

Cal-IPC Ventura, CA
October 15, 2010

Cal-IPC
2010
Symposium

Ventura, CA
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Rules to Follow
for the Use of
Aquatic
Herbicides

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What Are the Rules?

Laboratory Rules:

- When you don't know what you're doing, do it neatly
- First draw your curves, then plot your data
- Experience is directly proportional to equipment ruined
- To do a lab really well, have your report done well in advance
- Team work is essential, it allows you to blame someone else

Meeting Rules:

- Never arrive on time, or you will be stamped a beginner
- Don't say anything until the meeting is half over; this stamps you as being wise
- "It is better to be thought a fool than to open one's mouth and remove all doubt." (Benjamin Franklin)

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Today's Talk

- What Are the Rules?
- What is NPDES?
- Do I Need an NPDES Permit?
- Injunction Dysfunction
- Are the Rules Changing?
- The Future



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What Are the Rules?

The First Wave

- The Federal: FIFRA
- State: DPR
- Local: COCs and County Ordinances

The Second Wave

- The Federal: NPDES
- State: NPDES
- Local: Injunctions



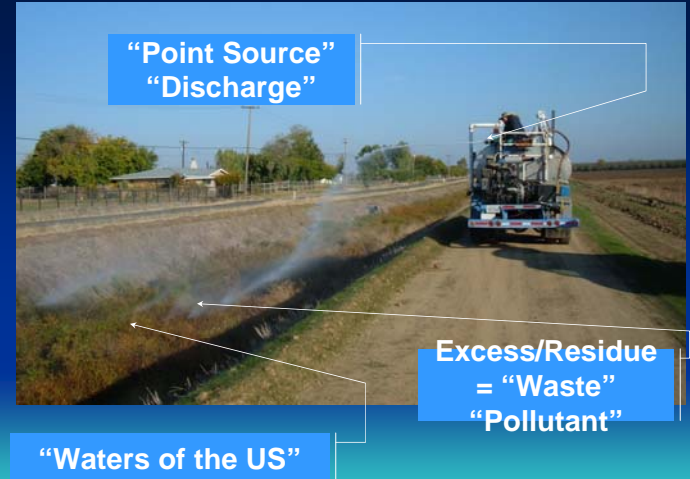
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What is NPDES?

- **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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Do I Need an NPDES Permit?

- You “discharge” a “pollutant” to “Waters of U.S.”
- Your pesticide application leaves a “residue”
- Your applications are to, over or near water
- Perceived CWA Violations and Subsequent Citizen Lawsuits Concern You



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Waters of the US “WOUS”

- All interstate waters and wetlands currently, formally or potentially used in interstate commerce;
- All other waters, including intrastate waters the use, degradation or destruction of which could affect interstate or foreign commerce
- Waters which are or could be used:
 - by interstate or foreign travelers for recreational or other purposes;
 - for industrial purposes by industries in interstate commerce
 - to take fish or shellfish and sold in interstate or foreign commerce; or

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“Waters of the US”

- Adjacent Wetlands and Ponds
- Tributaries
- Seasonally intermittent streams ultimately emptying into a WOUS

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“Waters of the US”

- All **INTER**state waters and wetlands currently, formally or potentially used in interstate commerce;
- **Example: Klamath, Truckee & Colorado Rivers**
- All other waters, including **INTRA**state waters the use, degradation or destruction of which **COULD** affect interstate or foreign commerce including waters:
- Waters which are or **COULD** be used:
 - by interstate or foreign travelers for recreational or other purposes;
 - for industrial purposes by industries in interstate commerce
 - to take fish or shellfish and sold in interstate or foreign commerce; or
- **Example: The Delta**
- **TRIBUTARIES** to WOUS
- **Reasonably intermittent streams that ultimately empty into a WOUS**
- **Ponds adjacent to WOUS**
- **Example**

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“Waters of the US”

Excludes:

- Pre-1985 converted cropland
- Waste treatment ponds
- Artificial lakes/ponds created by excavating/diking dry land to collect/retain water used exclusively for stock watering, irrigation, settling basins, or rice growing
- Above the “ordinary high water mark”

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“Waters of the U.S.”



Ask: Could I Be Conected?”

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“Interstate Commerce”: California’s Irrigated Ag Economy

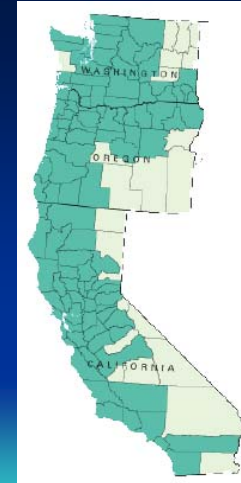
- #1 food and agricultural producer in the US for >50 consecutive years
- > 95% of almonds, artichokes, dates, figs, kiwifruit, olives, persimmons, pistachios, prunes, raisins, clovers, and walnuts in the US
- > 80% of strawberries in the US
- > 75% of all ripe olives in US
- > 50% of fruit, nuts, and vegetables in US

Source: CDFA

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Salmonids

- CA, WA, OR
- 2 Aquatic pesticides:
 - 2,4-D
 - Triclopyr



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Injunction Dysfunction

- Salmon/Steelhead
- Red-legged Frog
- Goby 11
- Bottomline:
 - Buffer Zones
 - Exceptions for Invasive & Noxious Species Control



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Red Legged Frog

- 4 Aquatic pesticides:
 - Imazapyr
 - 2,4-D
 - Glyphosate
 - Triclopyr
- ~40K Ac & 33 Counties



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"Goby 11"

- Tidewater Goby + 10 others
- 3 Aquatic pesticides
 - 2,4-D
 - Acrolein
 - Diquat
- 8 Counties
 - Alameda
 - Contra Costa
 - Marin
 - Napa
 - San Mateo
 - Santa Clara
 - Solano
 - Sonoma



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Chemical Control

- Currently only 10 registered for Use in CA



Chemicals
Triclopyr
Diquat Dibromide
Glyphosate
Fluridone
Na ₂ CO ₃ Peroxyhydrate
Non-Ionic Surfactants
2,4-D
Imazapyr
Endothall
Acrolein *
Copper *

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"Current" California Permit Requirements

- Submit Notice of Intent (NOI)
- Prepare and Execute an Aquatic Pesticide Application Plan (APAP)
- Sample & analyze in and around treated area
- Report annually

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Are The Rules Changing?

The Draft EPA Permit

- Likely will not apply in CA (We are currently more stringent)



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Are the Rules Changing?

The "New" CA Weed Permit

- SWRCB Re-writing Aquatic Pesticide Permits
 - Vectors
 - Invasive Animals
 - Aerial Applications
 - Aquatic Weeds



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Rules for Aquatic Pesticide Use

- Know the Rules
- Understand Permit Criteria
- Get Permit(s)
- Understand Injunction Limitations



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The Future

- Jan 2011: Draft Aquatic Weed Permit Out
 - May Mirror Other Permits
 - Toxicity testing?
 - Group Monitoring?
 - Restrictions on copper?
- Mar 2011: CA Finalizes permits
- Apr 2011: New permit ready to go



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The Future: Stay Informed

- California Aquatic Pesticide Permit ("Weed Permit")
 - http://www.waterboards.ca.gov/water_issues/programs/#permit
- Goby 11 Injunction
 - <http://www.epa.gov/oppfead1/endorsement/litstatus/factsheet.html>
- Red-Legged Frog Injunction
 - http://www.cdpr.ca.gov/docs/endspec/rl_frog/index.htm
 - <http://www.epa.gov/espp/litstatus/redleg-frog/rf.htm>
- Salmonid Injunction
 - <http://www.epa.gov/espp/litstatus/wtc/maps.htm>



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More Information

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