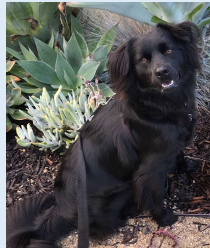
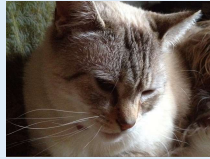


## BACWA Pesticide Workgroup: Annual Update to BACWA Executive Committee



Stephanie Hughes, P.E.  
February, 2025

1

## BACWA Pesticides Workgroup Members

### Municipal Agencies

- Autumn Ross, SFPUC (chair)
- Julie Weiss, Palo Alto
- Elise Sbarbori, Palo Alto
- Tina Keegan, Palo Alto
- Ella Phillips, San Mateo
- Nathan Calapine, City of San Jose
- Alicia Dutrow, Union Sanitary District
- Melody LaBella, Central San
- Mary Cousins, BACWA

### Regional Board

- Alessandra Moyer
- Natlie Lee
- Rebecca Nordenholt

### Consultant Support

- Stephanie Hughes P.E.
- Tammy Qualls, P.E., Qualls Environmental Consulting
- San Francisco Estuary Institute
  - Kelly Moran, Ph.D.
  - Ezra Miller, Ph.D.

## Primary 2024 topic areas

1. Regulatory communication with EPA, DPR and DTSC
2. Updated workgroup goals and pesticide priorities
3. Continued outreach regarding on-pet pesticides culminating in 4-part workplan



## Regulatory Communications 2024

### US EPA:

- Submitted 3 comment letters to EPA
  - Neonics
  - IPBC
  - Pesticide labels
- Made a public comment at EPA's Endangered Species Act Insecticide meeting
- Coordinated with NACWA, resulting in NACWA submitting 3 comment letters to EPA

### CA Dept of Pesticide Regulation (DPR) and Dept of Toxic Substances Control (DTSC):

- Met with the DPR Surface Water team
- Spoke with the DPR neonic re-evaluation team multiple times
- Submitted 1 comment letter to DPR in support of pesticide model update
- Submitted 1 comment letter to DTSC on its Priority Product Work Plan

5

## Regulatory Tracking for 2025

### US EPA:

- EPA's proposal to move on-pet pesticide authority to FDA (uncertain if this will occur)
- EPA's effort to coordinate Office of Pesticide Programs (OPP) with Office of Water (OW) and Clean Water Act
- Project 2025

### DPR and DTSC:

- DPR's re-evaluation of **neonics** for non-production outdoor ornamental plants, trees, and turfs (required by AB363)
- DPR's final draft of **imidacloprid** re-evaluation
- Opportunities to work with DPR (Sustainable Pest Management) and DTSC (Safer Consumer Products)

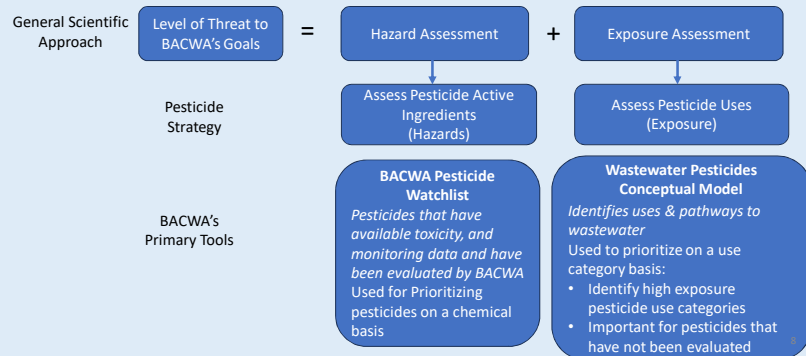
6

## As we seek to engage more deeply with DPR and DTSC, we sought to first internally clarify the Workgroup goals

- Prevent effluent toxicity / Protect wastewater and recycled water quality
  - Protecting affordability and feasibility of reuse (potable and non-potable)
- Prevent (Avoid) process interference / Ensure process operations
- Prevent challenges with biosolids disposal / Protect biosolids reuse

7

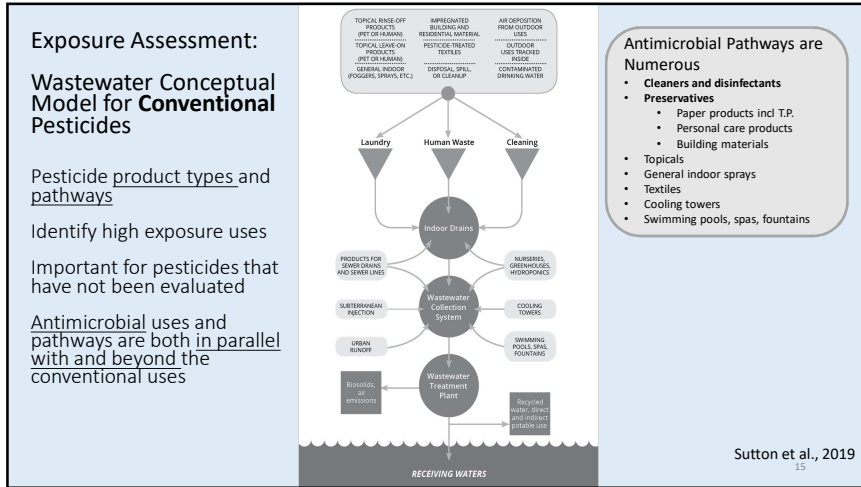
## Our scientific Pesticide Prioritization Process leads to our top concerns moving forward



## Hazard Assessment: Top Two Tiers of the Watch List

Priority	Basis for Priority Assignment	Pesticides
1 – High Concern	a) POTW effluent monitoring data exceeding benchmarks b) Known cause of process interference c) Present in recycled water or biosolids at concentrations that limit use d) SF Bay area receiving water 303(d) listing for the pesticide or degradate e) Identified by RMP as a High or Very High Concern	<b>Fipronil</b> <b>Imidacloprid</b> <b>Pyrethroids (21 chemicals)</b>
2 – Moderate Concern	a) Pesticide contains a Clean Water Act Priority Pollutant b) SF Bay area receiving water 303(d) listing for the pesticide, degradate or contaminant that also has non-pesticide sources c) Identified by RMP as a Moderate Concern	<b>Carbendazim</b> <b>Copper pesticides</b> <b>Silver pesticides</b> <b>Zinc pesticides</b> <b>QACs</b>

14



Through this process, we identified four high-exposure pathways needing attention

Leads to our Flea/Tick Outreach – top tier pesticides (fipronil, imidacloprid, pyrethroids) with high exposure

**Topicals (pets or humans)**

**General Indoor Pesticides (sprays, foggers, etc.)**

**Priority Pesticide Uses**

**Treated Textiles** (pyrethroid-impregnated and antimicrobial protected clothing)

**Antimicrobial Cleaners and Preservatives**

Needs more science

California Department of Pesticide Regulation

25

**2024 Flea/Tick Outreach Effort**

- Palo Alto piloted outreach to a pet shelter
  - Shelter switched from fipronil to less toxic flea treatment
  - Shelter providing handouts with adoption papers
- National speaking engagements
  - Veterinary Information Network, February 2024
  - American Veterinary Medical Association, June 2024
  - University of Florida Shelter Vet training (online), Dec. 2024
- National veterinary survey
  - 637 US veterinarians, including 73 California vets
- Drafted a multi-year BAPPG workplan

**Veterinary Survey Results**

- 12% of US vets (and 18% of California vets) currently do not recommend either fipronil or imidacloprid to their clients
- When presented with brief information (mid-survey) about aquatic toxicity concerns, an additional 60% of vets indicated they would be somewhat or very willing to consider changing their product recommendations.

- 2024 VIN Survey 28

### Alternative strategies they would recommend (in order of preference):

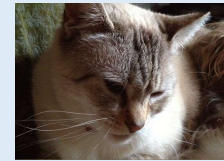
#### Flea Control

1. Orals/chewables
2. Home mechanical treatments (vacuuming, washing bedding)
3. Another on-pet topical or collar
4. Professional pest control service
5. Home pesticidal treatments (carpet sprays or foggers)
6. Flea shampoo

#### Tick Control

1. Orals/chewables
2. Rigorous coat inspections
3. Another on-pet topical or collar
4. Keeping the dogs on trails / avoiding woods and tall grass
5. Professional pest control service
6. Creating a tick free zone in the yard
7. Home pesticidal treatments (outdoor sprays)

### The Vets Identified These Barriers For Removing Fipronil and Imidacloprid



1. Cost
2. Client compliance / Ease of administration
3. Prescription vs OTC
4. Adverse reactions/Suitability (seizures, food allergies to chewable flavorings, pregnant/lactating patients, puppies and kittens)

### Do you have any other thoughts about flea or tick products that contain fipronil or imidacloprid?

- “We haven't used in over 15 years, nor recommend.” –DVM, OH
- “...**Warning labels. Information pamphlets for veterinary offices. Commercials or the equivalent**” –DVM, CA
- “Since these products are OTC, **the manufacturers and EPA need to lead the charge** in reducing environmental contamination and concerns.” –DVM, TX
- “Will there be **warnings** released for the **general public and DVM's** or updated product labels with **scientific evidence** confirming fipronil and imidacloprid in waterways and affecting human health?”
- “I would like to know a lot more about the **environmental effects** of all of the drugs that we use as veterinarians. **This should be demanded by our profession of all animal health companies.**” – DVM, UT
- “**Further clinician and consumer education would be beneficial.** Consider **cautions/warnings on packaging**, especially for impacts to human health (especially children, groomers)” – DVM, Ontario

### Proposed Workplan for 2025-2027



## Outreach Toolkits Have Been Created

The image shows two screenshots from the BAPPG website. The left screenshot displays the 'NEXT BAPPG MEETING' and 'BAPPG - MEETING MINUTES' sections. The right screenshot displays the 'FLEA AND TICK OUTREACH TOOLKITS' section, which lists various outreach materials and includes a QR code for more information.

<https://bacwa.org/committees/bay-area-pollution-prevention-group/>

## Asking Each Agency to Contribute at Some Level

- Schedule a meeting with your supervisor, to review Workplan and campaign materials, ID points of contact
- Join the ten BAPPG members who include pesticides in their Pollutant Minimization program
- Provide links to the [Baywise vets page](#) and [Baywise pet owner page](#)
- Amplify BAPPG flea/tick outreach by [using flea/tick campaign materials](#) in your service area
- Replicate Palo Alto program with a vet/shelter in service area

**BAPPG leadership will be checking in with all agencies at the April BAPPG meeting.**



Dall-E created image by Alessandra Moyer, SF Bay Regional Water Board

## Thank You for Your Attention!

Stephanie Hughes, P.E.  
 Consulting Chemical Engineer  
 sehughes@scu.edu  
 408.499.9271

