

Providing Decision Making Analytical Tools to IPM Managers

Essentials of Implementing Countywide IPM Program



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County of Santa Clara
<http://IPM.SCCGOV.ORG>

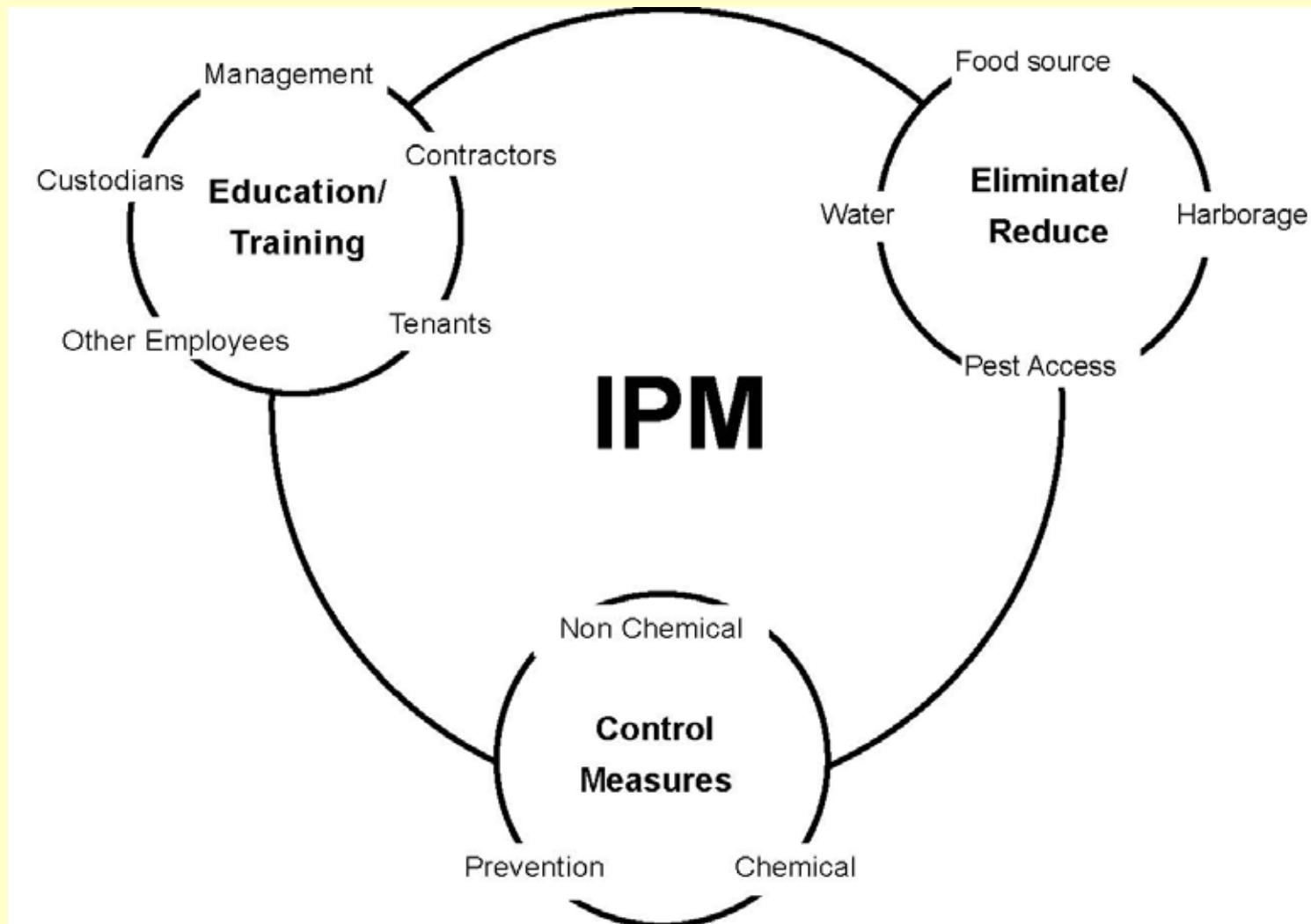


Presentation “in a nutshell”

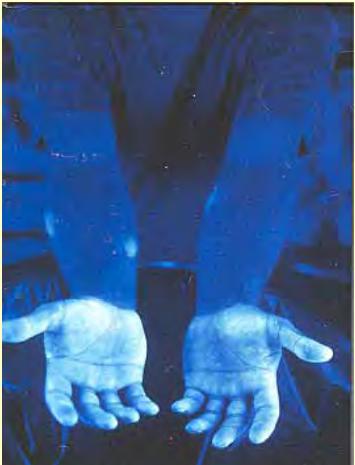
Objectives & Goals

- Provide information, resources and training support to pest management program managers and other personnel who seek **administrative/operational tools and techniques** in order to implement reduced risk pest management projects in their jurisdictions
- Protect the environment and the public from improper pesticide use through sustainable low impact pest management practices and public education
- Make the experience economical, sustainable, safe, enjoyable, and pest free

INTEGRATED PEST MANAGEMENT



WHY IPM?

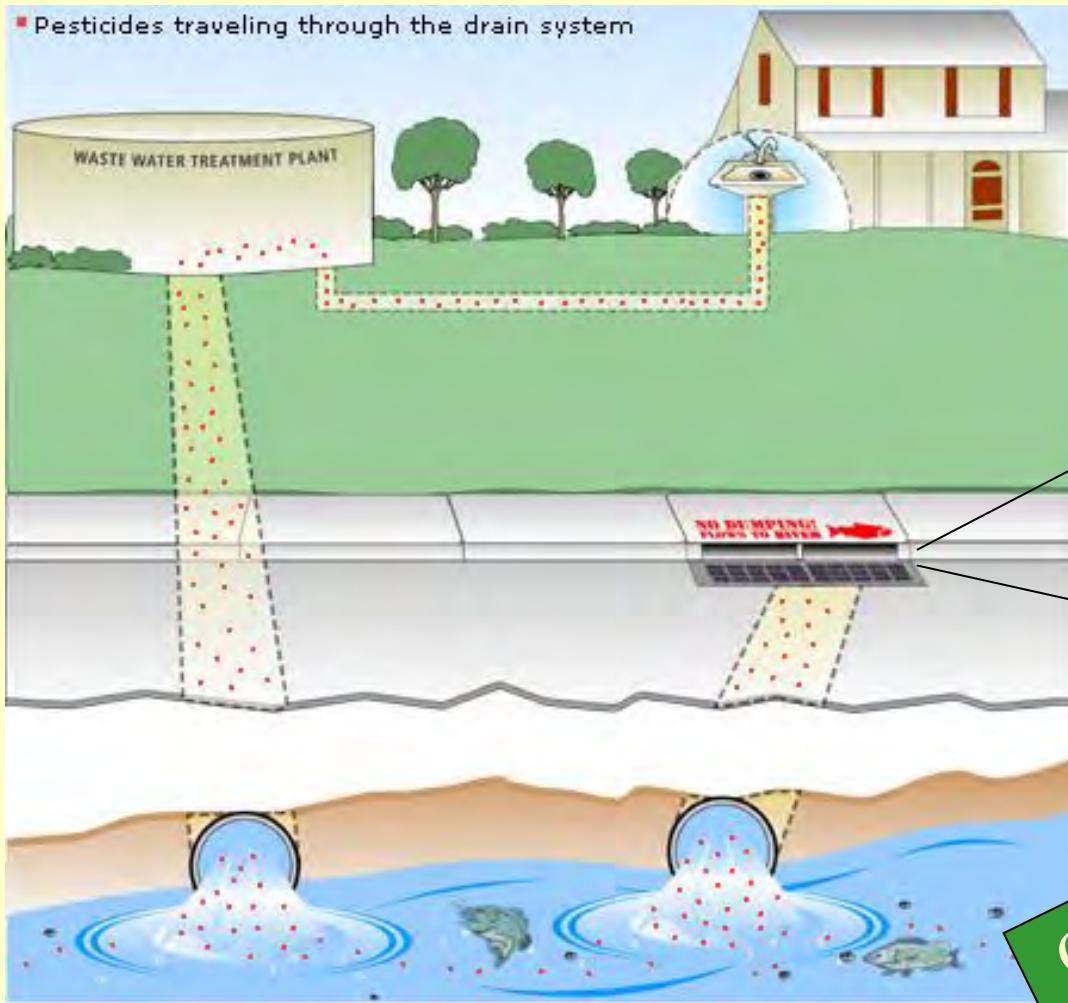


WHY IPM?

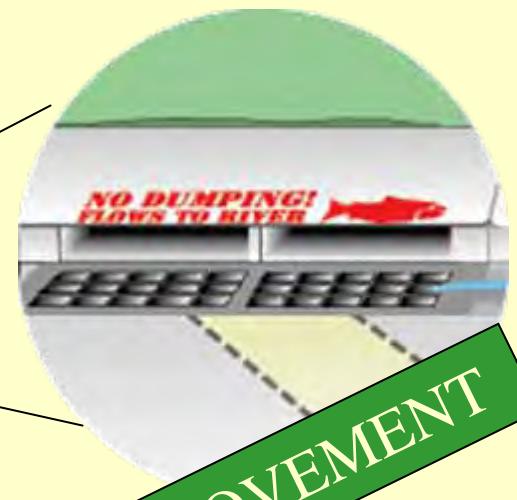


**DON'T BECOME
ANOTHER NUMBER
PROTECT
YOURSELF
THROUGH
INFORMED
DECISIONS**

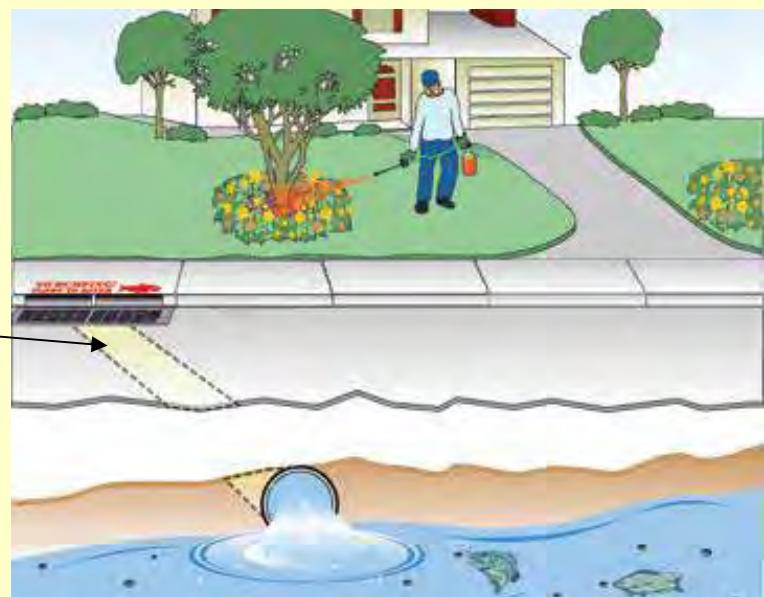
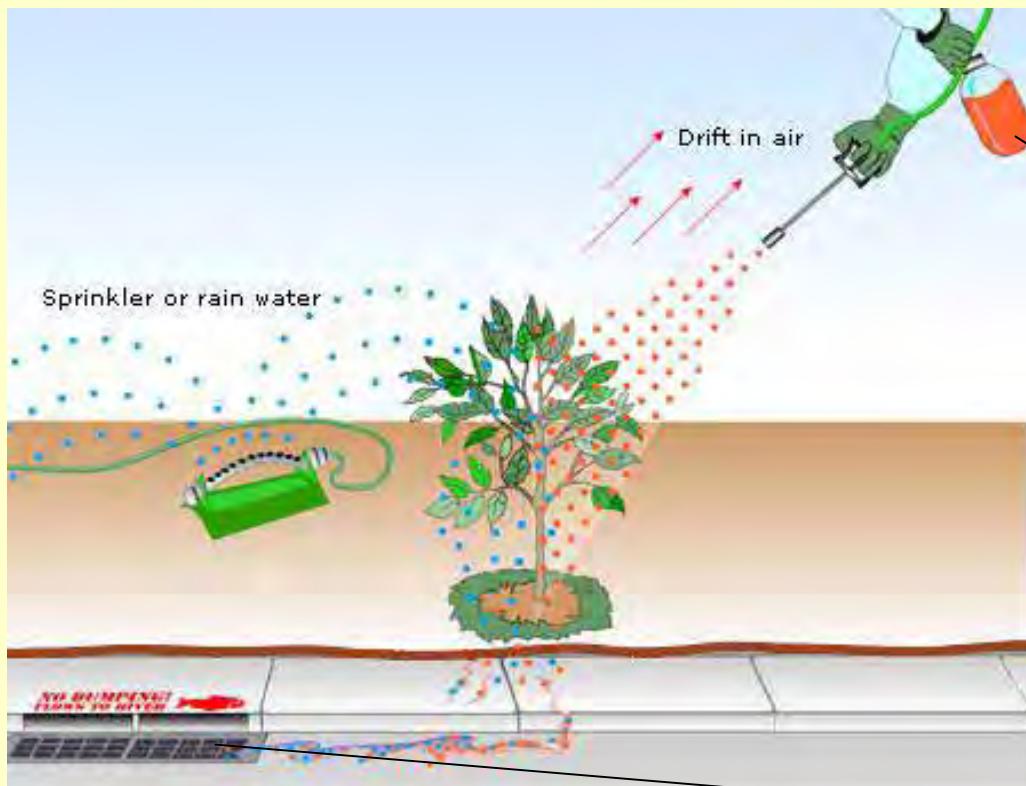
WHY IPM?



OFF TARGET MOVEMENT



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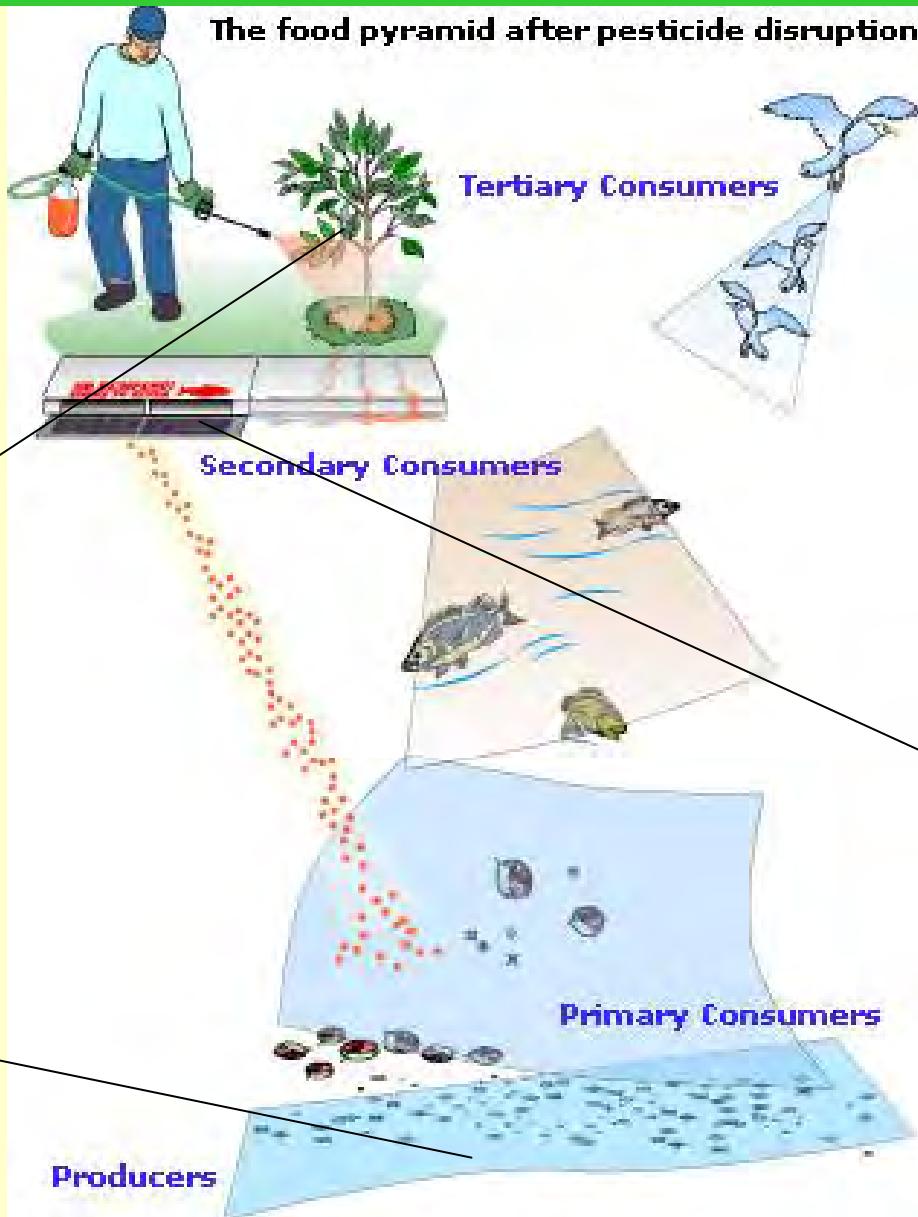
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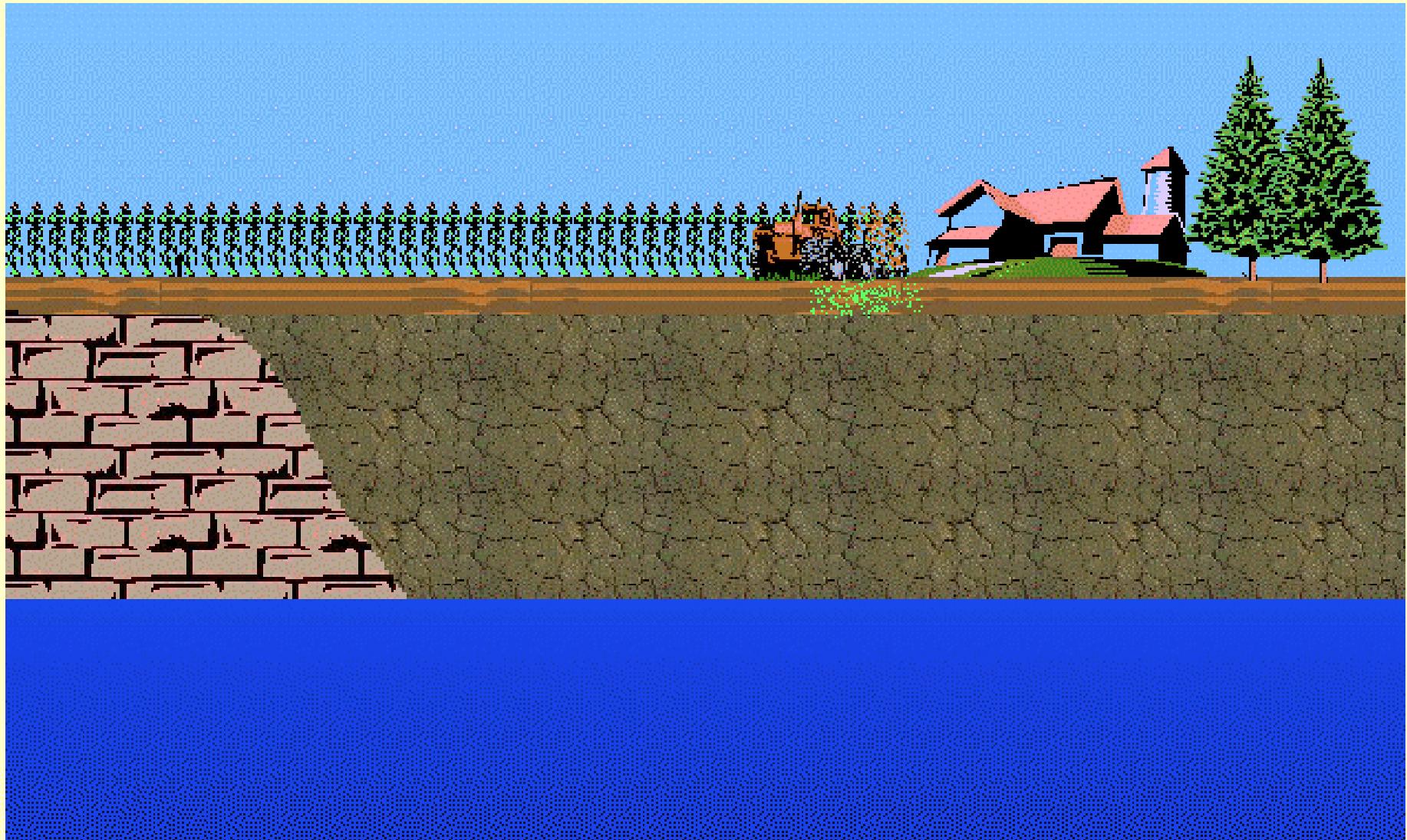
Beneficial arthropods



Ceriodaphnia dubia

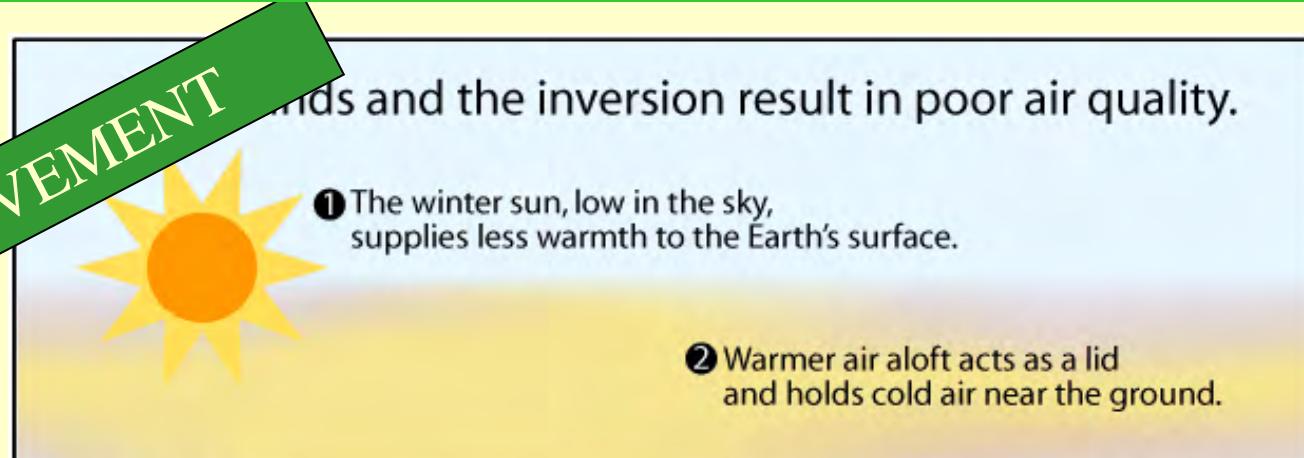
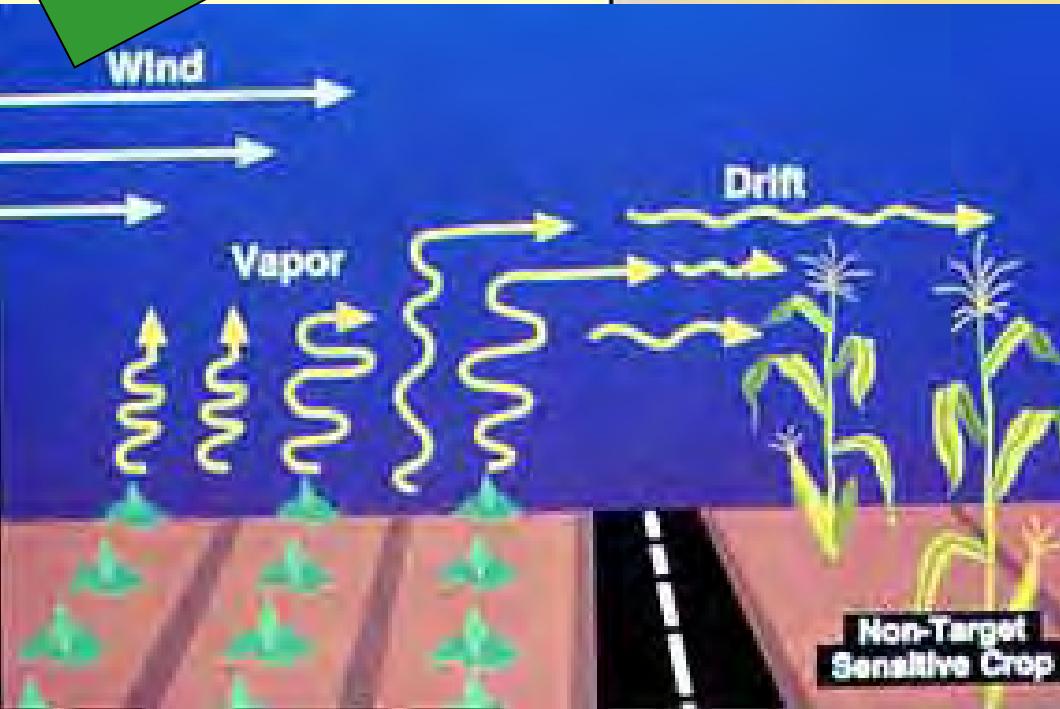


WHY IPM?



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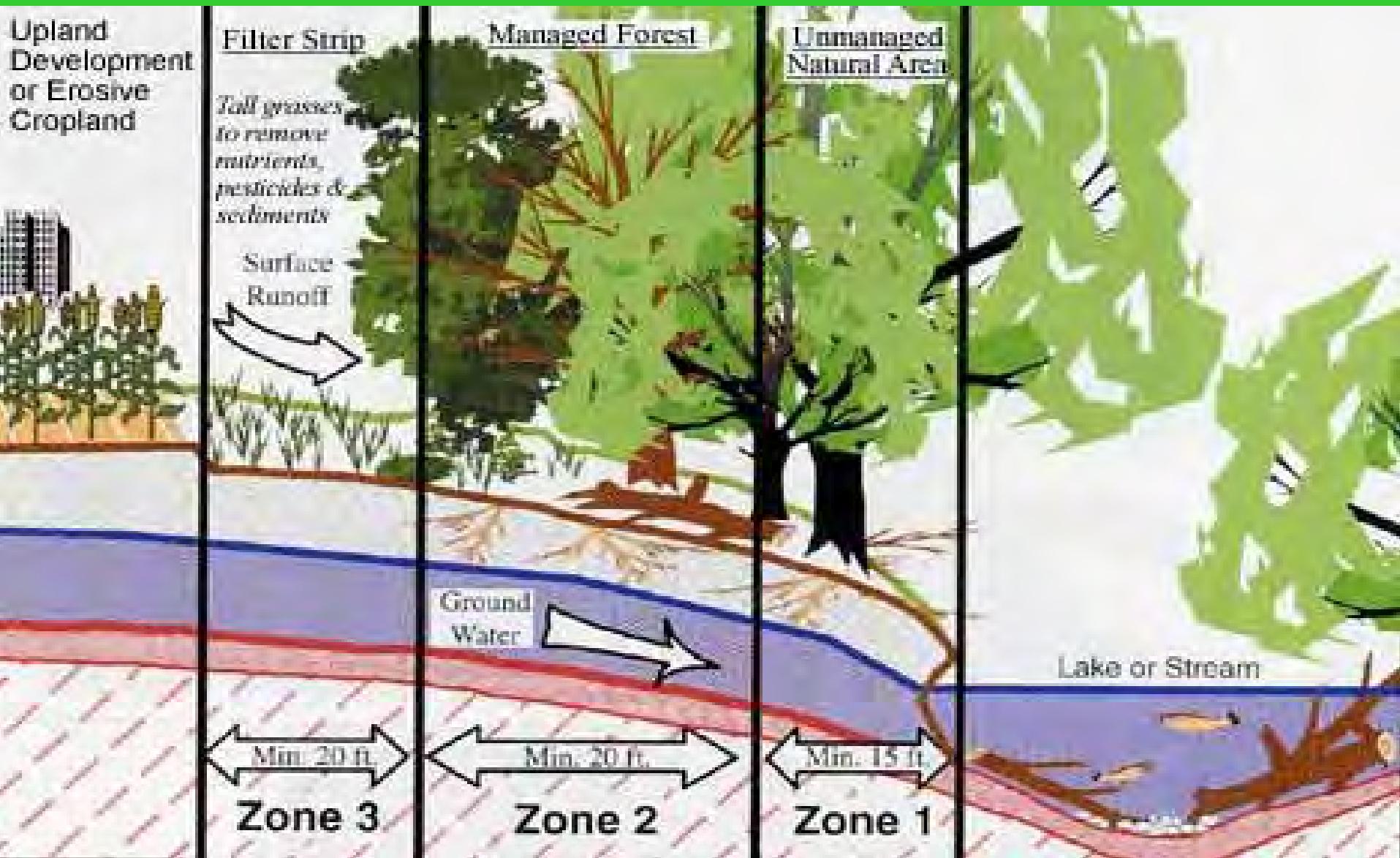


WHY IPM?

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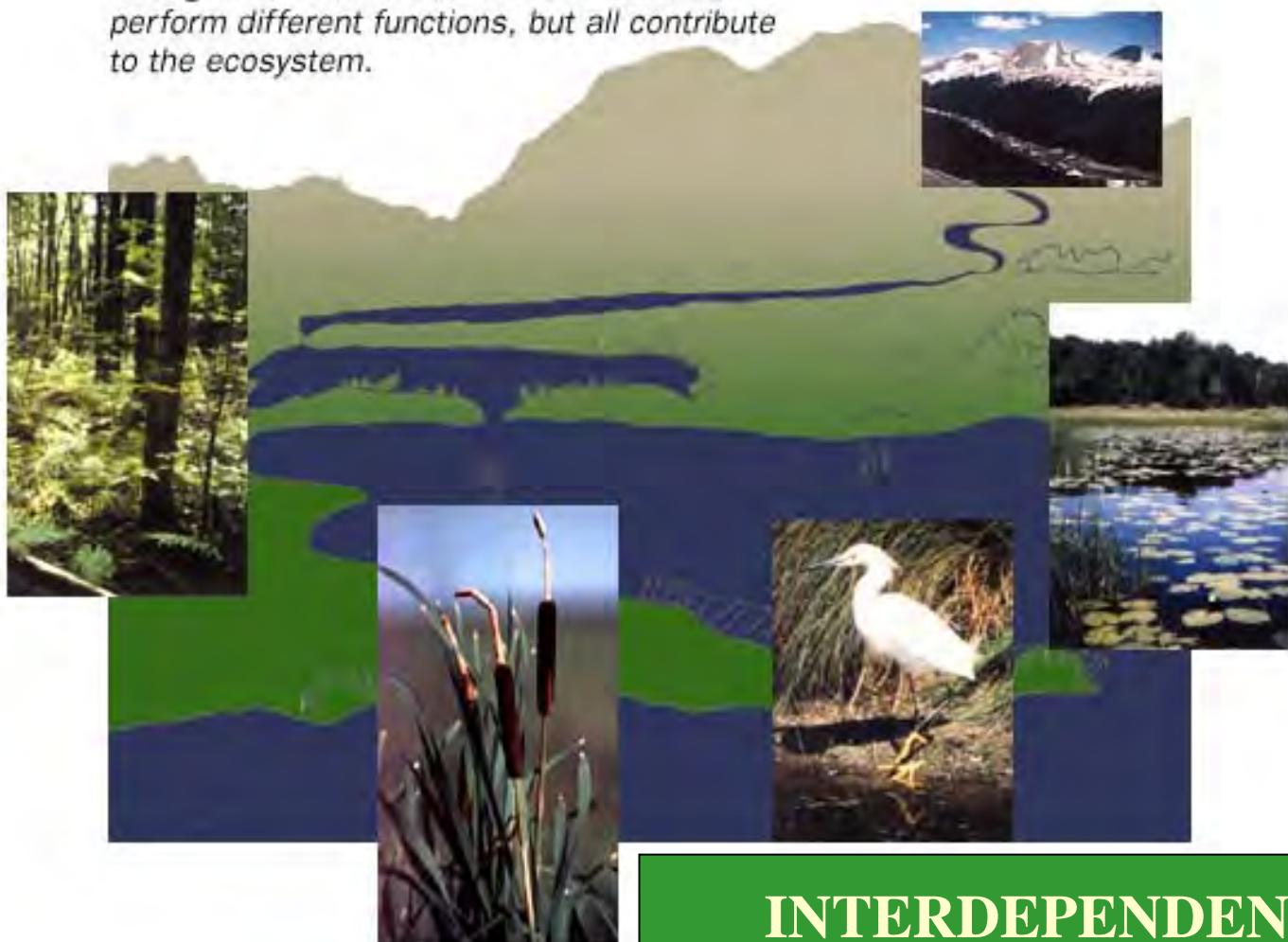


WHY IPM?



WHY IPM?

As water, sediments, and nutrients move through the watershed, different wetlands perform different functions, but all contribute to the ecosystem.



WHY IPM?



MULTIPLE RISKS REQUIRE MULTIPLE BARRIERS

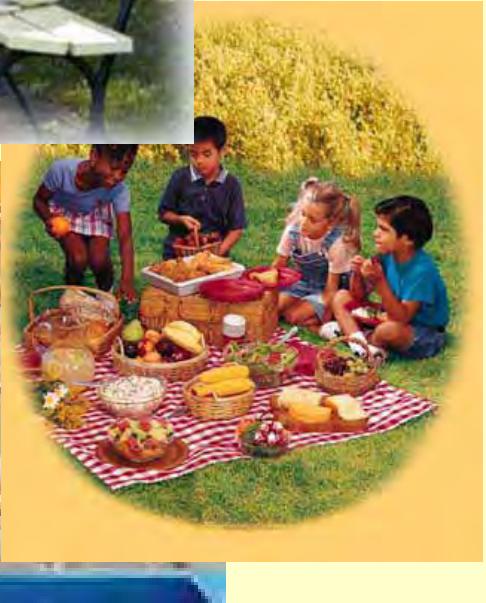
Safe drinking water is essential to the health of American citizens and the economic health of our communities. However, drinking water is vulnerable to contamination from many potential threats. There are programs and activities that when operated effectively form a protective web of multiple barriers to ensure the safety of our drinking water. The success of these barriers relies on the involvement and vigilance of local, state and federal officials, the private sector, public interest groups and individual citizens.

This poster identifies examples of

1. Surface and groundwater sources of drinking water (in blue),
2. Potential threats to those drinking water sources (in red), and
3. The multiple barriers that together protect our nation's public health (in green).

Risk Prevention Barrier
Risk Management Barrier
Risk Monitoring and Compliance Barrier
Individual Action Barrier

WHY IPM?



WHY IPM?



COUNTYWIDE IPM PROGRAM DEVELOPMENT

- **POLICY DEVELOPMENT**

- **Policy Makers**

- Board
 - Executive Management
 - IPM Coordinator
 - Technical Advisory Group
 - Stakeholders
 - Public Process

- **Policy Template**

- **Facilitator/Recorder**

- **Time Frame**



Legislative Policy
Frame Work

SCC IPM Ordinance

Do your home work, make the process simple
and attainable in a given time frame

COUNTYWIDE IPM PROGRAM DEVELOPMENT

Technical Advisory Group

- Ground Maintenance department
- Natural Resource Management department
- Entomologist/Biologist/Horticulturist/Agronomist/Soil Engineer/Arborist (each) on staff or from local agricultural university
- Space Planning, Design & Real Estate Management Department
- Financial Management, Grant facilitator & Procurement Department
- Occupational Safety and Environmental Compliance Department
- Counsel as needed
- Department IPM Coordinators from representative departments/agencies

Others from outside agencies:

- Vegetation management department of local water district or watershed management district
- Agriculture Commissioner, Hazardous vegetation/invasive compliance; Department of Pesticide Regulation or Environmental Conservation or Environmental Protection Agency
- Public health pest management department, vector control district
- Pollution prevention department, Water Quality Control Board
- Public & Environmental groups
- Consultants as needed

COUNTYWIDE IPM PROGRAM DEVELOPMENT

- **Administrative Guidelines and Procedures**

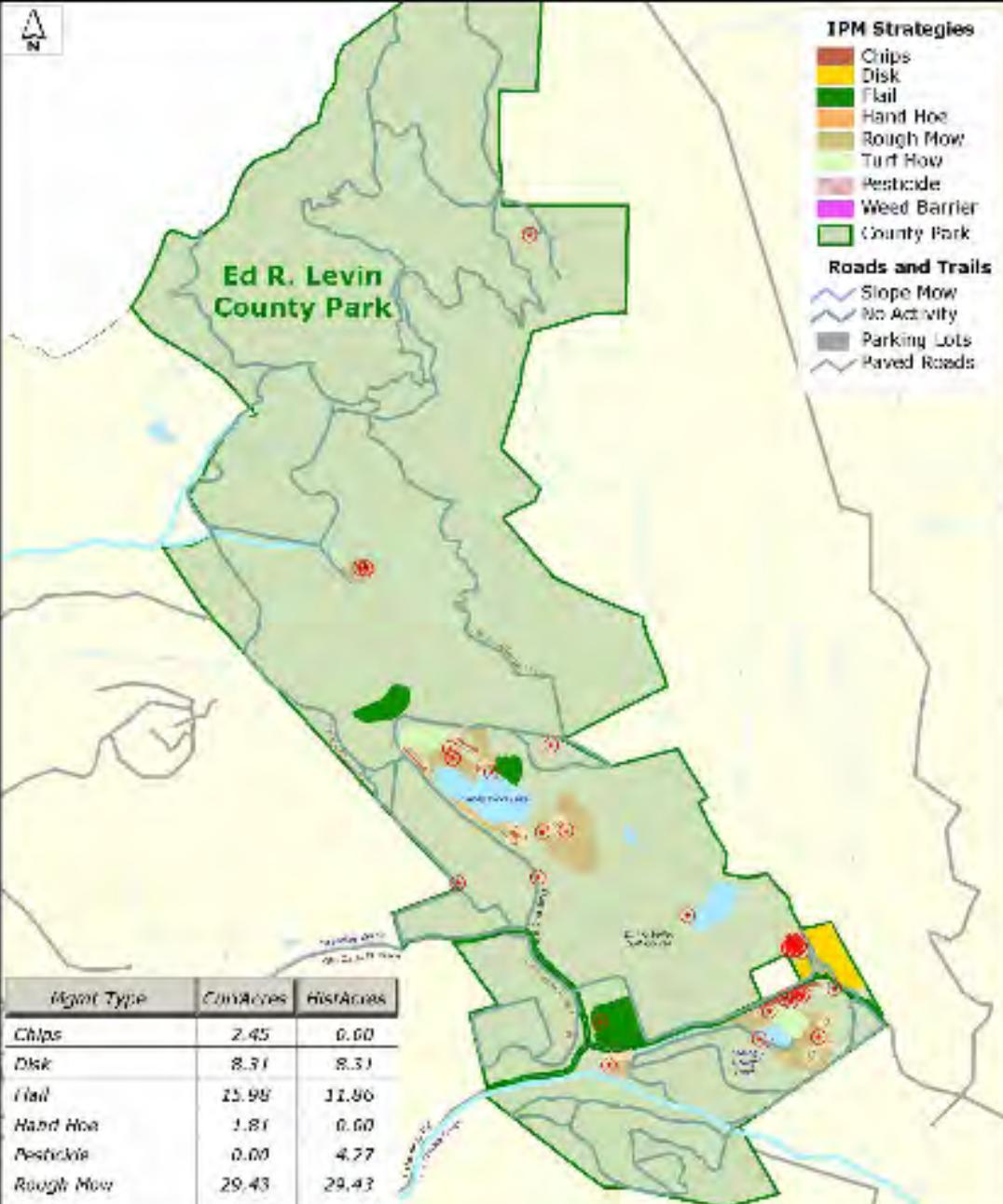
- IPM Ordinance – Interpretation
 - Work with Property Management Groups to negotiate IPM clauses for new leases and lease renewals; capital improvement projects, contract provisions, lease negotiations etc.
- Preparation and Maintenance of Department IPM Plans
- Maintenance of IPM Data and Documents
- Selection of IPM Products, Consultants and Service Providers
- Are you deciding to use pesticide?
 - Selection of Reduced Risk Pesticides
 - Pesticide Use Exemption and Approval Process
- Pesticide Application Notification and Posting
- Pest Management Activity and Pesticide Use Reporting System
- IPM Training, Demonstrations, Public Education & Outreach
- Pest Management Field Site Surveys
- Quality Control and IPM Performance Management
- Specific Use Guidelines



DEVELOPING IPM & PESTICIDE USE REPORTING SYSTEM

- **Each Pest Management Service Activity should include:**
 - Operators Name
 - Pest Control Advisor Name & license number
 - Pest Control Technician Name
 - Site Address, Location, Sector, Township, Meridian etc.
 - Site/Location Map; GIS/GPS Map
 - Pest (s) Activity (In an IPM Program getting to know the Species is important)
 - Sanitation/Housekeeping/Maintenance Observations
 - Non-chemical approach details
 - Chemical approach details
 - Pest control advisor recommendation
 - Pesticide (s) Product name, active ingredients, EPA Registration number, formulation, and quantity of pesticide used
 - Site of pesticide application;
 - Date & Time of pesticide application;
 - Name of pesticide applicator/license number;
 - Application equipment number, if applicable;
 - Evaluation of effectiveness, cost economics





Santa Clara County IPM & Pesticide Use Reporting System



- Business Reports
- Project Specific Reports
- Monthly Pesticide Use Report
- School Annual Pesticide Use Report
- IPM Activity Cost Analysis/
- Life Cycle Costs

For more info Click here



COUNTYWIDE IPM PROGRAM DEVELOPMENT

- **Planning:** needs for each year; communicating plans to department head's for approval,
- **Budgets and Economics:** Continuously improve and make the process feasible and economical to the facilities; find alternative sources of funding (grants); writing grants and follow up;
- **Educate, train and communicate** facility managers, department IPM coordinators/safety coordinators and facility tenants
- **Procure Qualified IPM Contractors**
- **Develop a comprehensive Project specific IPM service plans**
- **Maintain records of Pesticide use exemptions**
- **Maintain Data and Document Control** (IPM Log Book - Record Keeping); submit quarterly and annual IPM activity/pesticide use reports
- **Emphasis on overall Pesticide Use Reduction:** physical, mechanical and cultural control – A non-chemical Approach
- **Program Performance Management:** ensure quality control through periodic auditing of IPM projects
- **Safety and Communication**
- **Work with Property Management to** negotiate IPM clauses for new leases and lease renewals; capital improvement projects, contract provisions, lease negotiations etc.

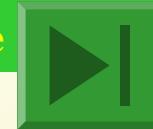
INFORMATION & TRAINING

[Do you need Facility Managers IPM Manual? Click here](#)



INFORMATION & TRAINING

Do you need IPM Resource Manual CD? Click here



For More Information Contact
Naresh Duggal - Santa Clara County IPM
(408) 299-5105

INFORMATION & TRAINING



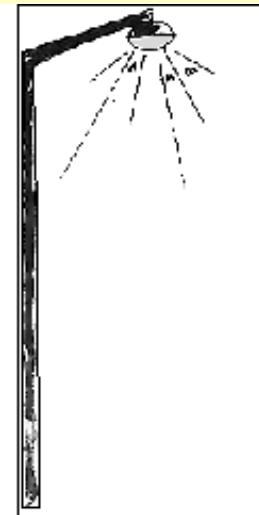
STRUCTURAL SANITATION & MAINTENANCE



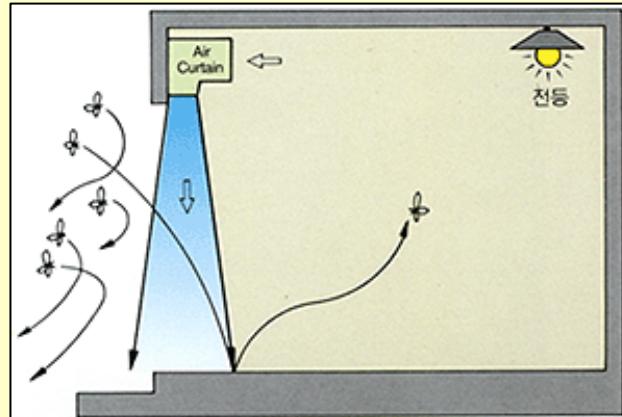
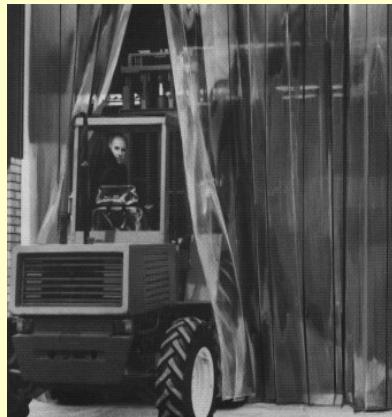
STRUCTURAL SANITATION & MAINTENANCE



STRUCTURAL DESIGN CONSIDERATIONS



Typical insect volume around mercury vapor lighting



CONSTRUCTION SITE CONSIDERATIONS





PESTICIDE USE REDUCTION URBAN LANDSCAPES

**Policy & Budget Support
Inventory & Inspection
Professional Consulting
Alternative Mgmt. Options
Budgeting
Consensus Building
Team Work
In-house or Contracting
Evaluation**

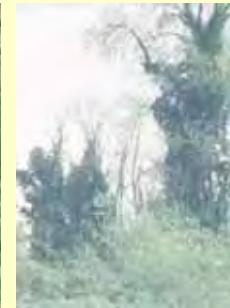
DEVELOPING IPM PROGRAM FOR URBAN LANDSCAPE

LANDSCAPE DESIGNS FOR LOW MAINTENANCE



PLANT
PLACEMENT

LANDSCAPE DESIGNS FOR LOW MAINTENANCE



Avoid Aggressive Plants
English Ivy



Purple Loosestrife an ornamental becoming a noxious weed



Flowering Cherry, Plums, Olive

PLANT SELECTION

LANDSCAPE DESIGNS FOR LOW MAINTENANCE



STANDARDS AND TOLERENCE LEVELS

LANDSCAPE DESIGNS FOR LOW MAINTENANCE



MOWING STRIP UNDERLAYMENT

LANDSCAPE DESIGNS FOR LOW MAINTENANCE



RUBBER MULCH & HARDSCAPES

LANDSCAPE DESIGNS FOR LOW MAINTENANCE



USE OF MULCH

IPM Program: Mechanical Weed Control



IPM Program: Ground Covers



RUBBER & WOOD MULCH AS WEED BARRIER



IPM Program: Organic Herbicides Trials



IPM Program: Yellow Jacket Control in Regional Parks



Mint Oil



Yellow Jacket Traps

Aquatic Weed Management



IPM Project: Invasive Weed Management



Year 2000-2005

Weeds: Yellow Star Thistle
Barbed Goat Grass, Milk Thistle
Italian Thistle, French Broom,
Arundo donax

- Use of Herbicide
- Controlled Burns
- Cattle Grazing
- Native Species Seeding
- Bio Control

Coverage: ~25,000 Acres

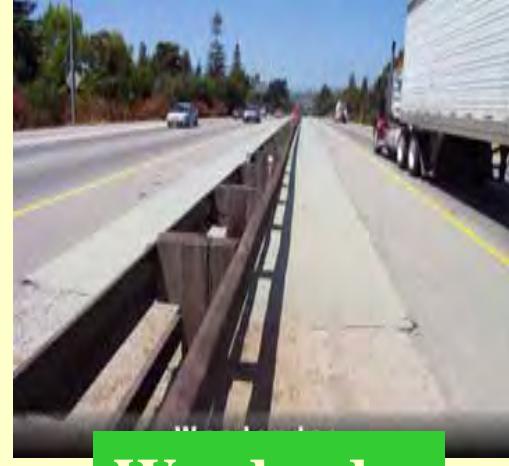
Right of Way: Vegetation Barriers



Durotrim



Polypavement



Weedender



Mulch Cover

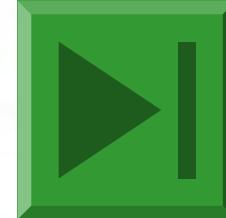
WILD LIFE PEST MANAGEMENT



**RELIANCE ON EFFECTIVE TRAPPING
PREVENTING SECONDARY KILL**

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