

# Pesticides and Water Quality



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# Overview of Presentation

- **Background - Stormwater and Pesticides**
- **Stormwater Regulation and the “Municipal Regional Permit (MRP)”**
- **Upcoming Changes to the MRP**

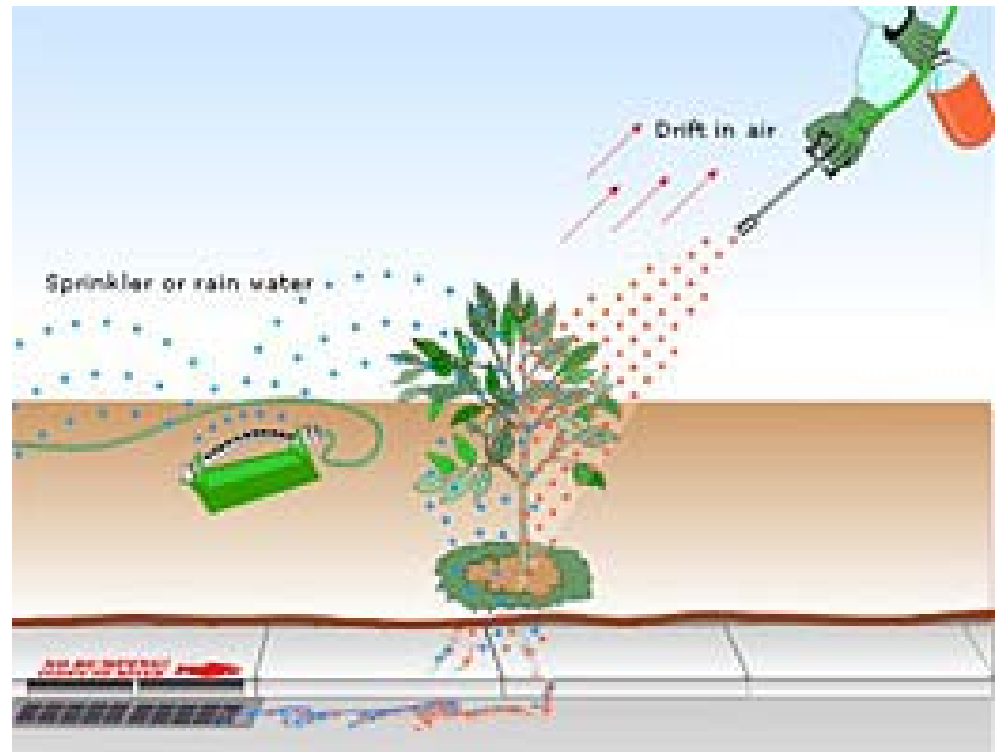
# Pesticides Threaten Water Quality



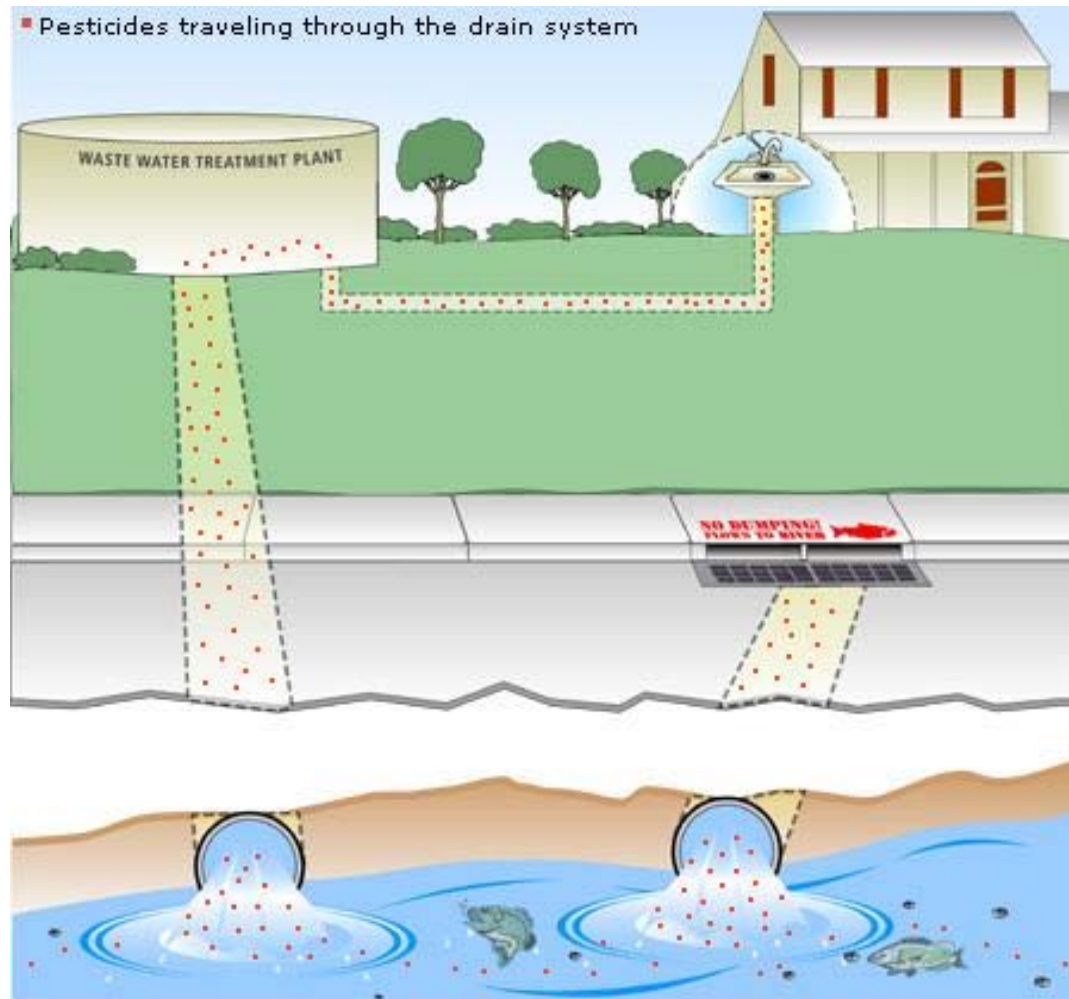
- Many historical studies showing likely pesticide impacts to aquatic habitat in Bay Area and throughout California.
- Widespread problems where urban and agricultural land uses drain to creeks and other water bodies.
- 2013 review of past 10 years of water quality monitoring data: pyrethroids and fipronil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

# Pesticides Enter Storm Drains by Multiple Pathways

- Stormwater Runoff
- Irrigation
- Spills



# Pesticides Enter Storm Drains by Multiple Pathways



# 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**



# What is the Municipal Regional Permit (MRP)?

- **Regional permit regulating municipal stormwater system discharges:**
  - **MRP 1.0 Effective date: December 1, 2009**
  - **Permit renewed every 5 years**
  - **MRP 2.0 expected in 2015**
  - **Provision C.9 Pesticides Toxicity Control**
  
- **MRP developed and enforced by the SF Bay Regional Water Quality Control Board.**



# MRP Provision C.9

- **Municipal agencies required to implement a pesticides control program to help reduce pesticide discharges in stormwater runoff.**
- **Adopt and implement an IPM Policy or ordinance.**
- **Report trends in municipal pesticide use**
- **Require municipal staff and contractors to implement IPM**



# MRP Provision C.9

- **Provide IPM training for municipal staff**
  - **Report in Annual Report**
- **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)**

# MRP 2.0 Schedule

- **Administrative Draft issued in February 2015**
  - **Stormwater Program staff is working with municipal staff to provide comments**
- **Tentative Order expected in May 2015**
- **Permit adoption likely in Fall/Winter 2015.**

# Changes to Provision C.9

- Added two new pesticides of concern – diamides and indoxacarb
  - **Will lead to increased tracking requirement**
  - **Need clarification on which pesticides to report**
- Describe a minimum of three IPM actions implemented in the reporting year, focusing to the extent possible on new or enhanced actions taken.
  - **Not realistic to expect new actions each year**

# Changes to Provision C.9 (cont.)

- **Require contractors to implement IPM.**
  - **Hire IPM-certified contractors AND include IPM contract specifications.**
    - **Change to Hire IPM-certified contractors OR include IPM contract specifications (same as MRP 1.0)**
  - **Observe and annually report contractor compliance with IPM Policies**
    - **Need clarification on what is expected**

# 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
- Report any violations observed to County Ag.
- Pesticide use by municipalities must be tracked to show any trends
- Stay tuned for more information on MRP 2.0

# QUESTIONS?

