


# Pesticides and Water Quality

**Vishakha Atre  
EOA, Inc.**

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# Overview of Presentation

- **Background - Stormwater and Pesticides**
  - **Stormwater Regulation and the  
“Municipal Regional Permit (MRP)”**
  - **Pesticide Control Requirements in the  
MRP**
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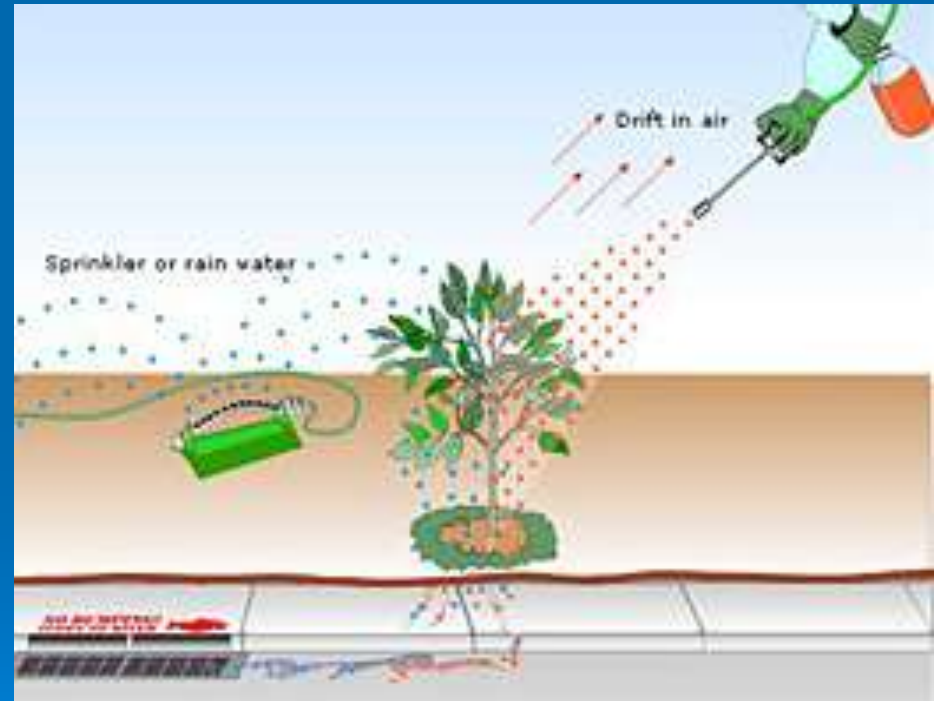
# Stormwater Pollution

- Pollutants entering the storm drain system flow to local creeks and the Bay **with no treatment**
- Everyday activities can cause stormwater pollution



# Pesticides Enter Storm Drains by Multiple Pathways

- Stormwater Runoff
- Over-Irrigation
- Spills
- Drift



# Pesticides Threaten Water Quality

- Many historical studies show likely pesticide impacts to aquatic habitat in Bay Area and throughout California.
- Most toxicity observed in urban creek sediments has been attributed to pesticides.
- 2013 review of past 10 years of water quality monitoring data: pyrethroids and fipronil and associated toxic effects widespread in CA urban watersheds.

# Regulatory Background: Municipal Stormwater Permits

- Since 1987 the federal Clean Water Act has required municipalities to obtain permits to discharge stormwater from municipal storm drain systems
- These are National Pollutant Discharge Elimination System (NPDES) Stormwater Permits





# Municipal Regional Permit (MRP)

- Santa Mateo agencies are part of the MRP that covers four Bay Area counties
- MRP developed and enforced by the SF Bay Regional Water Quality Control Board
- Includes requirements for controlling urban runoff pollutants – litter, sediment, pesticides, etc.

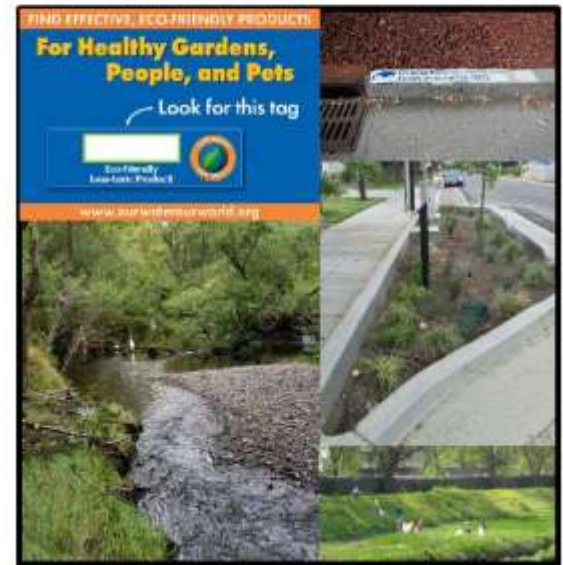


# MRP Provision C.9

- Municipal agencies required to implement a pesticides control program to help reduce pesticide discharges in stormwater runoff
- Implementation coordinated through the SMCWPPP Parks Maintenance and IPM Work Group

California Regional Water Quality Control Board  
San Francisco Bay Region  
Municipal Regional Stormwater NPDES Permit

Order No. R2-2015-0049  
NPDES Permit No. CAS612008  
November 19, 2015





# MRP Provision C.9

- Implement an IPM Policy or ordinance.
- Report trends in municipal pesticide use
  - Pesticide tracking database template developed in FY 16-17
- Report IPM tactics and strategies used
- Require municipal staff and contractors to implement IPM
- Provide IPM training for municipal staff

# MRP Provision C.9

- Hire IPM-certified contractors or include contract specifications requiring IPM
- Report violations of pesticide regulations (e.g., improper usage or disposal) to County Agricultural Commissioners
- Conduct outreach to the public and pest control professionals
  - [www.flowstobay.org](http://www.flowstobay.org)



# Pesticides of Concern

- Active ingredients are listed in the MRP as pesticides of concern:
  - Diamides
  - Diuron
  - Indoxacarb
  - Fipronil and its degradates
  - Organophosphates
  - Pyrethroids
  - Carbamates

# Some Take Home Messages

- Pesticides are impairing water quality in the Bay Area and throughout California
- The MRP requires municipalities to have an IPM policy and to implement an IPM program
- Municipal staff & contractors must follow IPM Policy and SOPs
- Avoid the use of pesticides of concern. Track usage
- Report any violations observed to County Ag.

For more information...

**[www.FlowsToBay.org](http://www.FlowsToBay.org)**

**[www.OurWaterOurWorld.org](http://www.OurWaterOurWorld.org)**

Vishakha Atre

EOA, Inc.

408-720-8811 x3

**[vatre@eoainc.com](mailto:vatre@eoainc.com)**