

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**

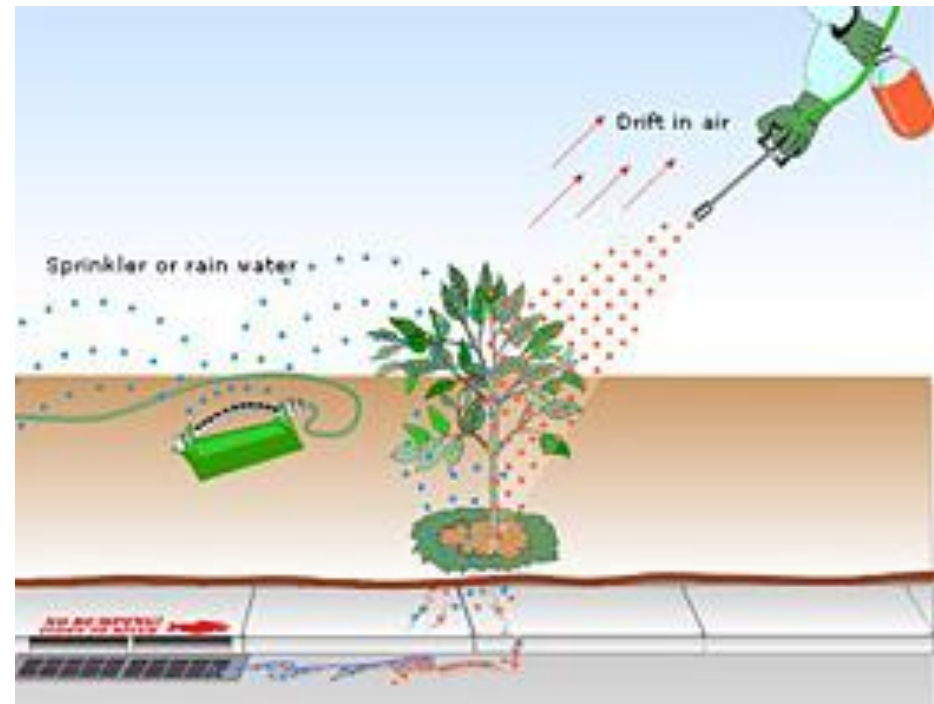


Pesticides Threaten Water Quality

- Many historical studies showing likely pesticide impacts to aquatic habitat in Bay Area and throughout California.
- Widespread problems where urban and agricultural land uses drain to creeks and other water bodies.
- 2013 review of past 10 years of water quality monitoring data: pyrethroids and fipronil and associated toxic effects widespread in CA urban watersheds.

Pesticides Enter Storm Drains by Multiple Pathways

- Stormwater Runoff
- Irrigation
- Spills
- Drift



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) **Municipal 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.

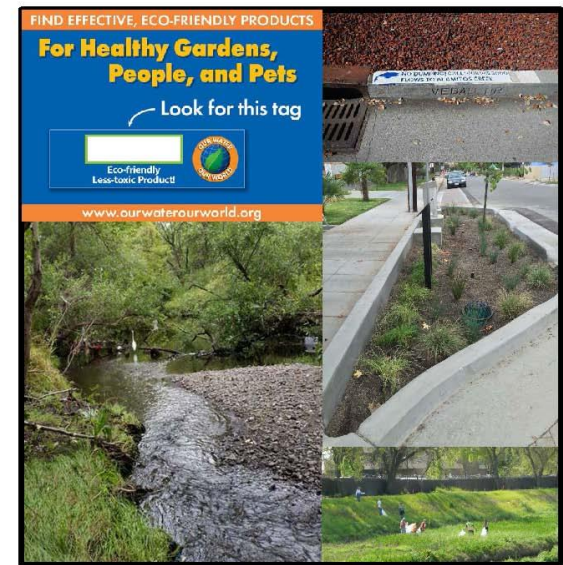


MRP Provision C.9

- **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

- **Adopt and implement an IPM Policy or ordinance.**
- **Report trends in municipal pesticide use**
- **Report IPM tactics and strategies used**
- **Require municipal staff and contractors to implement IPM**
- **Hire IPM-certified contractors or include contract specifications requiring IPM**





MRP Provision C.9

- Provide IPM training for municipal staff
- 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



Pesticides of Concern

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

www.OurWaterOurWorld.org

Vishakha Atre

EOA, Inc.

408-720-8811 x3

vatre@eoainc.com