



*Coalition for Urban/Rural Environmental Stewardship*

[www.curesworks.org](http://www.curesworks.org)

## **Building Coalitions to Approach BMPs for Protecting Water Quality**

**Parry Klassen, Executive Director**





Coalition for Urban/Rural Environmental Stewardship  
[www.curesworks.org](http://www.curesworks.org)

- Founded 1997
- Non-profit organization:  
agricultural, urban  
projects
- Promote stewardship,  
Best Management  
Practices (BMPs)
- [www.curesworks.org](http://www.curesworks.org)



### Staff

Parry Klassen, *Executive Director*

Jim Markle, *Projects Manager*

Tamara Taliaferro, *Projects Coordinator*

Susan Stewart, *Project Specialist*

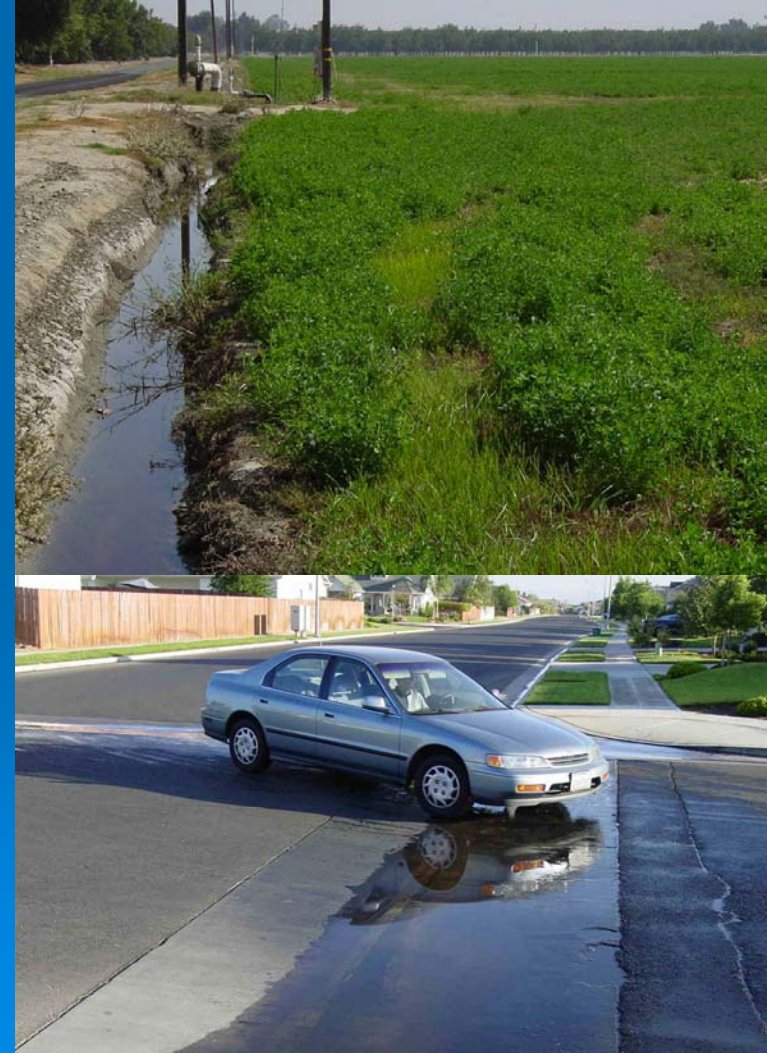
Rick Sandberg, *Project Technician*

Robert McMurphy, *Technician*

# Pesticides in Agriculture/Urban Environments: *Mitigation of Risks to Surface Water thru BMPs*

- What uses are causing problems?
- Which approaches can minimize risk?

Fact: Society realizes  
benefits from pesticides



# CURES Approach

- Build coalitions to resolve pesticide issues
  - Bring together best minds, broader interests
  - Too expensive to go it alone
- Research coordination for better information development, dissemination
  - Understand product physical/chemical properties in the environment to drive BMPs
- Advance stewardship practices
  - Common sense + science based

# Coalitions Lead to Education

- Goal is to modify user behavior
  - Create training materials, handouts, presentations
    - Reinforce key label points
    - Practices often go beyond product labels
  - Focus on user causing greatest impact
- Demonstrate public influence on issues
  - State/Regional Water Boards
  - State Regulatory Agencies

# BMP Approach to Stewardship

## *Beneficial Management Practices*

- BMPs can minimize risks to the environment
- Registrants generate extensive product data
  - To support safe and effective use when label directions are followed
- Agriculture has broader “menu” of BMPs
- Urban user BMP information is evolving; not necessarily on labels



# CURES Approach

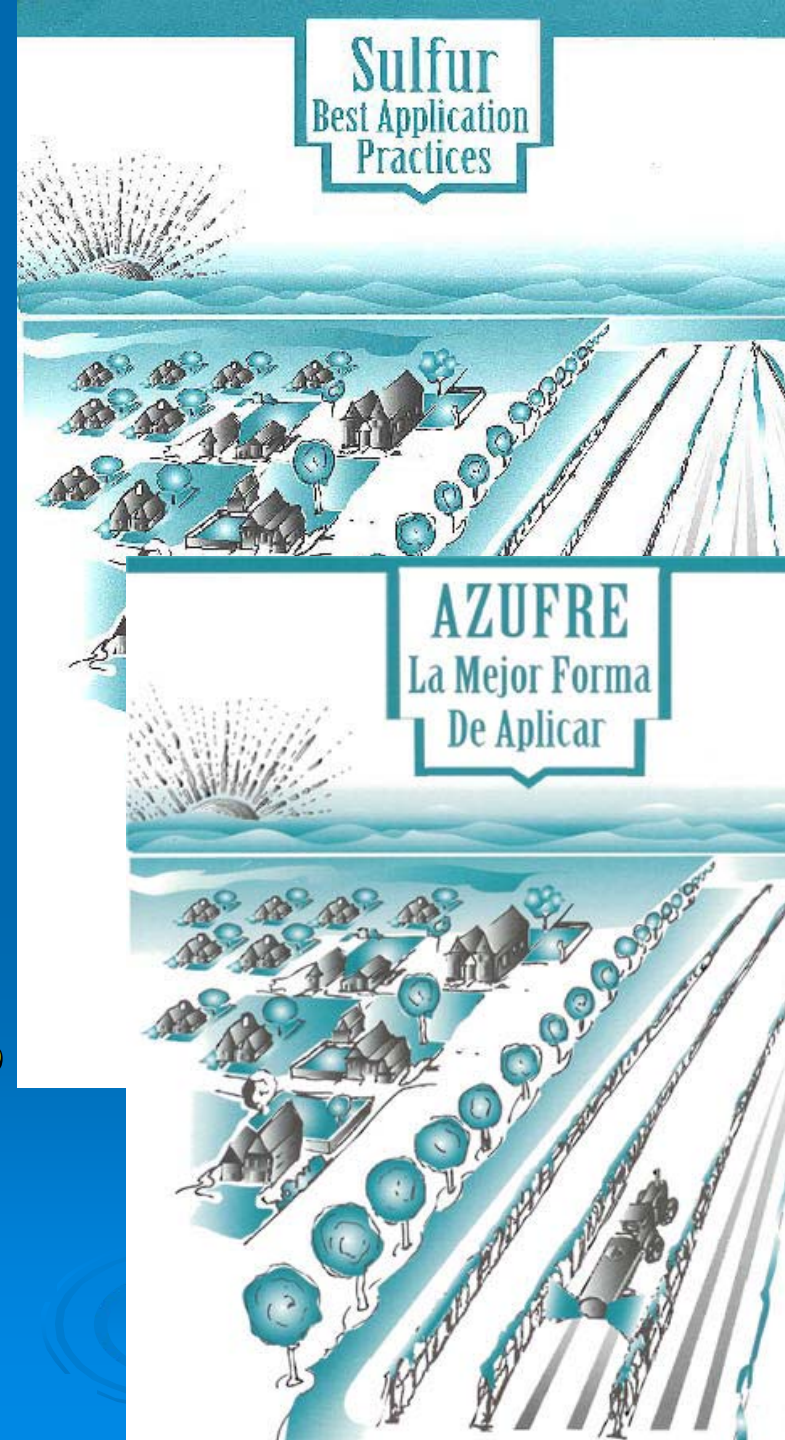
## *California Projects*

- Sulfur Spray drift
- Sacramento River Diazinon TMDL
- Central Valley Water Quality Coalitions

# First Test of CURES “Model”

2000-01 -- Sulfur drift from grapes throughout California

- CA-DPR threatened to make sulfur “Restricted Use” product
- 20+ Stakeholders documented known practices
- Produced grower BMP publication: *English and Spanish*
- Dozens of outreach presentations given to growers, PCAs
- Grape industry has integrated spray drift prevention emphasis





# Sacramento & Feather River Diazinon TMDL: dormant orchards

- 2002 - Collaborated with Sacramento Valley Water Quality Coalition/registrant
- Registrant developed BMP practices; publication for orchard growers
- Extensive outreach to user community
- CA-DPR adopted “Dormant Spray Regulations” based on label changes
- Last three years met TMDL standard except for one storm exceedance tied to tomatoes



***Central California***

# **Irrigated Lands Regulatory Program**

**Passed July 2003**

**Central Valley  
Regional Water Quality  
Control Board**

***Region 5***



# Irrigated Lands Regulatory Program

## Program Objectives

### *Form Watershed Coalitions to...*

- Characterize discharges from irrigated agriculture in the Central Valley
- Identify potential source(s) of water quality exceedances
- Encourage farmers to implement management practices to address water quality problems





# Waterway Monitoring Requirements

## Monitoring and Reporting Program

### ***Water Column***

- Pesticides
- Nutrients
- Sediment
- Salt / EC
- Boron
- Bacteria / e coli
- Ambients (temp, DO, etc)

### ***Streambed Sediment***

- Toxicity
- Pesticides (soon)

*Any constituent that can affect the quality of waters of the State*



# Central Valley Water Quality Coalitions

## *2003-ongoing*

- Farmer/irrigation district coalitions formed in response to Irrigation Lands Regulatory Program
  - Central Valley Regional water Quality Control Board
- CURES supports BMP outreach efforts in regions with documented water quality issues
  - Northern San Joaquin Valley
  - Delta
- CURES to manage \$8 million state grant to distribute funds to install BMPs in problem watersheds

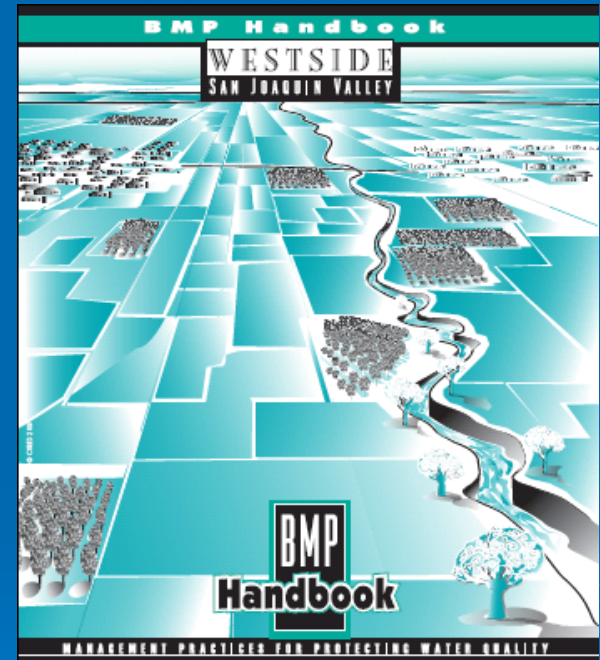


# BMP Technical Bulletins

## BMP Handbook

- Information on farming practices such as:

- Sediment basins
- PAM
- Enzyme treatments
- Tailwater return systems
- Vegetative ditches
- Irrigation scheduling



- Summaries of technical reports developed by the California Water Institute, Ducks Unlimited, California Department of Pesticide Regulation and others

# BMP Technical Bulletins

## Some translated into Spanish and/or Punjabi



### EL MANEJO DE LOS DERIVADOS DEL AZUFRE Es Su Responsabilidad

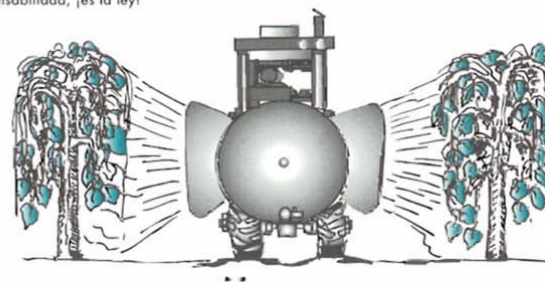
Cada vez que el azufre es rociado sobre los campos de cultivo cerca de áreas sensibles el operador del equipo debe darse cuenta del movimiento en potencia que hay a su alrededor.

Aunque el uso de azufre ha sido un elemento natural que ha sido usado por miles de años para el control de enfermedades y insectos, exponerse al azufre puede causar irritación en los ojos y dificultad al respirar.

Para prevenir la exposición al público, los operadores deben tomar medidas extras cuando se trabaja cerca de áreas sensibles como escuelas, paradas de autobús, caminos transitados, residencias y zonas habitadas.

El operador es el principal responsable en la aplicación de el azufre. Si se comete un error éste puede ser de alcances considerables.

Es mejor evitar problemas haciendo el esfuerzo de hacer una buena aplicación. Tenga sentido común cada vez que aplique el azufre. No sólo es su responsabilidad, ¡es la ley!



#### Operación del equipo

Detenga las actividades de rocío de azufre y sus derivados (sulfuros) si son una potencial amenaza en que pudiera desplazarse hacia áreas sensibles.

Evite aplicaciones cuando se encuentre gente activa en las zonas aledañas al campo en tratamiento.

Al usar rociadora disminuya las revoluciones por minuto del motor para minimizar el potencial del rocío.

Comience la aplicación sólo cuando el aplicador esté próximo a la planta a ser rociada. Así mismo si el equipo lo permite pare el soplador cuando haga cambio de surco.

Cuando sea posible aplique el azufre en la noche o en fin de semana si se está cerca de áreas urbanas o caminos donde la actividad es común.

Déle constante mantenimiento al equipo.

Comience el rocío sólo cuando ya esté cerca de la vina o árbol donde va a comenzar.

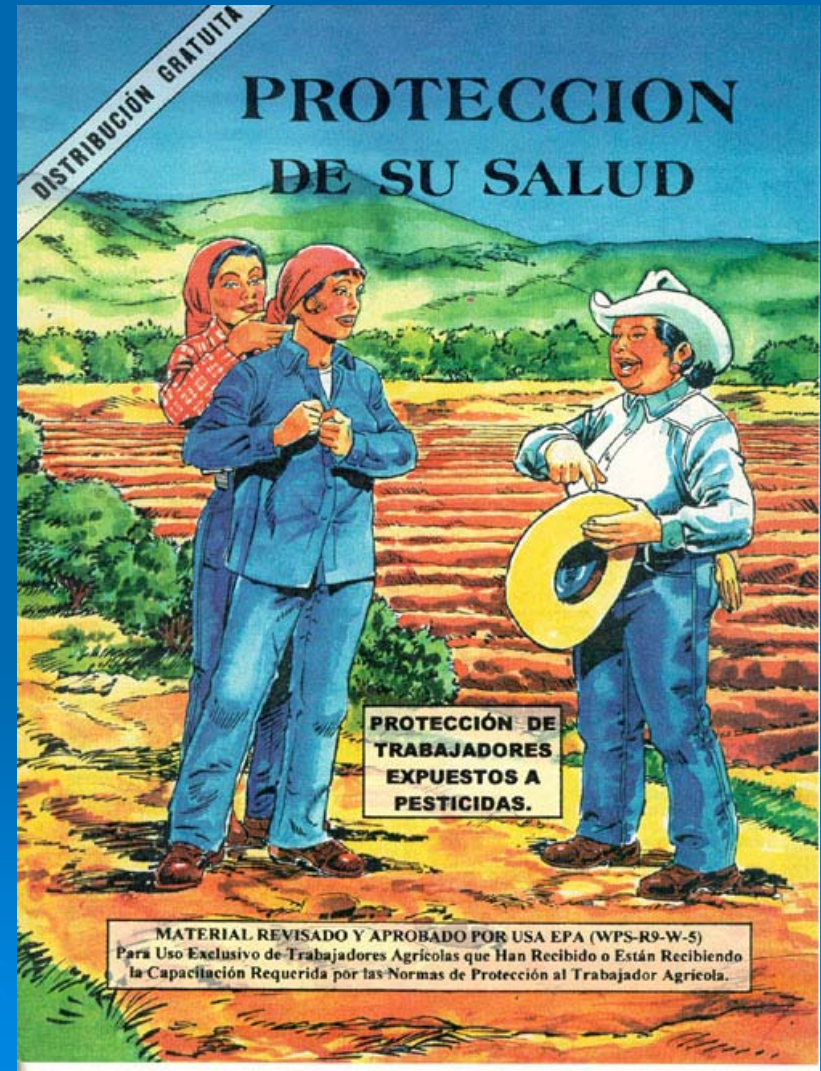




# Spanish Novella

## Farmworker Training Manual

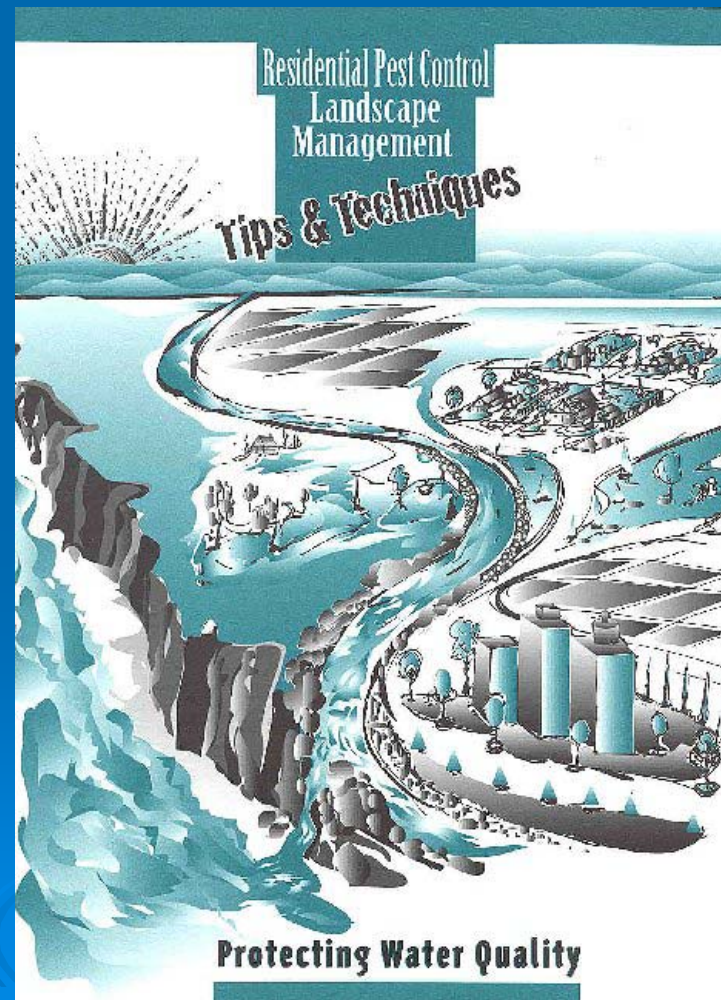
- Over 75 resources to assist trainers of farmworkers to provide proper pesticide safety training
- Safety of children and families of farmworkers
- Training methods, washing pesticide contaminated clothes, protective equipment, and heat stress
- Resources include videos, cassettes, posters, flipcharts, manuals, pamphlets and flyers



# Urban Professional Applicators

## Outlines BMPs for urban professional

- *Scout site to ID storm drains, wetlands, streams, and other sensitive areas*
- *Product selection*
  - *ID pests*
  - *ID pest source/location*
  - *Use IPM*
  - *As needed, use pest specific product at source*



# Take Home Messages

- Sustainable use of pesticides requires stewardship
  - Mitigation measures based on scientific research
    - BMPs
    - Education
- Focus on identified user community
- Modification of behavior can be done
  - Use multiple tactics including peer pressure



# Current CURES Activities/Opportunities

- New challenges
  - Pyrethroid projects and PWG collaboration
    - Urban source identification
    - BMP development
  - ESA mitigation next?
    - Base efforts on sound science
- Balanced, fair regulation for users of pest control products who implement practices when protection species and habitats
  - Agriculture - food and fiber
  - Urban pests and landscape
  - Forestry
  - Industrial

# **CURES model is...**

- Effective without additional regulation
- Engaged, broadly linked
- Backed by science
- Applicable for addressing new challenges
  - ESA Species
- Built on coalition principles and structure
- Behavior modification through outreach and collaboration

# CURES

## Expanding to a Larger Audience

- Expand the concept beyond California
  - Structure in place
  - Models to follow
- Organizations in other regions should consider adding CURES as a component of their stewardship programs
  - CURES publications are applicable in other regions
  - CURES staff are available for assistance
  - Contacts in the registrant, agriculture, urban communities

# Future Steps

- CURES has unique position between input providers, users, regulators
- Provide science-based mitigation strategies
- By better understanding fate and transport, can lay ground work for future effort
  - Focus funding where most effective
- Help find answers to challenges facing continued pesticide use



*Coalition for Urban/Rural Environmental Stewardship*

[www.curesworks.org](http://www.curesworks.org)

**Parry Klassen**

Executive Director

559-288-8125

[pklassen@unwiredbb.com](mailto:pklassen@unwiredbb.com)

*"Education For Environmental Responsibility"*