

Cal IPC Symposium – Chico, CA
October 8, 2014

Cal-IPC
Symposium
“Wildland
Weeds and
Water”

Wednesday
October 8, 2014

*Fix it if it is
Broken: Why the
New California
NPDES Aquatic
Pesticide Permit
is Better*

Michael Blankinship

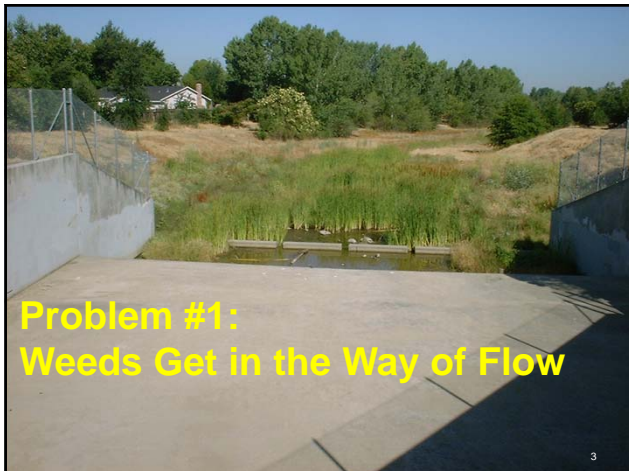


Today's Talk

- The Problem
- Why a Permit?
- Why Change?
- Questions



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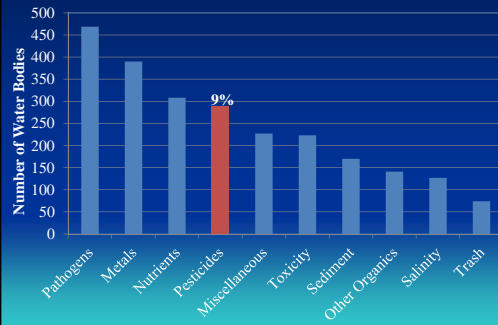
Problem #3

• People don't like pesticides

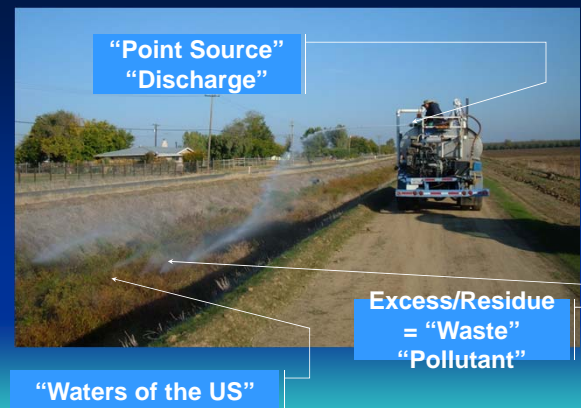
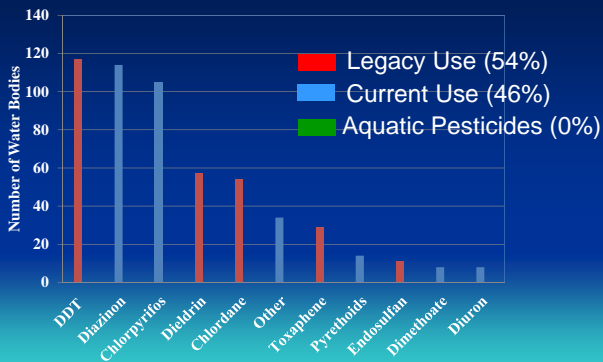
- People really don't like pesticides in their water
- Risk = Toxicity, right?
- 1996 Talent Irrigation District
 - leaking gate releases acrolein-treated water; 92K steelhead die
- On-going Clean Water Act 303(d) List



2010 303(d) List: California's 2,496 Impaired Surface Waterbodies



2010: California's Number of Pesticide-Specific Impaired Water Bodies



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What is NPDES?

- **N**ational **P**ollutant **D**ischarge **E**limination **S**ystem
- Part of the Federal Clean Water Act
- Typical Uses: stormwater, construction, industrial discharges
- Benefits:
 - Protect water quality
 - Allows discharge
 - Provides legal protection



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Approved Aquatic Herbicides

- Currently only 12 registered for Use in CA
 - Acrolein *
 - Copper *
 - 2,4-D
 - Diquat
 - Endothall
 - Fluridone
 - Glyphosate
 - Imazamox
 - Imazapyr
 - Penoxsulam
 - Sodium Carbonate Peroxyhydrate
 - Triclopyr



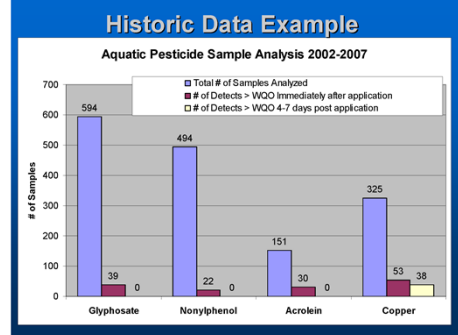
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Old Permit Data Review

- All Data
 - 100 Permittees
 - 11 Years
- Data “Snippet” Used:
 - 25 Permittees
 - 7 Years

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Old Permit Data Example



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Old Permit Data Summary

- **What does Historic Data suggest?**
 - 9% Exceeded WQO before 7 days
 - No adverse acute impact noted
 - “We applied it, we found it”
 - 2% Exceeded WQO after 7 days
 - Solely Due to Copper
 - No adverse chronic impact noted
 - Degradation consistent with literature
- **Bottomline:**
 - Follow the label = Acceptable water quality

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Old Permit Data Summary

- Ave Cost/Permittee/Year: \$6,500
- Total “Invested”: \$7,100,000

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Why the New Permit?

- **The Old Permit Data Showed:**
 - Costly
 - WQO Exceedence Rare
 - Acute/chronic impact not apparent
 - Consistent with literature
- **Justification For Some Change**

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The New and Improved Permit: Key Provisions

- 3 samples, not 4
- Glyphosate “1 and Out” per setting
- All Others: “6 and Out” per setting
- Group Formation
- New Permit is submitted electronically*



*Currently applies only to the Central Valley

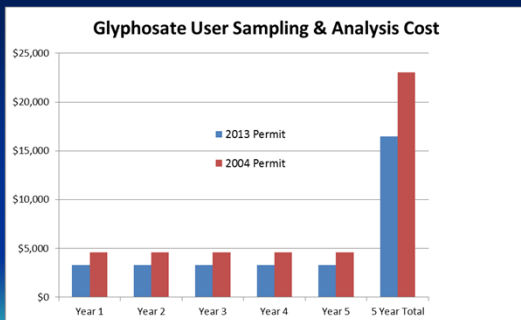
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Case Study Glyphosate

- Example: For an RCD making up to 24 glyphosate applications per year
- Sampling Requirements
 - Old Permit → 2 sample events/yr
 - The “10%” Rule
 - New Permit → 1 sample event
 - The “One and Done” Rule

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Case Study



Savings!

~\$7,000

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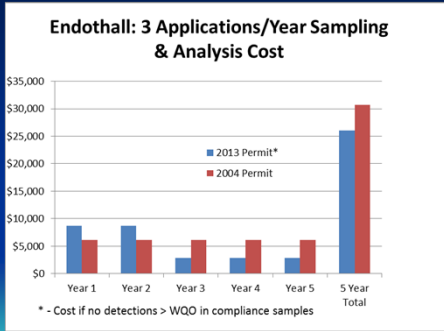
Case Study Endothal

- Example: For an RCD making up to 3 endothal applications per year
- Sampling Requirements
 - Old Permit → 2 sample events/yr
 - The “10%” Rule (minimum 2)
 - New Permit → 1-3 sample events
 - 3 sample events first two years then 1 per year*

*If no detections > WQO in compliance samples.

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Case Study



Savings! → ~\$5,000

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The Bottomline

- Old Permit: \$7,000,000
- New Permit: \$3,300,000
- Savings: \$3,700,000

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Summary & Wrap-up

- California Aquatic Pesticide Permit (“Weed Permit”)
 - http://www.waterboards.ca.gov/water_issues/programs/npdes/aquatic.shtml
- Join the Lyris Distribution list



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Our Most Recent
New Product
Introduction:

The Spud®



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