

# Educating our Communities about the Links Between Indoor Flea Control and San Francisco Bay

Stephanie Hughes, P.E., Olivia Trevino,  
Julie Weiss, and Alicia Dutrow

February 7, 2024

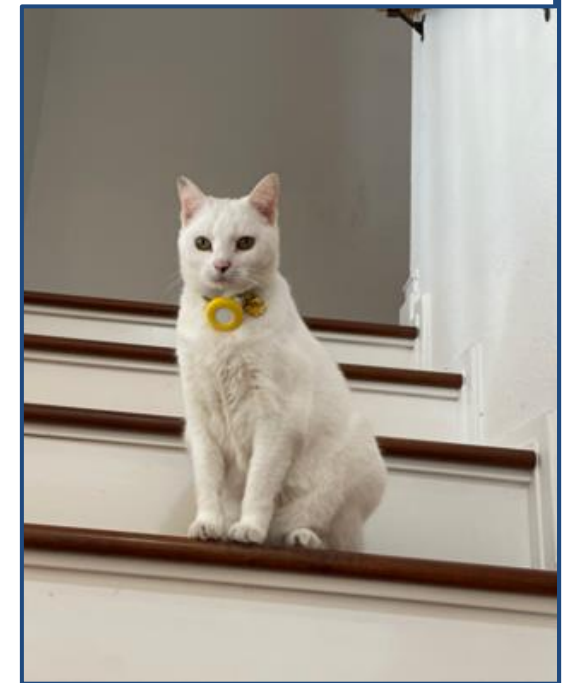


**B A C W A**  
**B A Y A R E A**  
**C L E A N W A T E R**  
**A G E N C I E S**

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

# Topics for Today

- The link between indoor flea control and SF Bay
- IPM alternatives
  - New insights about systemics vs topicals
- Outreach activities and opportunities
  - Recent outreach by BAPPG and members
  - Introduce you to a Toolkit
  - What your agency can do
  - Possible coordinated outreach



# Pesticides Workgroup 2023 Highlights

- Submitted 5 comment letters to USEPA
  - Priority indoor pesticides: etofenprox and cyantraniliprole
  - Connection between indoor uses and endangered species
  - Proposed regulatory change for all on-pet pesticides
- Met with USEPA Office of Pesticide Programs
- Several veterinary outreach highlights (coming later!)
- Presented with the 2023 Dr. Teng-Chung Wu Pollution Prevention Award by the Water Board



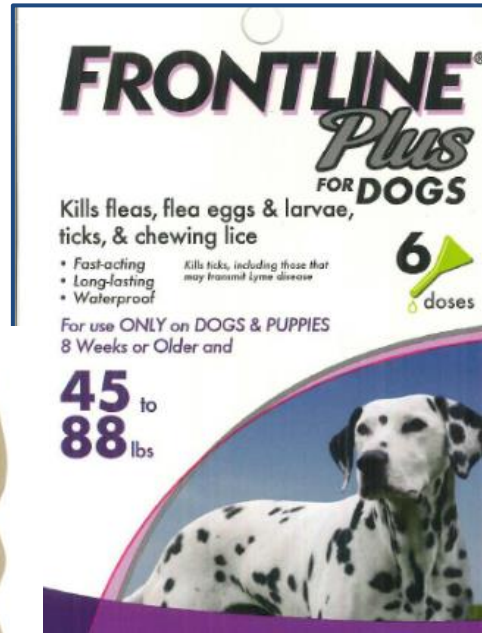
# **Pesticide Discharges to the Sewer Can Harm the Environment and Be Costly**

- Potential to cause or contribute to wastewater treatment process interference
- Adverse impacts to receiving waters
- Permit compliance issues
- Exposes cities to the potential for third party lawsuits under the Federal Clean Water Act (CWA)
- Degrade recycled water quality and/or ability to reuse biosolids



# Pesticides of Concern are Those That Exhibit Aquatic Toxicity and Persist in the Environment

- Fipronil
- Imidacloprid
- Indoxacarb
- Pyrethroids
  - Bifenthrin
  - Cypermethrin
  - Deltamethrin
  - Permethrin



# Numerous Scientific Studies Provide Significant Evidence That On-Pet and Indoor Flea/Tick Treatments Travel Through Sewer Systems and Are Discharged in Effluent



pubs.acs.org/est

Fipronil washoff to municipal wastewater from dogs treated with spot-on products

Jennifer Teerlink<sup>a,\*</sup>, Jorge Hernandez<sup>b</sup>, Robert Budd<sup>a</sup>

<sup>a</sup> Department of Pesticide Regulation, California Environmental Protection Agency, Sacramento, CA 95812, USA

<sup>b</sup> California Department of Food and Agriculture, Sacramento, CA 95812, USA

## Sub-sewershed Monitoring to Elucidate Down-the-Drain Pesticide Sources

Robert Budd,<sup>\*</sup> Jennifer Teerlink, Christopher Alaimo, Luann Wong, and



Cite This: <https://doi.org/10.1021/acs.est.2c07443>



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Science of the Total Environment

journal homepage: [www.elsevier.com/locate/scitotenv](http://www.elsevier.com/locate/scitotenv)

Wash-off potential of pyrethroids after use of total release fogger products

Mark Dery<sup>a,\*</sup>, Brian Dinh<sup>a</sup>, Robert Budd<sup>b</sup>, Dong-Hwan Choe<sup>a</sup>

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# How Indoor and On-Pet Treatments Travel to Sewer Systems and San Francisco Bay



Indoor pet  
flea control  
product

Washing of  
pets, hands,  
pet  
bedding,  
floors,  
carpets, and  
clothing

Transport  
to sanitary  
sewer  
system

Discharge  
to water  
body,  
recycled  
water,  
and/or  
biosolids

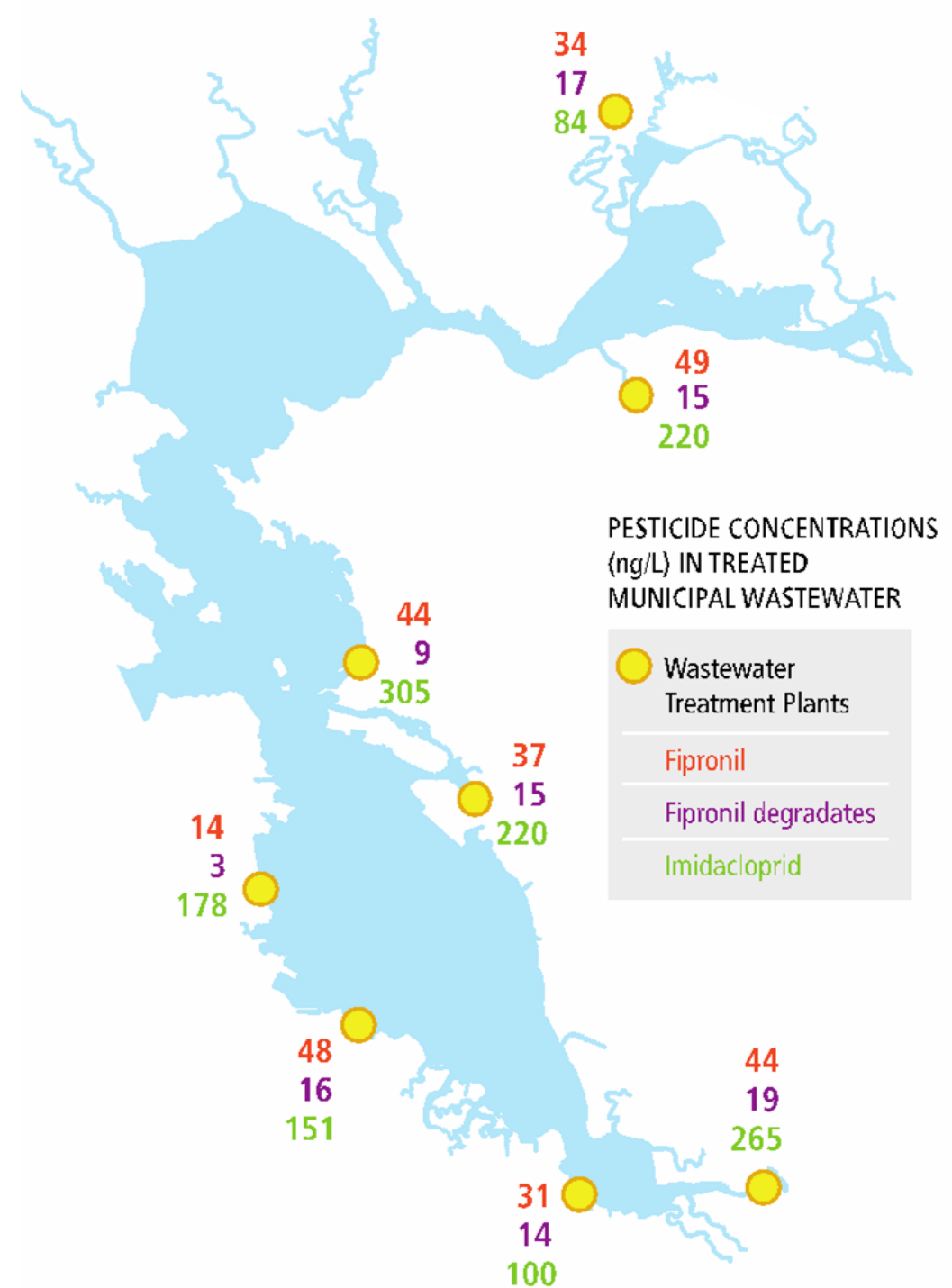


We have evidence that on-pet pesticides pass through wastewater treatment at **concentrations above aquatic toxicity thresholds** for sensitive organisms

Aquatic toxicity thresholds:

11 ng/L for fipronil

10 ng/L for imidacloprid





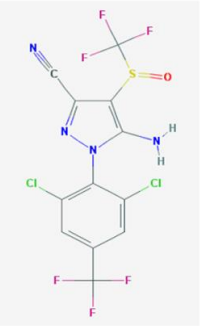
# California's Department of Pesticide Regulation is Studying the Human Health Risks Associated with Fipronil Exposure

## Risk Characterization of Fipronil

Leona D. Scanlan, PhD  
Svetlana E. Koshlukova, PhD  
Andrew L. Rubin, PhD DABT  
Pete N. Lohstroh, PhD  
Anna Kalashnikova, PhD  
Puttappa Dodmane, PhD DABT  
Stephen Rinkus, PhD  
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Weiyang (Tim) Jiang, PhD  
Christopher DeMars  
Eric Kwok, PhD DABT  
Shelley DuTeaux, PhD MPH  
Karen Morrison, PhD

Pesticide Registration and Evaluation Committee  
March 19, 2021



*“Scenarios that pose a **potential risk** to home users include:*

- Acute **dermal exposure** for users who **apply pet spray** at home*

*Post-application **residential exposures for adults** considered to pose a **potential health risk** include:*

- Seasonal **exposure to pet spray products***

*Post-application residential exposure for **children** considered to pose a potential health risk include:*

- Short-term oral exposure to turf granules*
- Seasonal **oral exposure to pet products***
- Seasonal **dermal exposure to pet products**”*

# Pesticides of Concern are Those That Exhibit Aquatic Toxicity and Persist in the Environment

- Fipronil
- Imidacloprid
- Indoxacarb
- Pyrethroids
  - Bifenthrin
  - Cypermethrin
  - Deltamethrin
  - Permethrin

- Seeking to reduce use of persistent, toxic pesticides so the values return to below aquatic toxicity thresholds
- This list could change:
  - As consumer preferences change
  - As new products come to the marketplace
  - As new science emerges

# An IPM Pyramid for Flea and Tick Control

*Consider strategic use of pesticidal products to protect animal health and public health*



Pesticides

Indoors

On-pet

Systemically-acting pet preventatives

Many are orals/chewables

Physical measures

Vacuum; clean bedding

Monitor

Keep out of tall

grass

# Using IPM for Flea Control

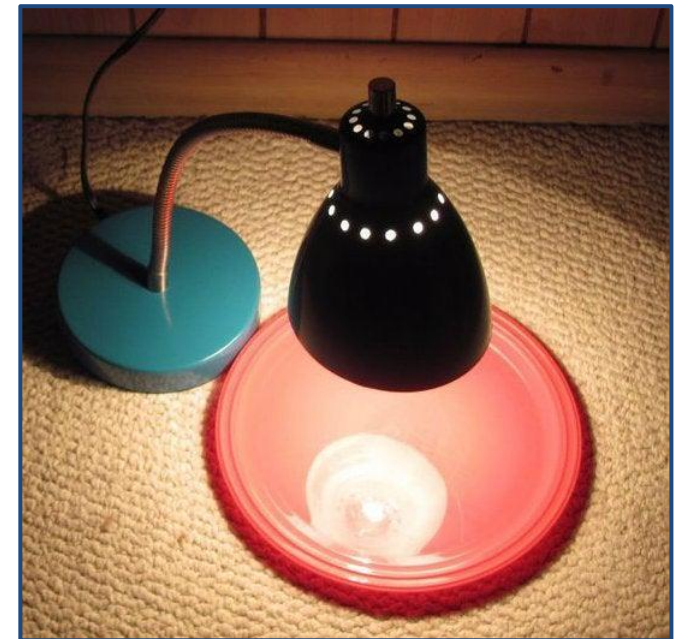
1. **Prevent:** vacuum (everywhere and often!), wash bedding, steam clean
2. **Monitor:** flea combs, flea traps
3. **Crack-and-crevice sprays:** more effective and reduce human exposure, relative to foggers and carpet sprays



Source: <https://www.preventivevet.com/pets/how-to-get-rid-of-fleas-in-your-home>



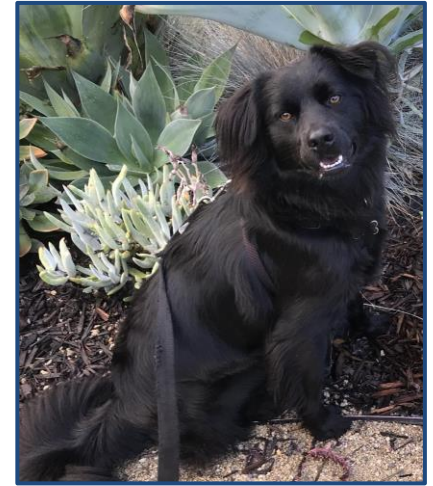
Source: [https://www.ecats.vet/siteSearch/view/225302\\_Fleas.pml](https://www.ecats.vet/siteSearch/view/225302_Fleas.pml)



Source: <https://www.instructables.com/Simple-Flea-Trap/>



# Similarly for Ticks...Our Consumer Message is That Prevention is the Key



1. If possible, **keep your dog's coat short.**
2. **Try to keep out of the brush.**
3. **Thoroughly inspect your pet** after walks. Pay particular attention to the nose, mouth, eyes, ears (inside too), around tails and under the collar.
4. **Seek to create a tick-free zone in your yard**, controlling brush or tall grass.



# Alternatives Include Systemically-Acting Medications

- May be administered either orally (chewables) or topically
- Some systemically-acting medications also protect against internal parasites
  - Reducing number of monthly medications
- Many of the newest ones are isoxazolines
  - Associated with possible adverse neurologic reactions in some dogs
- Prescriptions required rather than over the counter
  - Creates a social justice aspect



# Evidence Suggests that Systemics May be More Effective Than Topicals

*"In this study systemically acting insecticides such as nitenpyram, and the topically applied but systemically active insecticide selamectin, were **more effective** in interfering with flea blood feeding **than were imidacloprid and fipronil.**"*

"Flea blood feeding patterns in cats treated with oral nitenpyram and the topical insecticides imidacloprid, fipronil and selamectin," McCoy, c., et al., Veterinary Parasitology, Vol. 156, pp 293-301, 2008.

Why? Hypotheses include:

- More accurate application method
- More direct approach (pest bites animal rather than happens upon the topical on the skin or fur)
- The active ingredient is not being licked off or diluted around the home

# Orals May Pose Lower Risk of Environmental Harm

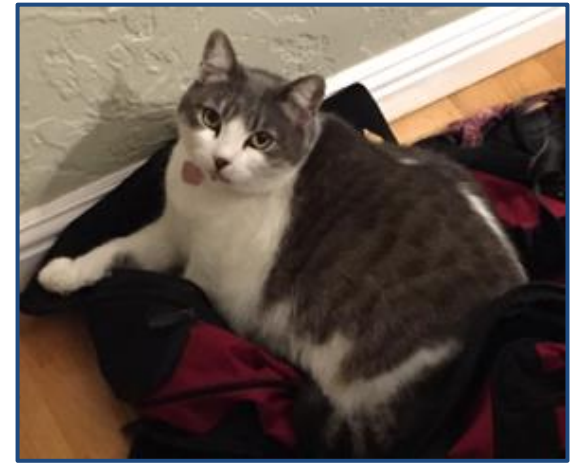
***“It is possible that orally administered isoxazoline such as afoxolaner, lotilaner or oral formulations of fluralaner may pose a lower risk of environmental harm. Orally administered fluralaner is primarily excreted unchanged in the faeces, as opposed to being widely disseminated in hair and skin (European Medicines Agency, 2013). However, concerns still exist, as fluralaner is extremely persistent in the environment, with a DT50 in soil of up to 989 days and has a high toxic potency for non-target invertebrates (European Medicines Agency, 2017).”***

From Perkins et al., Potential role of veterinary flea products in widespread pesticide contamination of English rivers, Science of the Total Environment 755 (2021) 143560.

# Summary of Concerns for Flea and Tick Control

- Flea and tick control pesticides are reaching sewer systems
- Pesticides subsequently discharged into San Francisco Bay can exceed aquatic toxicity thresholds
- CA's Dept of Pesticide Regulation has identified potential human health risks associated with fipronil
- Systemically active and orally-applied products may pose lower environmental risk and may be more effective
- When vets, animal shelters and pet adoption agencies use these topicals, consumers view that as an endorsement

# BAPPG's Progressive Collaboration with and Outreach to Veterinarians



## INITIAL RESEARCH (2015-2018)

- Researched indoor urban sources of high priority pesticides; found on-pet and indoor flea medications to be a major concern; sought alternatives

## INITIAL VETERINARY OUTREACH (2018-2022)

- Communication w/ Bay Area veterinary medical associations (newsletters, presentation)
- Veterinary Technician trainings at local community college
- Initiated communication with the American Veterinary Medical Association (AVMA)

## LATEST VETERINARY OUTREACH (2023-present)

- (International) vet survey is in development with the Veterinary Information Network (VIN)
- Sought and obtained Continuing Education credit (nationally approved) for outreach presentation
  - Invited to speak at VIN, February 2024 (VIN survey to follow)
  - Invited to speak at the AVMA conference, Austin, TX, June 2024
  - Palo Alto used these materials to reach out to their muni shelter





## City of Palo Alto Pilot Outreach to Shelter: Pets In Need

- Two locations: Palo Alto and Redwood City
- Current practice: dose every animal with Frontline (fipronil) prior to adoption
- Palo Alto Goal: shelter shifts from fipronil use and educates staff and their clients about fipronil's detrimental environmental impacts, exposure to people, questionable efficacy

# For Pets In Need, a Two-Step Approach Was Used:

## **1. An in-person meeting with the manager and lead veterinarian**

- Established our water quality expertise
- Shared draft rack cards for their front counter; received thoughtful feedback

## **2. Several months later, we returned**

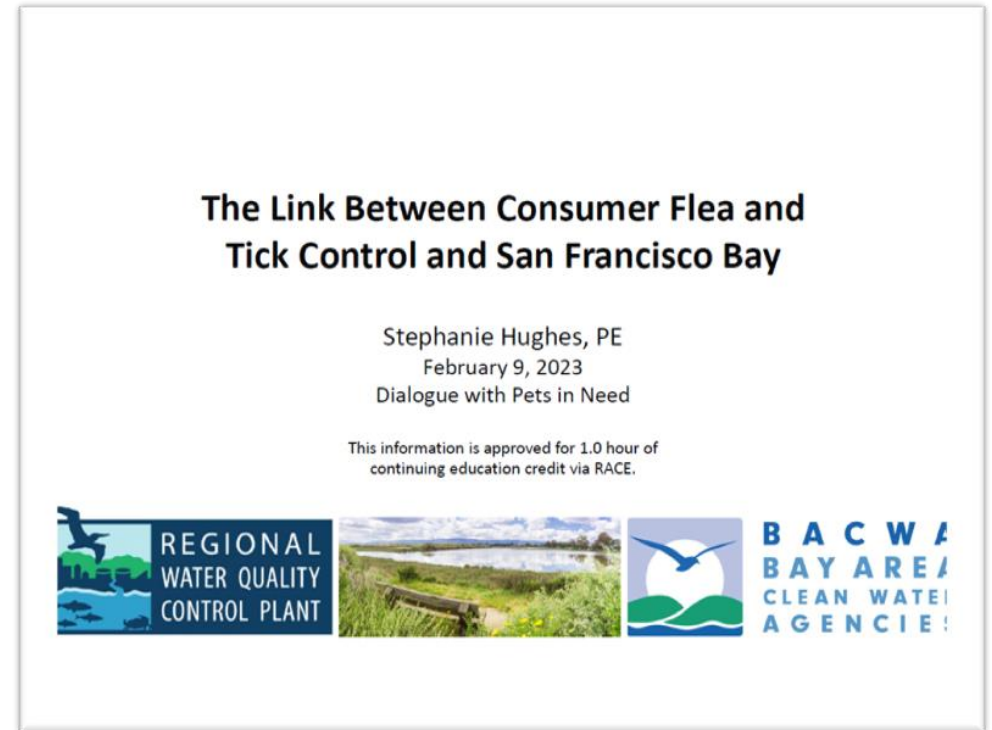
- Trained ALL staff at Palo Alto and Redwood City locations (via Zoom)
  - Offered Continuing Education Credits
- Printed 2,500 rack cards with the requested edits and provided card holders
- Information distributed at shelter and offsite pet adoption events

## **3. PIN reports they will shift to safer products in the spring**

- We will check in every few months for feedback, rack card reprints and use, in-house flea/tick treatment product switch, training needs, outreach assistance, and science/regional project updates.

# BAPPG Toolkit for Veterinarian Outreach

- Baywise.org (residential page and vet page with technical papers)
- Sample letter of introduction
- Rack card artwork, QR Code, and card holder specs/purchase details
- Sample veterinary presentation
  - For CE units (1) must be presented by Stephanie on behalf of BACWA and (2) Stephanie is responsible for tracking and providing certificates





# We Have Websites Tailored for Vets and Their Clients

## VETERINARY RESOURCES

### Help Pet Owners Avoid Exposure to Toxic Chemicals in Topical Flea & Tick Control Products

Listed below are a series of scientifically sourced warnings about the hazards of using topical pesticides for pet treatment. Vets are a trusted source for flea and tick control information. With your help, we can educate Bay Area pet owners about the efficacy of oral medications and the toxicity of pesticides in spot-on treatments.



INDOOR PET FLEA  
CONTROL PRODUCT



WASHING OF PETS, HANDS,  
PET BEDDING, FLOORS,  
CARPETS, AND CLOTHING



TRANSPORT TO SANITARY  
SEWER SYSTEM

DISCHARGE TO WATER BODY,  
RECYCLED WATER, AND/OR BIOSOLIDS

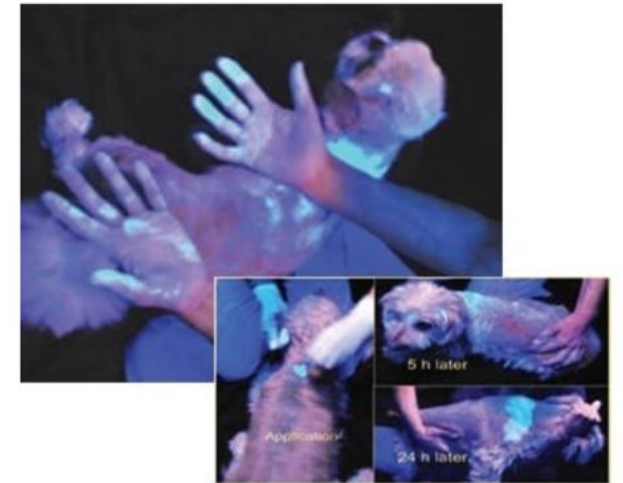
#### Hands, clothing, carpets and floors may be exposed to toxic chemicals when applying external flea and tick control products

Several scientific studies have examined the transport of active ingredients from flea and tick control products (including spot-on treatments, collars, sprays, and foggers) onto human hands, clothing, and indoor surfaces. Washing these results in the discharge of these pesticides into the sewer system.<sup>1,2,3,4,5</sup>

## YOUR PETS

### Is Your Flea & Tick Medicine Doing More Harm Than Good?

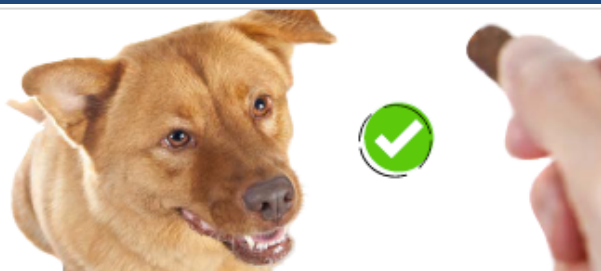
If you are a pet owner or someone who works with pets, you know how important it is to keep our furry friends free of fleas and ticks. However, you may not know that many products commonly used to treat fleas and ticks, including spot-on treatments, collars, sprays, and foggers, contain chemical pesticides that can easily spread around your home and make it into our waterways. These photos were taken from a study where researchers used a fluorescent dye in a spot treatment to show how it can spread.



Because of this, the safest option for our homes and waterways is using oral flea and tick medications as well as non-chemical methods for keeping fleas and ticks off our pets.

The California Department of Pesticide Regulation (DPR) has reviewed the use of fipronil (a common ingredient in pet/carpet sprays and on-pet topical treatments) and found a potential **human health risk** to adults and children in households where sprays and topicals





## Prevent Fleas and Ticks

*Ask your vet if chewable flea and tick medications are an option for your pet.*

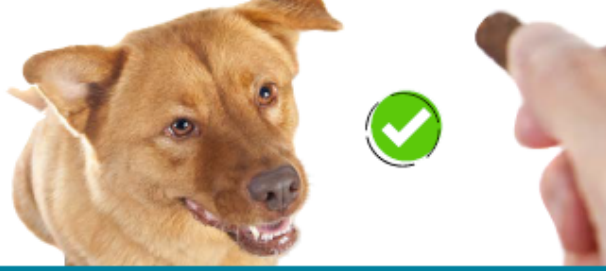
Chewable flea and tick medications may be a preferable alternative to topical treatments. Pesticides in spot-on treatments, collars, sprays, and foggers transfer onto you and indoor surfaces around your home. When washing pets, bedding, clothing, and your hands, these pesticides go down the drain and impact San Francisco Bay water quality.



The best defense is a good offense. Follow these tips to help reduce flea and tick problems before they start:

- **Fleas** - regularly vacuum floors, furniture, pet bedding and other fabrics. Use a flea comb dipped in soapy water to capture fleas.
- **Ticks** - regularly groom and inspect your pet for ticks and keep them out of tall grasses and shrubs during tick season.

For more information, visit [baywise.org](http://baywise.org).



## Prevención de pulgas y garrapatas

*Consulte a su veterinario si los medicamentos masticables contra pulgas y garrapatas son una opción adecuada para su mascota.*

Los medicamentos masticables contra pulgas y garrapatas pueden ser una alternativa preferible a los tratamientos tópicos. Los pesticidas que se encuentran en tratamientos tópicos, collares, aerosoles y nebulizadores se transfieren a usted y las superficies del interior de su hogar. Cuando baña sus mascotas, lava la cama para mascotas, la ropa y las manos, estos pesticidas salen por el desagüe y tienen un impacto en la calidad del agua de la bahía de San Francisco.

La mejor defensa es un buen ataque. Siga estos consejos para ayudar a reducir los problemas de pulgas y garrapatas antes de que comiencen:

- **Pulgas:** pase la aspiradora de forma regular por pisos, muebles, cama lecho para mascotas y otras telas. Utilice un peine para pulgas mojado en agua jabonosa para atrapar las pulgas.
- **Garrapatas:** acicale regularmente a su mascota y haga una inspección regular de su mascota para detectar garrapatas. Manténgala alejada de la hierba alta y de los arbustos durante la temporada de garrapatas.

Para mayor información visite [baywise.org](http://baywise.org).





# BAPPG Toolkit for Public Outreach

- BAPPG webpages
- Utility bill Insert
- Campaign artwork and text
- Electronic ad video
- OWOW flea factsheet (updated!)
- Public presentation slides
  - Prepared by David Robertson (SJ) and Stephanie for Santa Clara Library event
  - Updated with latest insights along with speaker notes



## Prevent Fleas and Ticks

*Ask your vet if chewable flea and tick medication is an option for your pet.*

Chewable flea and tick medications may be a preferable alternative to topical treatments. Pesticides in spot-on treatments, collars, sprays, and foggers transfer onto you and indoor surfaces around your home. When washing pets, bedding, clothing, and your hands, these pesticides go down the drain and impact San Francisco Bay water quality.

Speak to your vet about using oral medications to control fleas and ticks. Visit [baywise.org](http://baywise.org) for more information for you and your vet, and to learn how to safely dispose of expired pet medications. See the back for medication drop-off locations in Palo Alto.

**The best defense is a good offense. Follow these tips to help reduce flea and tick problems before they start:**

- Fleas: regularly vacuum floors, furniture, pet bedding and other fabrics. Use a flea comb dipped in soapy water to capture fleas.
- Ticks: regularly groom and inspect your pet for ticks and keep them out of tall grasses and shrubs.

**To learn more about watershed protection, visit [cleanbay.org](http://cleanbay.org) or call 650.329.2122.**

Individuals with disabilities who require accommodations to access City facilities, services or programs, or who would like information on the City's compliance with the Americans with Disabilities Act (ADA) of 1990, may contact the City's ADA Coordinator at (650) 329-2550 (voice) or email [ada@cityofpaloalto.org](mailto:ada@cityofpaloalto.org).

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**REGIONAL WATER QUALITY CONTROL PLANT**



## Eco-Safe Flea & Tick Control

Topical flea & tick treatments contain toxic pesticides. Try oral medication for your pet.

Close

Open

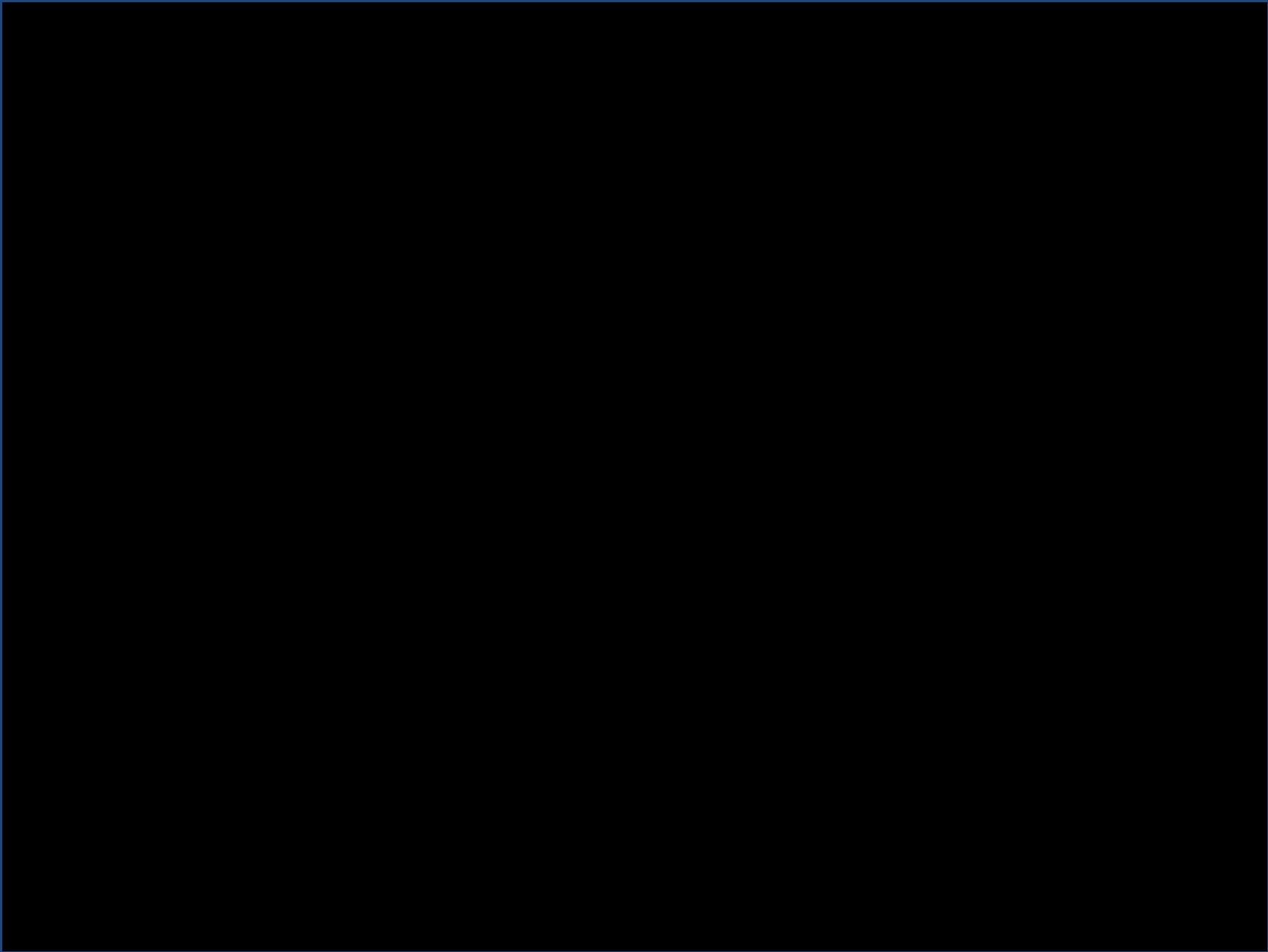


## Eco-Safe Flea & Tick Control



Swap out your topical flea & tick treatment for a safe, eco-friendly oral medication.









## FLEA CONTROL IS EASY AS 1-2-3!

## 1. Keep them out

- Frequently vacuum floors, carpets, and furniture
- Wash pet and human bedding
- Regularly clean or caulk cracks and crevices in floors and baseboards

## 2. Monitor

- Use flea traps to monitor your household
- Check your pet for fleas using a flea comb and a dish of soapy water, which will also get rid of any adult fleas

## 3. Treat your pets

- Wash your pet with pesticide-free shampoo and warm water
- Instead of topical treatment, ask your veterinarian if oral treatment is an option

## FINDING FLEAS IN THE HOME

- Adult fleas spend much of their time on an animal's body. If you haven't seen fleas but your dog or cat is scratching, your pet may have fleas.
- You may be able to see tiny white flea eggs and white, worm-like flea larvae on the floor, in cracks and crevices, in carpets, and where pets rest or sleep. You may also see "flea dirt" (flea droppings) where your pet sleeps. These black specks contain blood, and turn red when wet.
- Use a light trap to monitor your home for fleas. Light traps attract fleas and trap them on sticky paper. Traps work better if people and pets are not around — fleas prefer warm bodies to traps.

## PREVENTING FLEAS

## In your home

The vast majority of fleas (in several life stages) live throughout your home rather than on your pet. Therefore indoor flea prevention is a key part of flea control.

- Frequently vacuum carpets, floors, couches, and chairs to pick up adult fleas, larvae, and eggs. Empty vacuum or dispose of bags in the trash, outdoors.
- Frequently wash pet bedding in hot soapy water.
- Thoroughly clean cracks and crevices in floors or baseboards, or permanently seal with caulk.

## FLEA FACTS

Fleas make pets and people uncomfortable, and can transmit tapeworms to pets and sometimes to children.

Fleas in your home spend the vast majority of their lifetime — up to 18 months — as eggs, larvae or pupae, not as biting fleas on your pet. Adult fleas can live on your pet for up to 40 days and females lay 20-50 eggs every day, which means flea problems can get out of control quickly, especially in warmer weather when fleas are more active. This is why getting rid of all life stages of fleas by vacuuming and washing pet bedding — not just getting rid of adult fleas — is needed to prevent or stop a flea infestation.

- Blow or hand dust diatomaceous earth (DE) into cracks and crevices. Use DE labeled for use on pests, or use "food-grade" DE; avoid swimming pool DE. Wear a dust mask and goggles to keep DE out of your lungs and eyes.
- Avoid using indoor foggers as the pesticides transfer onto you, your clothing, and indoor surfaces. Upon washing, these pesticides go down the sewer drain and impact water quality.

## On your pet

- Wash your pet with a pesticide-free pet shampoo and warm water. Avoid shampoos containing the pesticide bifenthrin. When bifenthrin ends up in our waters, it harms crustaceans, aquatic insects, and fish.
- Use a flea comb (available at pet stores) to remove adult fleas on your cat or dog. Drown fleas caught in the comb in a cup of warm soapy water and flush or pour down the drain. Make sure to comb well around your pet's neck and base of the tail.
- Ask your veterinarian if chewable (oral) flea medications are an option for your pet. These products are safer for the environment than indoor foggers and topical ("spot-on") pet treatments, sprays and collars.
- If you use spot-on flea treatments, avoid products that contain fipronil, bifenthrin, imidacloprid, indoxacarb, deltamethrin, or permethrin — chemicals that cause water quality programs in creeks, rivers, or bays, and the ocean.

## Outdoors

- Don't treat for fleas outdoors unless you see large numbers of fleas there. Spray insecticidal soap only in those areas where you find fleas.
- Apply beneficial nematodes (*H. bacteriophora* or *S. carpocapsae*) to soil where you have found fleas. Soil temperature must be between 60°F and 90°F, and the soil should be moist. Water before and after application, but don't soak the area.

## USING PESTICIDES INDOORS ISN'T HEALTHY FOR YOU, YOUR PETS, OR THE ENVIRONMENT

Pesticides used on your pet or throughout your home transfer onto you and indoor surfaces around your home. For example, exposure to fipronil — a common



ingredient in many spot-on topical treatments — may lead to adverse human health impacts to those applying the treatment and to children (California Department of Pesticide Regulation, 2023).

When washing pets, bedding, clothing, and your hands, these pesticides go down the sewer drain and impact water quality. Wastewater treatment plants cannot fully remove complex chemicals like pesticides. Wastewater agencies are concerned that pesticides in spot-on flea treatments can wash off a pet — even weeks after being applied — and end up in California waterways.



Scan the QR Code to learn more about controlling fleas.



WWW.OURWATEROURWORLD.ORG

**Our Water Our World (OWOW)** is an award-winning partnership between municipal agencies and garden centers and hardware stores that sell pest control products. Initiated in 1998, the program focuses on less-toxic, eco-friendly products and techniques as many common pesticides are harmful to sensitive species and ecosystems when they reach California surface waters.

**Our Water Our World** fact sheets and store displays educate residents about less-toxic pest management. Look for the **Eco-friendly** tag next to less-toxic products in participating stores and nurseries.



**Our Water Our World** is a program of the California Stormwater Quality Association (CASQA), a 501(c)(3) non-profit organization that advances sustainable stormwater management protective of California water resources. CASQA is the registered service mark of the California Stormwater Quality Association®.

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Pest control strategies and methods described in this publication are consistent with integrated pest management (IPM) concepts, and are based on scientific studies and tests in actual home and garden settings. Use suggested products according to label directions and dispose of unwanted or leftover pesticides at a household hazardous waste collection facility or event. For more information on pesticide disposal, visit [www.earth911.com](http://www.earth911.com).

For more information, contact:  
[www.ourwaterourworld.org](http://www.ourwaterourworld.org)  
University of California IPM  
[www.ipm.ucan.edu](http://www.ipm.ucan.edu)


To find out how you can protect water quality with eco-friendly pest control, go to [ourwaterourworld.org/pesticides-and-water-quality](http://ourwaterourworld.org/pesticides-and-water-quality)



Choose eco-friendly products for your home and garden. Look for this symbol before you buy.



# Where to Find the Toolkit



LOGIN


Search

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## BAY AREA POLLUTION PREVENTION GROUP

The Bay Area Pollution Prevention Group (BAPPG) develops a Bay wide pollution prevention program in cooperation with storm water management partners. It develops a public education and information program directed to the public on how to prevent pollution through individual housekeeping practices. BAPPG provides a forum for information exchanges, sharing and regional projects.

General meetings are held from 10:00 am to noon the 1st Wednesday of February, April, June, August, October, and December. Steering Committee meetings (all members welcome to attend) are held from 9-10:00 am prior to General meetings and alternating months via teleconference on TBD dates.



### NEXT BAPPG MEETING

**BAPPG COMMITTEE MEETING**  
February 7 @ 10:00 am - 12:00 pm

NEW! FLEA AND TICK OUTREACH TOOLKITS


### BAPPG - MEETING MINUTES

VIEW ALL

BAPPG Meeting Minutes 2023-12-06	DOWNLOAD
BAPPG Meeting Minutes 2023-10-04	DOWNLOAD
BAPPG Meeting Minutes 2023-08-02	DOWNLOAD
BAPPG Meeting Minutes 2023-06-07	DOWNLOAD
BAPPG Meeting Minutes 2023-04-05	DOWNLOAD
BAPPG Meeting Minutes 2023-02-01	DOWNLOAD

### BAPPG - ANNUAL REPORTS

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## FLEA AND TICK OUTREACH TOOLKITS

### BAPPG - FLEA AND TICK OUTREACH

VIEW ALL

START HERE – Public Outreach Toolkit for Flea and Ticks

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Public Outreach Toolkit 2. Palo Alto Utility Bill Insert

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Public Outreach Toolkit 3.1 Campaign Images

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Public Outreach Toolkit 3.2 Pet IPM Campaign Text

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Public Outreach Toolkit 3.3 Google Response Ads Examples

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Public Outreach Toolkit 4. BACWA-Pesticide-PetOwnerAds-Video

DOWNLOAD

Public Outreach Toolkit 5. Sample PPT to Public Feb2024

DOWNLOAD

Public Outreach Toolkit 6. 256 Baywise Residential Pets QR Code FY23-24

DOWNLOAD

START HERE – Vet Outreach Toolkit for Fleas and Ticks

DOWNLOAD

Vet Toolkit 2. Model agency email to local shelters 2024

DOWNLOAD

Vet Toolkit 3.1 CPA BACWA Pets In Need 4x9 Rack Card – Final for Print

DOWNLOAD

Vet Toolkit 3.2 CPA Pets In Need 4x9 Rack Card Final for Digital

DOWNLOAD

Vet Toolkit 3.3 256 Baywise Residential Pets QR Code FY23-24

DOWNLOAD

Vet Toolkit 3.4 Brochure Holder (Set of 2)

DOWNLOAD

Vet Toolkit 3.4 Display Example

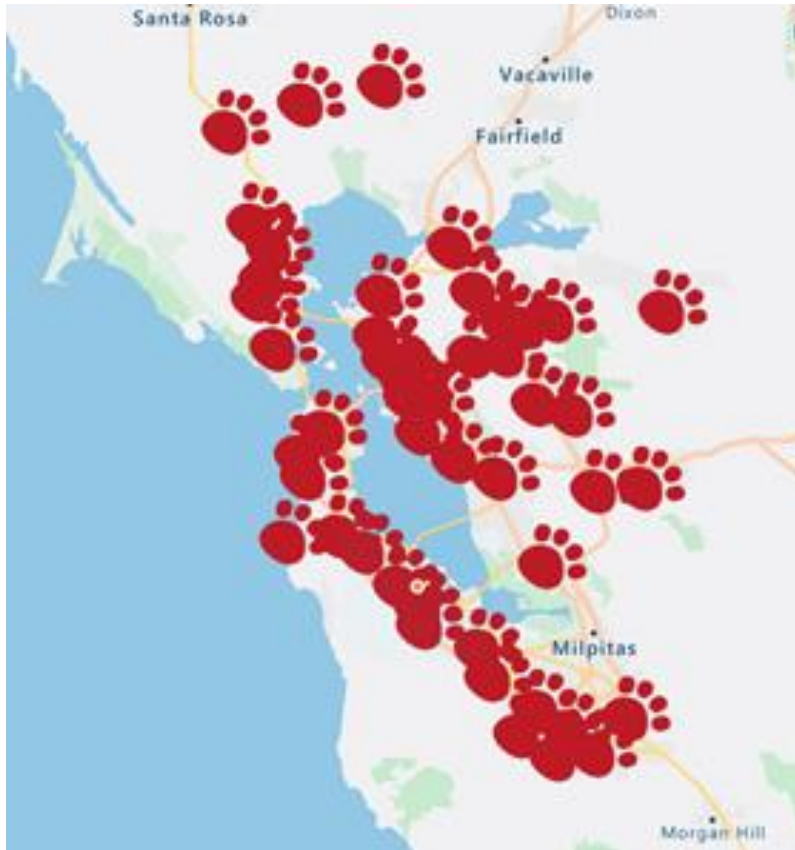
DOWNLOAD

Vet Toolkit 4. Palo Alto Flea-Tick Pesticides PIN 9Feb2023

DOWNLOAD

[Bay Area Pollution Prevention Group - Bay Area Clean Water Agencies \(bacwa.org\)](https://bacwa.org)

# Possible Pet Store Opportunity: Pet Food Express is a California-only chain that began in the Bay Area



# Ideas for Next Steps

*Continue current 2024 tasks, consider expanding effort at Fall Pollutant Prioritization Meeting.*

## **Current tasks:**

### **1. Public Outreach via BAPPG**

Update Baywise Flea/Tick outreach content

Veterinary and Public Outreach Toolkits for more agencies to use

Track progress of Pets In Need and Pet Food Express Projects

### **2. Vet Outreach\***

- Assess results of VIN survey
- Two vet presentations this year (VIN, February 2024; AVMA June 2024)
- Support to Pets In Need, Pet Food Express if needed

### **3. Regulatory Tracking\***

- EPA's proposal to move on-pet pesticide authority to FDA
- Opportunities to work with DPR (Sustainable Pest Management) and DTSC (Safer Consumer Products)
- Fipronil
  - EPA's Preliminary Interim Decision (PID) to determine eco- or human-risks and associated mitigation
  - DPR's proposed mitigation based on their human risk exposure

*\*Via BACWA Pesticides Committee*

## Vets Urged to Stop Pesticide-Based Flea Treatments for Pets

By Tracy Sparks



# BAY NATURE

SAVE THE BAY

WHO WE ARE WHAT WE DO GET INVOLVED WAYS TO GIVE BAY STORIES

# EAST BAY TIMES

## Environment

Latest News Crime Politics Environment Science Education Transportation Health California Nation

### TRENDING:

Trump immunity claims Toby Keith dies Antioch gang murder case Super Bowl watch parties Klay's late-game benching March ballot endorsements

**BREAKING NEWS** PG&E bills are set to hop higher — yet again — this spring



NEWS > ENVIRONMENT

## Dog and cat flea treatments suspected of polluting San Francisco Bay



### TRENDING NATIONALLY

- 1 Southern Californians share storm damage videos on social media
- 2 King Charles all smiles after brief reunion with prodigal Prince Harry
- 3 Pennsylvania man charged with flying drone over Ravens-Chiefs AFC title game
- 4 H-1B: Bad luck in the skilled-worker visa lottery pushes workers from Silicon Valley and other U.S. regions to Canada
- 5 Elizabeth Holmes celebrates 40th birthday with her kids in prison yard

(Alicia Crabbe/Bay Area News Group)

# 2025 Pollutant Prioritization: Consider Expanding Efforts

## 1. Expand Public Outreach via BAPPG

- Story pitch to local news agencies and nonprofits (Bay Nature, Save The Bay)
- BAPPG annual outreach campaign (e.g., electronic ads)
- Identify 1-2 other agencies to work with shelter or veterinarian chain

## 1. Expand Partnership with Veterinary Community\*

- Use VIN survey results to enlist AVMA support (e.g., avoiding prophylactic use)
- Incorporate messages into AVMA or other veterinary websites/other outreach
- Identify additional veterinary conference and vet programs
- Create a short video that highlights Stephanie's presentation and CE credits
- Coordinate outreach to a regional veterinary (or pet store) chain

## 1. Track regulatory opportunities\*

- EPA's proposal to move on-pet pesticide authority to FDA
- Opportunities to work with DPR (Sustainable Pest Management) and DTSC (Safer Consumer Products)
- Fipronil
  - EPA's Preliminary Interim Decision (PID) to determine eco- or human-risks and mitigation
  - DPR's proposed mitigation based on their human risk exposure

\*Via BACMA Pesticides Committee





# Thank You for Your Attention!



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