1: Pesticides Regulatory Action Items for the most recent update). CASQA will continue to seek opportunities to support DPR's efforts across the SPM focus areas, and work with BACWA on areas of shared priority.

²⁰ Isothiazolinones include 2-methyl-4-isothiazolin-3-one (MIT), 5-chloro-2-methyl-4-isothiazolin-3-one (CMIT), 1,2-Benzisothiazolin-3-one (BIT), 4,5-dichloro-2-octyl-3(2H)-isothiazolinone (DCOIT), 1,2-Benzisothiazol-3(2H)-one, 2-butyl (BBIT), and 2-n-Octyl-4-isothiazoline-3-one (OIT).

²¹ Includes, 2,4-DP and MCPP (Mecoprop). 2,4-D, Dicamba, and MCPA are listed separately.

²² Chlorpyrifos and Diazinon, while often asked about, have near zero or no urban uses, respectively.

* Contains Perfluoroalkyl and polyfluoroalkyl substances or "PFAS," a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom. (Based on the definition set by the Organisation for Economic Co-operation and Development (OECD). The state of Minnesota compiled a list of PFAS pesticides here: <https://www.mda.state.mn.us/environment-sustainability/pfas-pesticide-active-inert-ingredients> Full OECD PFAS definition here: https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/07/reconciling-terminology-of-the-universe-of-per-and-polyfluoroalkyl-substances_a7fbcba8/e458e796-en.pdf

Section 4. Assessment of Progress

Since the mid-1990s, CASQA (and its predecessor organization the Stormwater Quality Task Force) has worked to ensure that the pesticide regulatory structure at the state and federal level regulates pesticide uses to protect water quality. CASQA's long-term pesticide program activities focus less on specific pesticides and more on instilling systematic process improvements. A central aspect of achieving these changes involves supporting key initiatives at EPA, DPR, and the Water Boards that make progress toward these changes

4.1 STATE-LEVEL PROGRESS

At the state level, significant progress has been made by DPR in addressing current problems with pesticides in surface waters receiving urban runoff. DPR continues to implement improved registration processes and responses to observed water quality problems. DPR also continues to implement and evaluate mitigation measures for observed problems with pyrethroids and fipronil.

DPR's transition to Sustainable Pest Management (SPM), a holistic, systems-based approach, offers opportunities for further improvement. The 2023 SPM Roadmap identifies improved data, research and outreach, increased adoption of SPM, and pest-preventive urban design as key leverage points for urban implementation. DPR's 2026 Continuous Evaluation and Mitigation Update increases transparency by identifying actions and next steps. As described in Section 3.2, the SPM Advisory Committee and SPARC provide additional avenues for stakeholder input and science-based prioritization.

Furthermore, in 2014, the State Water Board established an urban pesticides reduction project (now titled the Statewide Urban Pesticide Provisions or UPP) as a top priority under the comprehensive stormwater strategy, known as "Strategy to Optimize Resource Management of Stormwater" or STORMS. CASQA has been actively supporting the development of the UPP since their inception.

Overall, DPR has a system in place that is reasonably effective at addressing pesticide toxicity in urban water bodies, although improvement is needed to better coordinate this process with the requirements of the Clean Water Act and MS4 permits. The goal is to embody this process in the State's UPP and the Management Agency Agreement (MAA) between DPR and the Water Boards

4.2 FEDERAL-LEVEL PROGRESS

CASQA's engagement with EPA focuses on promoting the standardization in labeling, enhancing modeling of pesticide use and water quality impacts, and ensuring Endangered Species Act (ESA) considerations are incorporated into regulatory decisions. Regulatory activities, as described by Table 2, show moderate success in addressing pesticide registration decisions. However, questions remain about how fully EPA's analyses account for key urban uses and whether upcoming risk management decisions for pyrethroids, imidacloprid and other neonicotinoids will provide any additional protection of urban water bodies. Consequently, further engagement on pesticide registration decisions is necessary to effectively communicate the impacts of urban use pesticides to water quality.

Section 5. Looking Forward

In the coming year, CASQA will continue to address near-term pesticide concerns and seek long-term regulatory change. At the federal level, CASQA will continue engagement on specific regulatory actions for priority pesticides. At the state level, CASQA will continue to support DPR in their rollout of the SPM initiative and their proposed Pesticide Prioritization Process. The pesticide program's priority focus areas include:

(1) Seek near-term changes in pesticide regulatory actions:

- Support completion of DPR action on fipronil water pollution, including implementation of effective education for professional users regarding restrictions on its outdoor urban use.
- Advocate for the enforcement of DPR's existing mitigation measures for pyrethroids and fipronil and recommend adoption of additional mitigation measures as warranted.
- Support completion of DPR's evaluation of the impacts of neonicotinoid pesticides on aquatic organisms.
- Continue to review EPA's proposed pesticide registration and registration review decisions, including those for new active ingredients and existing pesticides.

(2) Seek long-term changes in the pesticide regulatory structure:

- Continue engagement with EPA regarding incorporating their ESA obligation in registrations and re-registrations, including recommending the use of pictograms in labels, and seeking opportunities in California for EPA's future regional and vulnerable species pilot programs.
- Continue engagement with DPR regarding the SPM Roadmap specific to urban implementation programs and opportunities, including engagement with the SPM Advisory Committee and SPARC.
- Support DPR's proposed pesticide prioritization process as an effective pathway to prioritize pesticides under their continuous reevaluation process.
- Encourage and assist the Water Boards to continue to implement its MAA with DPR to prevent and mitigate pesticide impairments through more effective pesticide regulation.

CASQA will continue to seek opportunities to coordinate on high-priority regulatory actions with the Water Boards and other water quality stakeholders to improve efficiency and effectiveness. Attachment 1: Pesticides Regulatory Action Items details the prioritization and estimated schedule of future pesticide regulatory items, to inform planning and future pesticide regulatory activities.

Attachment 1: Pesticides Regulatory Action Items

Estimated CA DPR Schedule (Next 12 months):

Priority	Topic	Estimated Due Date	Wastewater / Stormwater	Item	Water Quality Issue
1	Investigation of Total Release Foggers (TRFs) and Intent to Begin Reevaluation	6/26/26		Reevaluation of indoor TRFs	Monitoring data; toxicity
1	Fipronil Pet Product Aquatic Risk Analysis (details below)	June 2026		Mitigation Options Document	Monitoring data; Anticipated 303(d) listings
1	Non-Agricultural Outdoor Neonicotinoids (details below)	July 2027		Re-evaluation Determination	DPR found human health risks for Acetamiprid, Dinotefuran, and Imidacloprid, which may necessitate product label changes or product bans.

Estimated US EPA Schedule (Next 12 months):

Priority	Topic	Estimated Due Date	Wastewater / Stormwater	Item	Water Quality Issue
high	Draft ESA Fungicide Strategy	6/29/26		ESA Strategy	Varied; review is needed to screen these for water quality issues
unknown	New Antimicrobials and Fungicides	various		various	Varied; many of these pesticides are showing up for the first time at the PID level; review is needed to screen these for water quality issues
1	Diuron	2026		BE (ESA)	303(d) listings
3	o-phenyl phenol	2026		PID	Toxicity. Used in cooling towers, paints, cleaners, etc.
4	Dicamba	2026		PID	Toxicity, stormwater monitoring data
4	Peroxy Compounds (peroxyacetic acid)	2026		PID (re-release)	Fountain chemical
4	Piperonyl butoxide (PBO)	2026		PID	Pyrethroid synergist
4	Pyrethrins	2026		PID	Related to pyrethroids, but less stable and less toxic
4	Tebuconazole	2026		PID	Fungicide
4	MGK-264	Uncertain		PID	Pyrethroid synergist
1	Fipronil	2027		PID	Monitoring data; Anticipated 303(d) listings

Key: RA = Risk Assessment; PID = Proposed Interim Decision; BE (ESA) = Biological Evaluation (Endangered Species Act); CA DPR = California Department of Pesticide Regulation; US EPA = United States Environmental Protection Agency

Attachment 2: Regulatory Participation Outcomes and Effectiveness Assessment Summary Tables

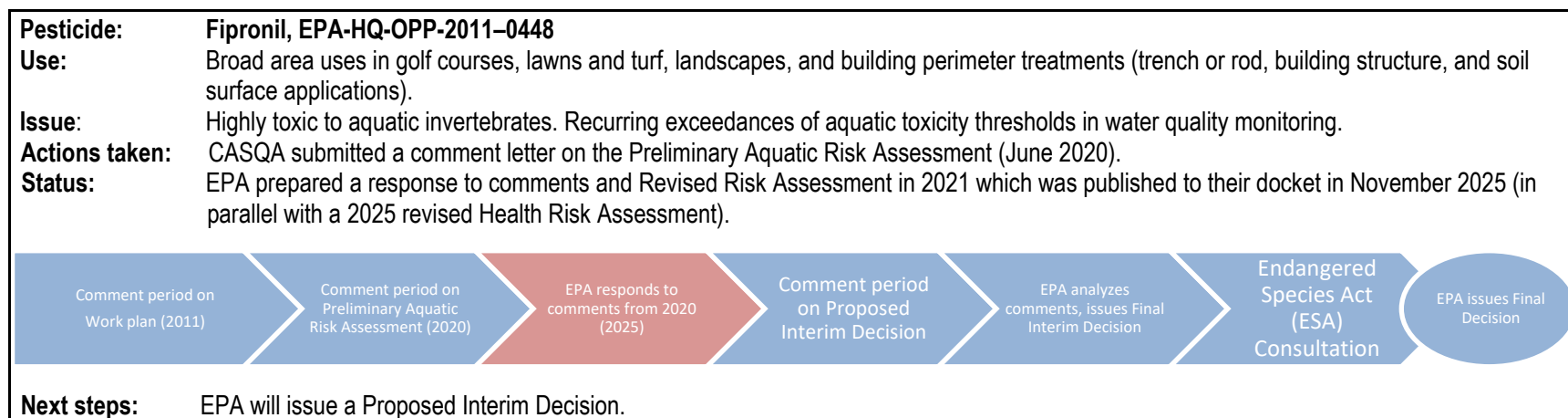
Cyhalothrins (Gamma and Lambda) Regulatory Participation Outcome and Effectiveness Assessment Summary Table

Pesticide:	Cyhalothrins (Gamma and Lambda), EPA-HQ-OPP-2010-0479 and EPA-HQ-OPP-2010-0480
Use:	Broad area uses in golf courses, lawns and turf, landscapes, and building perimeter treatments.
Issue:	Highly toxic to aquatic invertebrates. Recurring exceedances of aquatic toxicity thresholds in water quality monitoring. Multiple 303(d) listings as well as adopted and pending TMDLs.
Actions taken:	CASQA sent a comment letter to EPA on the cyhalothrins Proposed Interim Decision (PID) on January 11, 2021. In February 2020, CASQA also sent a comment letter to EPA on the Pyrethroids and Pyrethrins Ecological Risk Mitigation Proposal.
Status:	In September 2021, EPA released the Interim Registration Review Decision (ID). In February 2026, EPA released a Clarification and Correction to the ID.
Next steps:	EPA will complete an endangered species determination and any necessary consultation with the US Fish and Wildlife Services.

CASQA Comments to EPA on the Cyhalothrins PID (1/11/2020) (Summarized)	EPA Response	Did EPA incorporate CASQA's comment?
Risk Mitigation Must be Protective of Urban Surface Waters CASQA recommends EPA design a clear schematic graphic for product labels, review proposed label language text, and edit as needed to provide clear and consistent descriptions of pervious and impervious surfaces, and provide California-specific labels for outdoor structural pest control pyrethroids products consistent with regulations implemented by CDPR. "CASQA strongly supports the "Required Label Language for Lambda-and Gamma-Cyhalothrin End-use products with outdoor, urban, non-agricultural uses". As defined in PID Appendix B, pp. 88-90, as a minimum level of mitigation required	Clarification and Correction to the September 2021 Lambda-Cyhalothrin and Gamma-Cyhalothrin Interim Registration Review Decision, posted February 2026. To mitigate the risk to adults and children resulting from post-application exposure to products containing lambda-cyhalothrin and gamma-cyhalothrin on residential lawns, EPA added a new label restriction: "Do not apply directly to residential lawns and turf in residential settings (e.g., homes, parks, schools, athletic fields or any other area frequented by the general public)." (Clarification and Correction, pp. 2-3)	Partially. EPA kept the label language from the PID in the ID. Further, the 2026 correction to restrict residential lawn applications may reduce impacts to urban areas.

CASQA Comments to EPA on the Cyhalothrins PID (1/11/2020) (Summarized)	EPA Response Clarification and Correction to the September 2021 Lambda-Cyhalothrin and Gamma-Cyhalothrin Interim Registration Review Decision, posted February 2026.	Did EPA incorporate CASQA's comment?
to address the known risks to aquatic species from outdoor / urban uses of cyhalothrins. However, the Cyhalothrins PID does not provide any additional mitigation measures...to address the documented impacts of pyrethroid use in urban (non-agricultural) areas, and the risks to aquatic life of continued use of pyrethroid pesticides. This is despite significant evidence presented both in EPA's risk assessments and in our previous comment letters...consideration for possible additional mitigation measures should be afforded for each pyrethroid known through documented sources to contribute to surface water pollution.” (CASQA's Comments, pp. 2-3)		

Fipronil Regulatory Participation Outcome and Effectiveness Assessment Summary Table

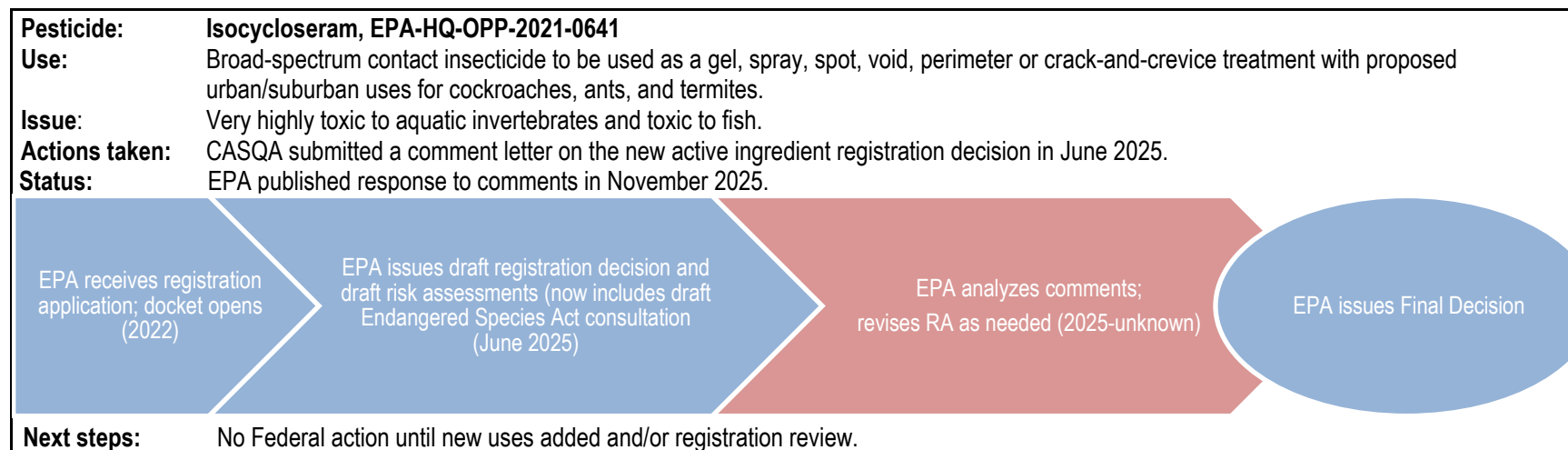


CASQA Comments to EPA on Fipronil: Draft Ecological Risk Assessment for Registration Review (7/6/2020) (Summarized)	EPA Response	Did EPA incorporate CASQA's comment?
Comment #1: Monitoring Data Cited in Fipronil ERA Should be Updated The Fipronil ERA appropriately cites California Department of Pesticide Regulation (CDPR) water quality monitoring data, but the data cited are outdated and incomplete. CASQA recommends the EPA update their monitoring data to include more recent studies done by CDPR. CDPR studies continue to show high levels of detection of fipronil and its degradates in surface water samples from urban areas.	Fipronil: Response to Comments on the Draft Ecological Risk and Drinking Water Assessments for Registration Review (Feb 16, 2021; published Nov. 2025) pp. 72-74; and Fipronil: Revised Draft Ecological Risk Assessment for Registration Review (April 13, 2021; published Nov. 2025). EPA provided an updated summary of monitoring data using more recent data. "EFED (Environmental Fate and Effects Division) appreciates CASQA comments and the reference to the California Department of Pesticide Regulation's (CDPR) Surface Water Database ... Monitoring data were queried for fipronil and its major degradates (sulfide, sulfone and amide) on October 15, 2020 from CDPR's website. The monitoring samples were taken from California rivers, creeks, agricultural drains, urban streams and estuaries." (Response to Comments, p. 10)	Yes.

CASQA Comments to EPA on Fipronil: Draft Ecological Risk Assessment for Registration Review (7/6/2020) (Summarized)	EPA Response Fipronil: Response to Comments on the Draft Ecological Risk and Drinking Water Assessments for Registration Review (Feb 16, 2021; published Nov. 2025) pp. 72-74; and Fipronil: Revised Draft Ecological Risk Assessment for Registration Review (April 13, 2021; published Nov. 2025).	Did EPA incorporate CASQA's comment?
	"In the most recent southern California study (Budd, 2019), fipronil was detected in 76% of samples, with 73% at concentrations above EPA's aquatic life benchmark for invertebrate chronic toxicity (0.011 ppb). In a separate study from northern California, Ensminger, (2019), fipronil was detected in 48% of samples, in all cases above EPA's aquatic life benchmark for invertebrate chronic toxicity (0.011 ppb)." (Response to Comments, p. 10)	
Comment #2: Risk Assessment Modeling Underestimates Risk from Urban Outdoor Uses CASQA recommends that applications to impervious surfaces without subsequent runoff over pervious surfaces, including but not limited to perimeter treatment uses, crack and crevice treatment uses, and spot treatment uses, be included in the risk assessment modeling. "According to the most recent available (2017) pesticide use data, virtually all fipronil applied to outdoor surfaces in California is applied as "structural pest control", in areas covered by municipal stormwater NPDES permits. ... assessments of risks from pesticide applications to impervious surfaces are essential for non-agricultural pesticide uses, because transport in urban runoff from impervious surfaces to surface waters via the storm drainage system is the transport pathway known to contribute most to observed water quality pollution from pesticide uses in urban areas. This is especially true where pesticides are applied	"Currently, the Agency does not quantitatively assess crack and crevice nor spot treatment uses. These uses are considered unlikely to result in appreciable aquatic exposure as compared to agricultural and wide-area non-agricultural applications. EFED acknowledges that many of the non-agricultural uses (e.g., perimeter treatment of commercial/ institutional/ industrial premises/ equipment) may contribute to fipronil residues in urban discharge into surface water. However, uses are not wide-area but are restricted to treatment of building perimeters and walls. And, in many cases, application rates listed in Appendix A of the DRA are one to several orders of magnitude lower than the application rate for perimeter treatments. Thus, assessment of perimeter treatment uses is considered protective for other outdoor uses." (Response to Comments, p. 11)	No. EPA did not update their risk estimates to include the additional urban uses and did not address the comment about how current EPA perimeter treatment modeling is only assessed over pervious surfaces, rather than impervious surfaces hydraulically connected to the storm drain system.

CASQA Comments to EPA on Fipronil: Draft Ecological Risk Assessment for Registration Review (7/6/2020) (Summarized)	EPA Response Fipronil: Response to Comments on the Draft Ecological Risk and Drinking Water Assessments for Registration Review (Feb 16, 2021; published Nov. 2025) pp. 72-74; and Fipronil: Revised Draft Ecological Risk Assessment for Registration Review (April 13, 2021; published Nov. 2025).	Did EPA incorporate CASQA's comment?
to surfaces that are hydraulically connected directly to the storm drainage system." (CASQA Comments, pp. 2-3) "The Fipronil ERA's description of modeling with respect to inclusion of applications to impervious surfaces for the perimeter (structural) ant treatment scenario needs clarification. ERA Section 8 text and tables indicate that impervious surface applications were modeled... (However), only runoff that flows over pervious surfaces (sod or lawn) was modeled in the residential perimeter treatment scenario." (CASQA Comments, p. 3)		
Comment #3: Additional Mitigation Measures Are Needed CASQA recommends that EPA evaluate, as part of the registration review process, whether existing California-specific label restrictions are sufficient to mitigate identified risks to aquatic life in urban surface waters. CASQA also recommends additional label requirements for pre-construction termiticide applications to prevent discharges of water that has contacted pesticide-treated soil. Specifically, labels should require applicators to cover treated areas until the foundation is poured, post signage identifying the treatment date and applicable site-management requirements, and manage water that collects in treated areas in accordance with applicable stormwater quality and hazardous waste requirements.	No published response.	No. EPA acknowledges urban values surpass aquatic benchmarks, but mitigation measures, including urban mitigation, are not discussed in the risk assessment.

Isocycloseram Regulatory Participation Outcome and Effectiveness Assessment Summary Table



CASQA Comments to EPA on Memorandum Supporting Proposed Decision to Approve Registration for the New Active Ingredient of Isocycloseram (6/10/2025) (Summarized)	EPA Response (Response to Public Comments on EPA's Registration of the New Active Ingredient, Isocycloseram, Nov. 19, 2025, pp. 72-74)	Did EPA incorporate CASQA's comment?
Comment #1: Isocycloseram Appears to be More Toxic Than Existing Pesticides with Parallel Outdoor Uses "The draft ERA states that isocycloseram is very highly toxic to aquatic invertebrates and toxic to fish. Isocycloseram is particularly toxic to estuarine/marine invertebrates under chronic exposure...When comparing chronic toxicity to aquatic invertebrates, isocycloseram is more toxic than fipronil, imidacloprid, and several pyrethroids with the same outdoor uses. In addition, several of the isocycloseram degradates are also highly toxic to aquatic invertebrates, similar to fipronil.	"EPA's risk assessment indicates, using modeling, that isocycloseram can potentially enter surface water and affect aquatic invertebrates. However, the chemical is unlikely to move into groundwater in concentrations high enough to affect aquatic invertebrates in subterranean habitats. EPA modeled exposure from outdoor residential, urban, and industrial use patterns of isocycloseram and characterized risks to aquatic invertebrates based on the sensitivity of those species coupled with the magnitude of exposure from proposed uses of isocycloseram... Label mitigations	No. EPA evaluated urban usage of isocycloseram. However, the response identifies agricultural runoff controls as the measures expected to substantially reduce risks to aquatic taxa. For urban uses, EPA identifies restrictions on applications to sewer and drain locations to reduce

CASQA Comments to EPA on Memorandum Supporting Proposed Decision to Approve Registration for the New Active Ingredient of Isocycloseram (6/10/2025) (Summarized)	EPA Response (Response to Public Comments on EPA's Registration of the New Active Ingredient, Isocycloseram, Nov. 19, 2025, pp. 72-74)	Did EPA incorporate CASQA's comment?
... Given that isocycloseram has equal or greater toxicity and shares similar urban applications, use of isocycloseram would likely result in a regrettable substitution within urban environments." (CASQA Comments, p. 2)	intended to reduce runoff from agricultural fields have the potential to reduce risk to aquatic taxa by approximately one order of magnitude... Additionally, because of stormwater contamination concerns, isocycloseram labels limit sewer/drain applications locations and specifically prohibit use in storm drains to help limit the exposure from residential uses. The BE and registration decision identify multiple compulsory mitigation measures for the general label to reduce the movement/transport of isocycloseram via run-off/erosion and spray drift." (Response to Comments, pp. 72-73)	potential exposure from residential uses.
Comment #2: Perimeter Band Spray On Pesticide Labels – Use Label Language Established for Pyrethroids "From 2019 to 2020, EPA worked extensively with pyrethroid registrants to develop perimeter band label language that was both effective against pests as well as protective of aquatic life. This reduced the band spray width (for pyrethroids) for some applications on impervious surfaces to be just 1-inch wide, greatly reducing the possibility of run-off over impervious surfaces which enter the storm drain system and flow untreated to surface waters. The pyrethroids perimeter band label, which is used for ten pyrethroids of varying toxicities, allows for a seven-foot perimeter band only when the application is over pervious surfaces, such as soil, mulch or lawn. CASQA Recommendation:	"EPA is maintaining a 7-ft perimeter band for outdoor handheld treatments because modeling conducted for handheld applications that have perimeter band restrictions in EPA's risk assessment considers applications to impervious surfaces. The highest EECs for residential use were obtained with 'ResidentialBSS' scenario. The curve number associated with this scenario accounts for 38% impervious area in EPA's standard quarter acre lot assumption. Therefore, EPA's modeling incorporates the potential for applications to both pervious and impervious surfaces without needing to aggregate different scenarios (e.g. residential and impervious) or restrict applications to impervious surfaces as was done with the pyrethroids. Since the exposure estimates already include the potential for application to impervious areas, no additional label instructions are required to address the exposure concerns for the perimeter band treatments." (Response to Comments, pp. 73 – 74)	No. EPA did not include the additional mitigation language to address exposure concerns for the perimeter band in isocycloseram products.

CASQA Comments to EPA on Memorandum Supporting Proposed Decision to Approve Registration for the New Active Ingredient of Isocycloseram (6/10/2025) (Summarized)	EPA Response (Response to Public Comments on EPA's Registration of the New Active Ingredient, Isocycloseram, Nov. 19, 2025, pp. 72-74)	Did EPA incorporate CASQA's comment?
Given the toxicity of isocycloseram and parallel uses, recommends require, pesticide registrants to submit revises labels for urban pesticides, using a process similar to the development of the pyrethroid labels which have narrower perimeter band spray widths when proximate to impervious surfaces.” (CASQA Comments, p. 3)		
Comment #3: Clarify Urban Labels So That Isocycloseram Is Not Applied In Or Around Storm Drains. “CASQA Recommendation: All urban labels: Under ‘SECTION 5.0 USE RESTRICTIONS AND PRECAUTIONS’ add the following bullet points: ‘DO NOT apply in or around storm drains.’ ‘Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries and commercial fish farm ponds).’ ‘Do not apply or irrigate to the point of runoff.’ Proposed A22128 Cockroach Gel Bait label: - Under Section ‘3.0 PRODUCT INFORMATION’ where ‘sewers’ are included in allowed treatment areas add statement that ‘Use is prohibited in or near storm drains.’	“While products should not be used in sewers or drains, some products may be used around perimeters of sewers or drains. For these products, EPA has added the following statements and graphic to reduce down-the-drain exposure pathways. To be clear, a product could contain one or more of these statements, as appropriate: ‘Do not pour down drains or sewers. Call your local solid waste agency for local disposal options.’  ‘When applying near sewers or drains, only apply using a coarse, low-pressure spray.’ {only for A21550 400SC (EPA Reg. No. 100-1707)} ‘When applying near drains or sewers (that are not storm or runoff drainage systems), only apply to the external perimeters (mouth/rim of sewer) and underside of sewer lids. Do not apply inside sewers or drains.’ ‘Do not apply to storm drains.’ ‘Do not use on washable textiles or fabrics.’” (Response to Comments, p. 74)”	Partially. EPA used/modified several of the warning statements that CASQA suggested to improve outdoor, urban labels.

CASQA Comments to EPA on Memorandum Supporting Proposed Decision to Approve Registration for the New Active Ingredient of Isocycloseram (6/10/2025) (Summarized)	EPA Response (Response to Public Comments on EPA's Registration of the New Active Ingredient, Isocycloseram, Nov. 19, 2025, pp. 72-74)	Did EPA incorporate CASQA's comment?
- Under Section '4.1.2 Outdoor Use', where label language allows use in 'drains leading to sewers' add clarification that 'Use is prohibited in or near storm drains.' - Under 'SECTION 5.0 USE RESTRICTIONS AND PRECAUTIONS' on all urban labels add the following bullet point: 'DO NOT apply in or around storm drains.'" (CASQA's Comments, p. 4)		
Comment #4: A Sixty-Day Comment Period Is More Appropriate For Stakeholder Engagement "CASQA Recommendation: Provide a sixty-day comment period for all new pesticide registrations, draft environmental risk assessments, and draft biological evaluations." (CASQA's Comments, p. 4)	"While not mandated by law, EPA offers an opportunity for public engagement when the proposed decision memo is published for a new active ingredient. A public comment period was held for 30 days based on the normal practice." (Response to Comments, p. 74)	No.