



# Idaho's Pesticide and Water Quality Program Update

Idaho State Department of  
Agriculture Division of Agricultural Resources

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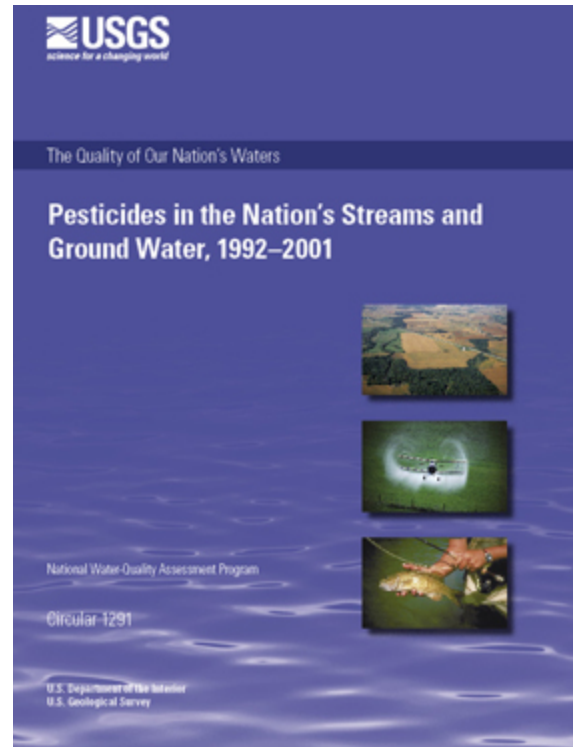
# Topics

- EPA FIFRA Grant Guidance Changes
- USGS National Report
- Idaho's Approach to Grant Guidance
- Update on Idaho's Ground and Surface Water Programs
- Summary

# EPA State/Tribal 2008 – 2010 Grant Guidance

- EPA is changing approach to pesticides and water quality
- Historical approach – ground water
- Future approach – ground and surface water
- Change based on:
  - USGS report
  - EPA Pesticide Programs working with Office of Water
- 3 Step Measure Process
- Clean Water Act coordination, 303(d) Measure
- Reporting to EPA

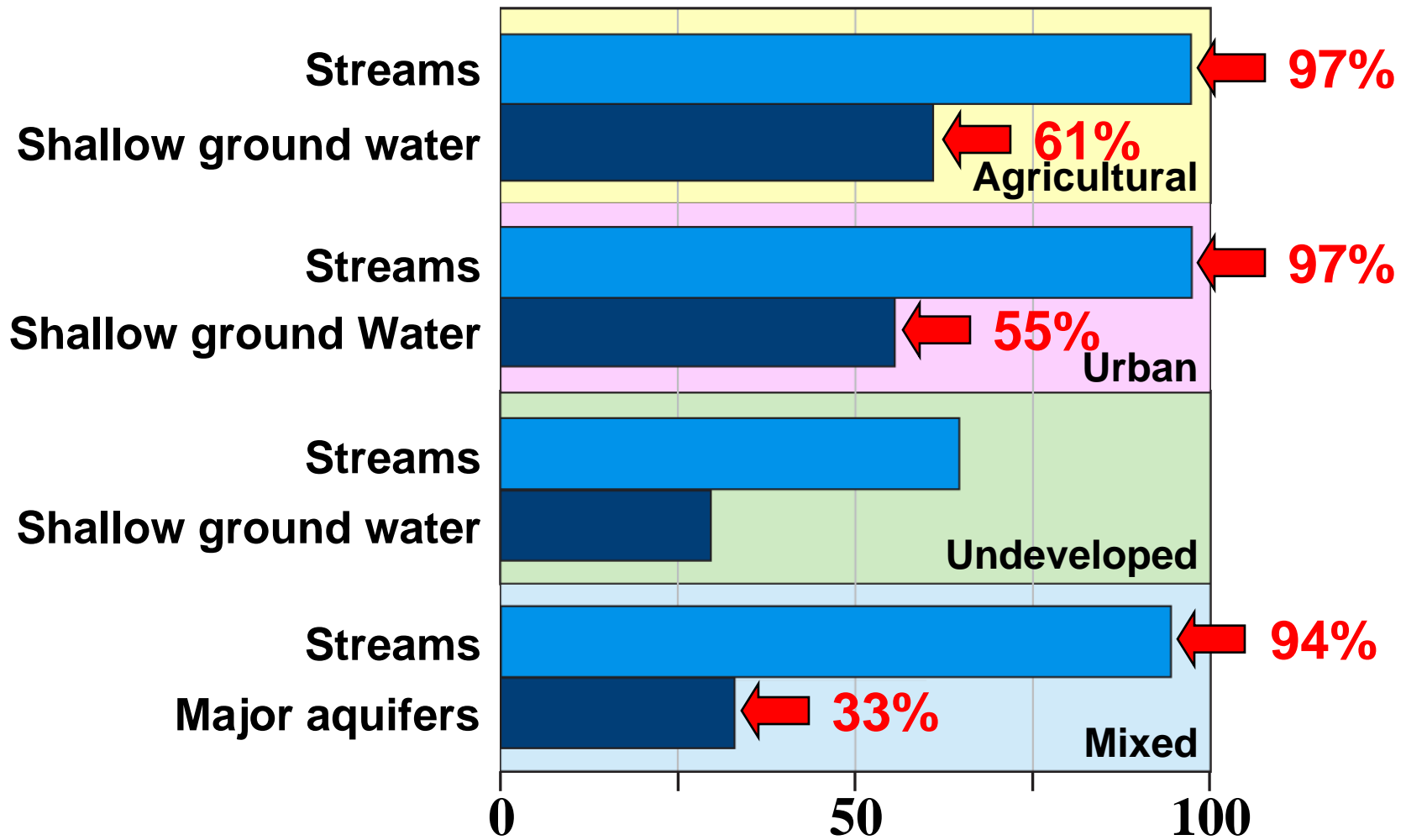
# Highlights of USGS Pesticides



From: Gilliom and others, USGS, Pesticides in the Nation's Streams and Ground Water, 1992 – 2001

<http://ca.water.usgs.gov/pnsp/pubs/circ1291/>

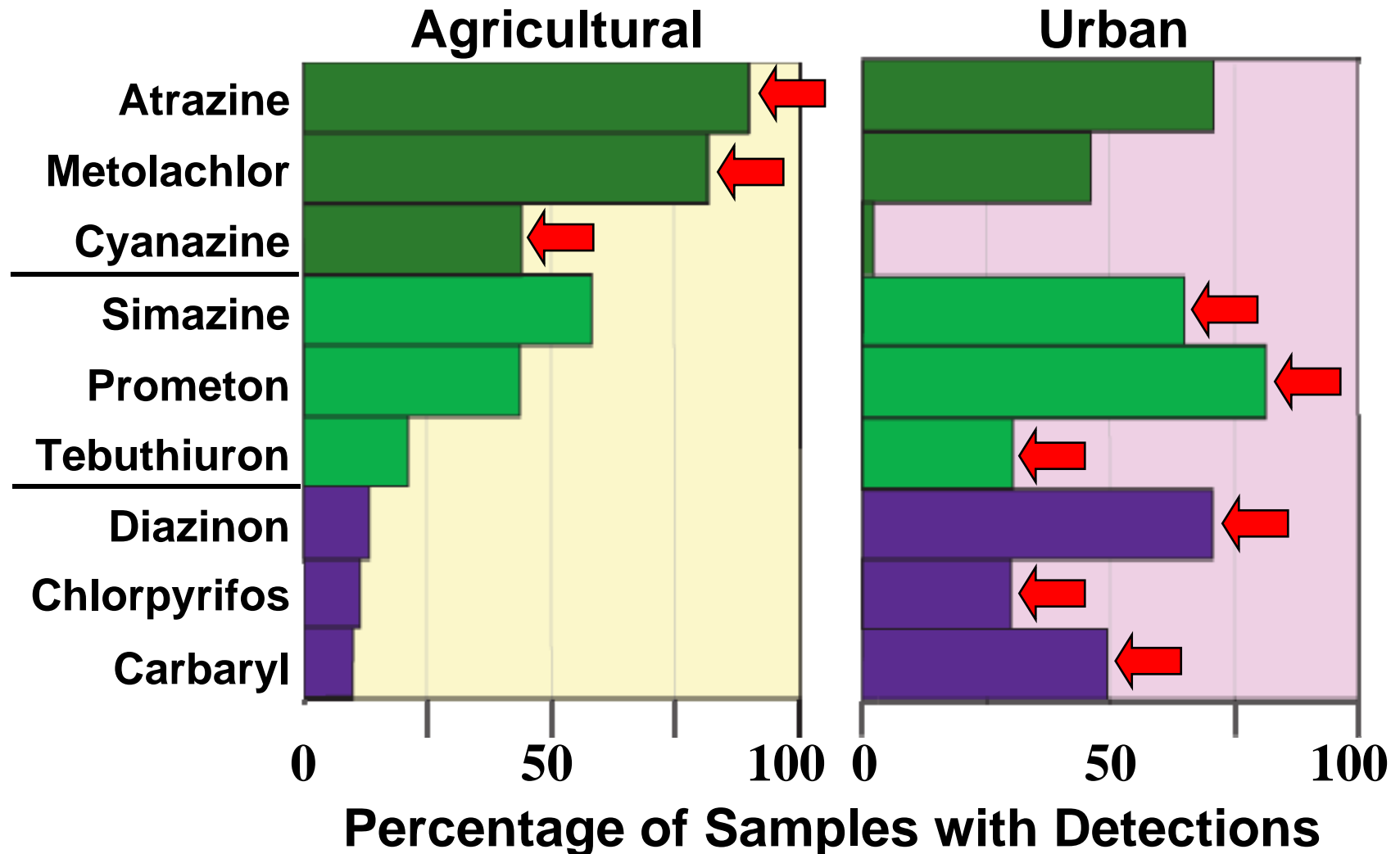
# Occurrence in Water



**Percentage of Samples with Detections**

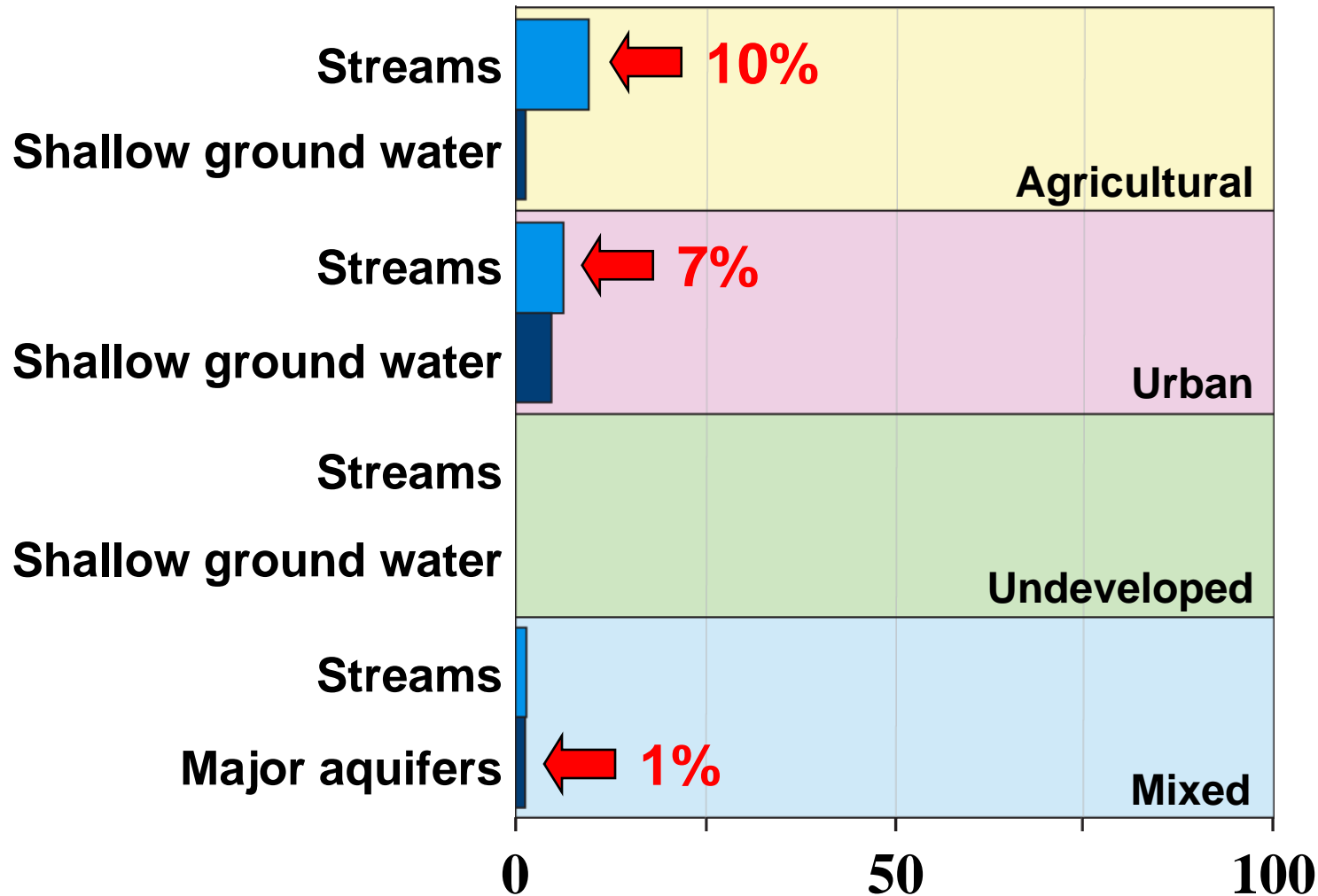
From: Gilliom and others, USGS, Pesticides in the Nation's Streams and Ground Water, 1992 - 2001

# Common Pesticides in Streams



From: Gilliom and others, USGS, Pesticides in the Nation's Streams and Ground Water, 1992 - 2001

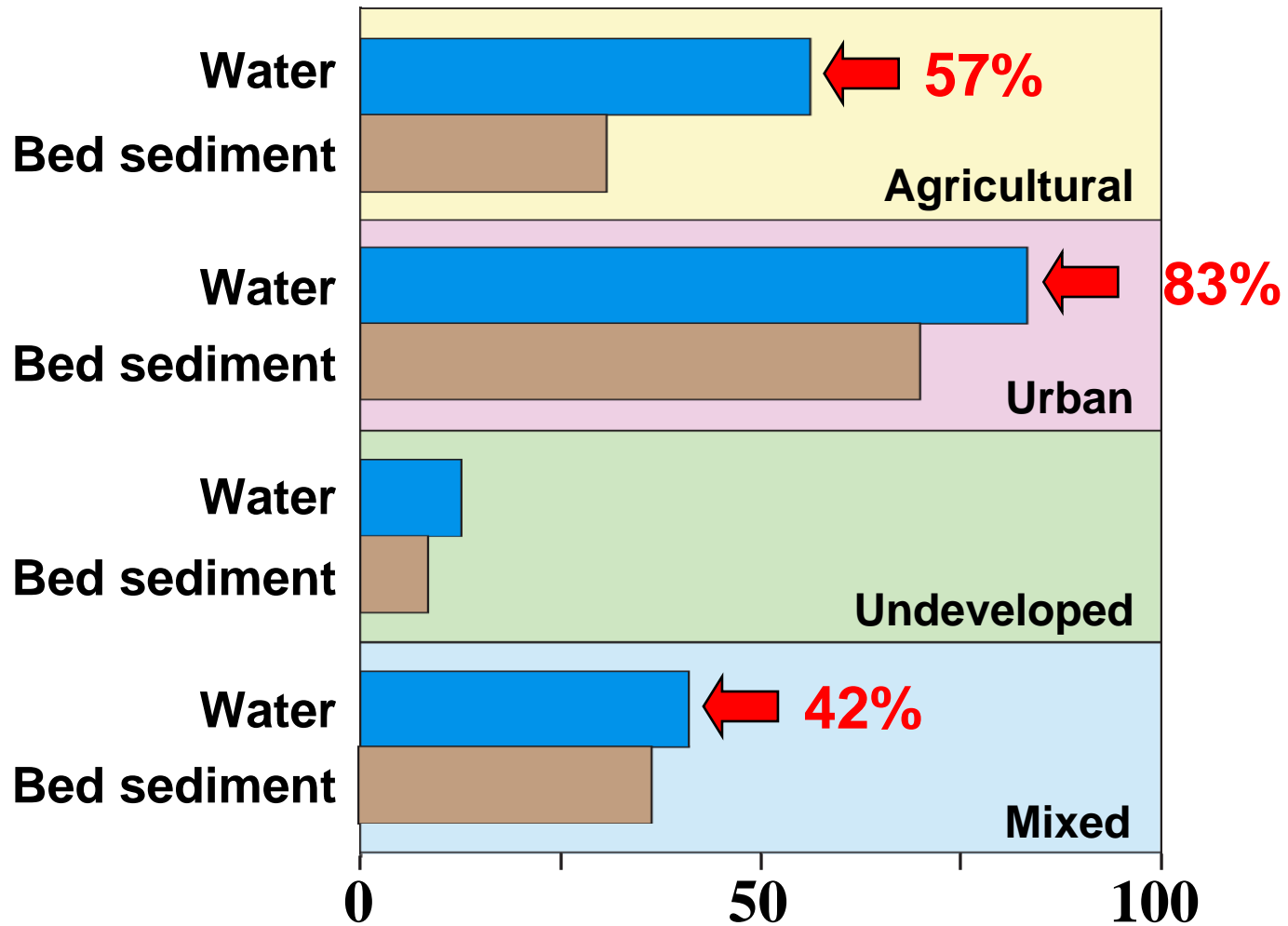
# Potential to Affect Humans



## Percentage of Sites Exceeding Benchmarks

From: Gilliom and others, USGS, Pesticides in the Nation's Streams and Ground Water, 1992 - 2001

# Potential to Affect Aquatic Life

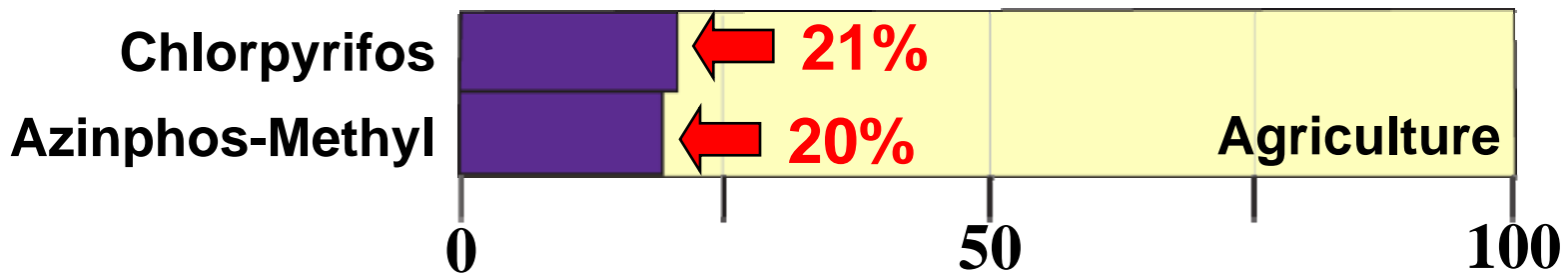


## Percentage of Sites Exceeding Benchmarks

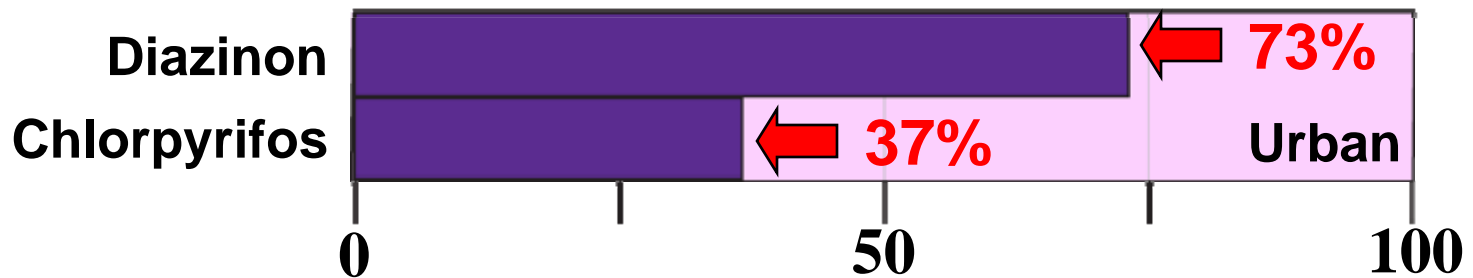
From: Gilliom and others, USGS, Pesticides in the Nation's Streams and Ground Water, 1992 - 2001

# Pesticides with Most Exceedances of Aquatic-Life Benchmarks

**57% streams had exceedances (20 pesticides)**



**83% streams had exceedances (10 pesticides)**



**Percentage of Sites Exceeding Benchmarks**

From: Gilliom and others, USGS, Pesticides in the Nation's Streams and Ground Water, 1992 - 2001

# **ISDA Pesticide Management Approach to EPA Grant Guidance**



# ISDA Pesticide Management Approach to EPA Grant Guidance

- Idaho Rules Governing Pesticide Management Plans (PMP) for Ground Water Protection.
- A surface water approach will be developed and implemented in this and subsequent grant years.
- Work to utilize the registration and registration review process to limit adverse impacts of pesticides on water resources.

# ISDA Pesticide Management Approach to EPA Grant Guidance

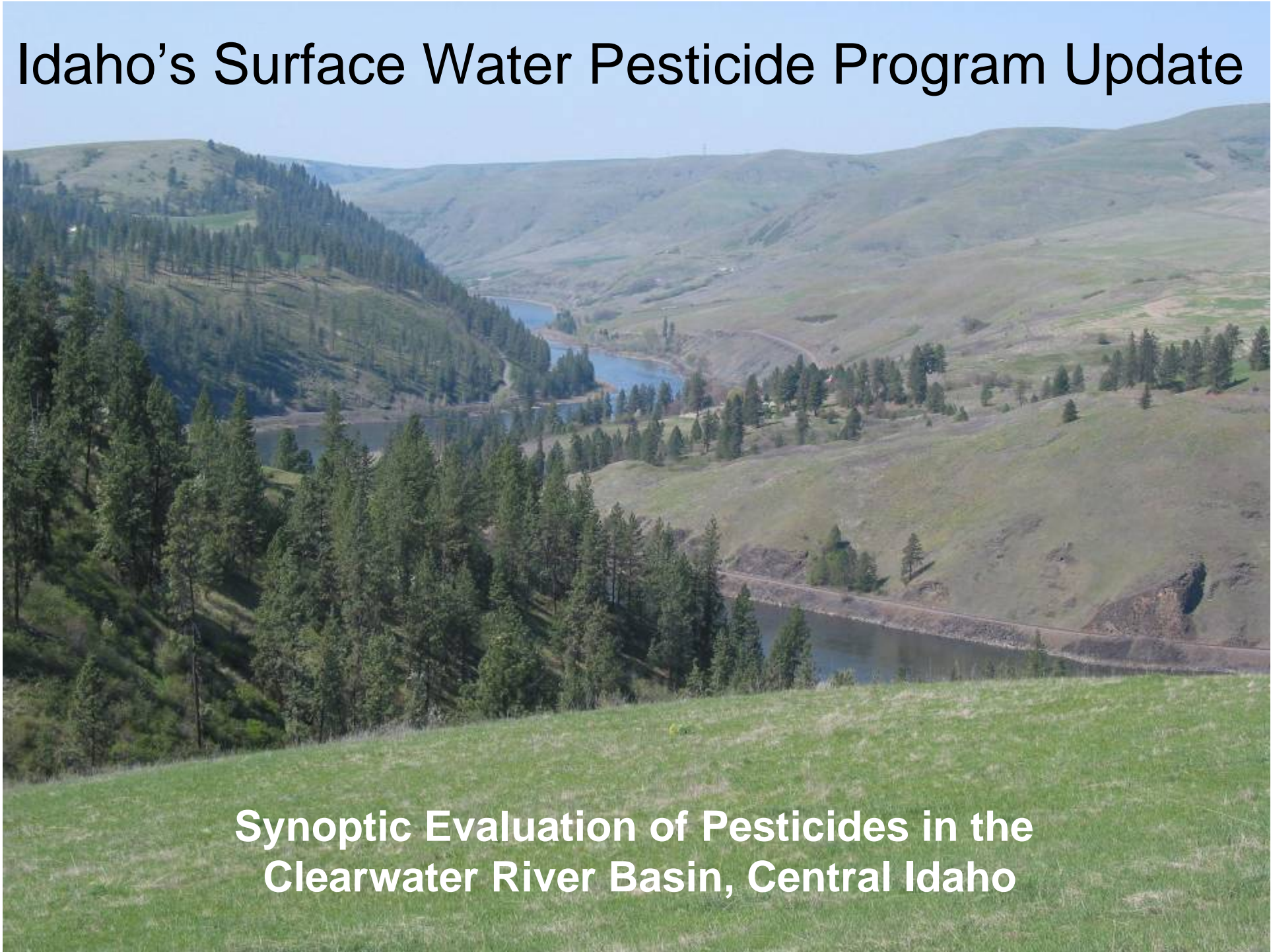
- Monitor compliance with and enforce non-compliance with water quality protection as enumerated on labeling.
- Implement routine inspections in areas of known ground & surface water pesticide detections.
- Education
- Evaluate the success using water monitoring information.

# Idaho Ground Water Chemicals of Concern

- Atrazine – Aatrex, Atrazine
- Dacthal – Dacthal
- Triallate – Far-go, Buckle
- Dicamba – Vanquish, Clarity, Distinct
- Bromacil – Krovar, Hyvar
- Diuron – Karmex, Krovar
- Simazine – Pramitol, Princep
- Bentazon – Basagran
- Hexazinone – Pronone, Velpar
- Picloram – Tordon, Grazon, Pathway

# Idaho's Surface Water Pesticide Program Update

**Synoptic Evaluation of Pesticides in the  
Clearwater River Basin, Central Idaho**



# Objectives

- Clearwater has salmonid bearing streams
- Contained significant agricultural acreage
- Watersheds where pesticide applications occur
- Four streams are 303(d) listed for pesticides
- Conduct monitoring, & response
- Ensure proper use of pesticides and the protection of the environment from pesticides
- Remove streams from list

# Results

- 47 detections were confirmed
- 13 pesticides were identified: Atrazine, Bromacil, Dicamba, Dimethoate, Diuron, Hexazinone, Linuron, Methomyl, Metribuzin, Picloram, Simazine, Tralkoxydim, 2,4-D
- Leading detections: Metribuzin (11), Diuron (7), Dicamba (6), Atrazine (5)
- All pesticide concentrations detected during this study were below any aquatic chronic or acute levels
- ISDA conducting education and promoting BMPs
- Further monitoring to be done

# Overall Conclusions

- Follow new EPA guidance
- Implement Idaho's Ground Water PMP Rule
- Idaho will develop a Surface Water Program
- List pesticides of interest, & concern
- Manage pesticides of concern
- Monitoring, Education, BMPs, Additional Rules if necessary
- Coordination of FIFRA with Water activities
- Reporting of programs and measure results