

# **SURVEY OF PUBLIC ATTITUDES ABOUT WATER ISSUES IN COLORADO**

**Matt Neibauer, Reagan Waskom, and  
Troy Bauder**

**Colorado State University  
Dept. of Soil and Crop Sciences**

# Northern Plains and Mountains Regional Water Program

## State Water Coordinators

Colorado – Troy Bauder

Montana – Jim Bauder

North Dakota – Tom Scherer

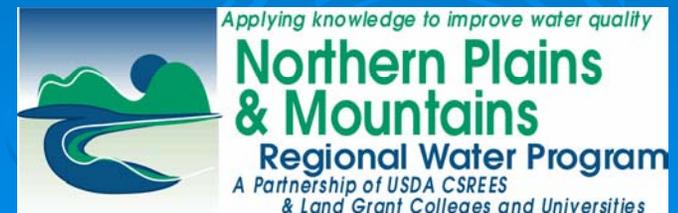
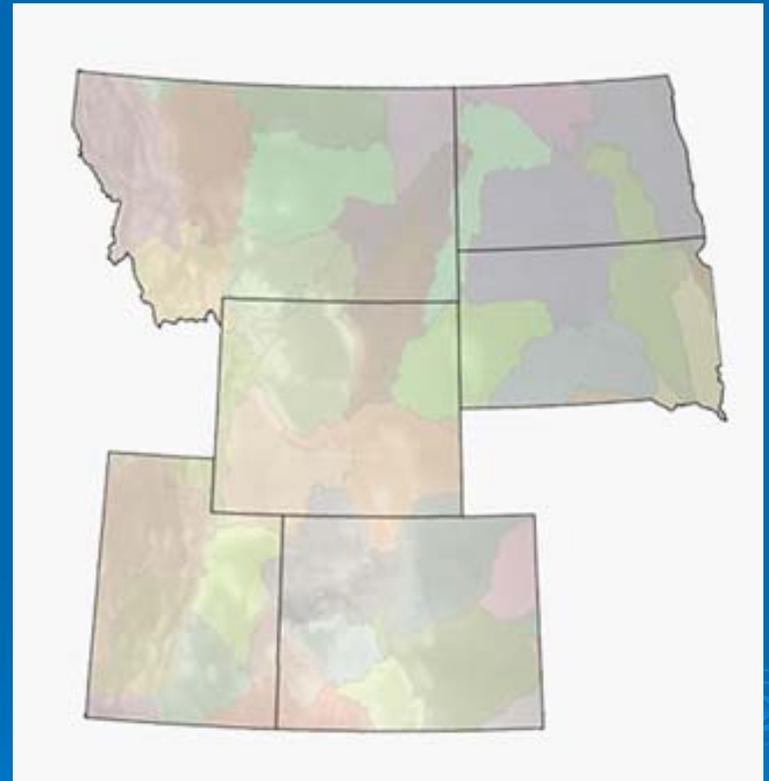
South Dakota – Dave Clay

Utah – Nancy Mesner

Wyoming – Ginger Paige

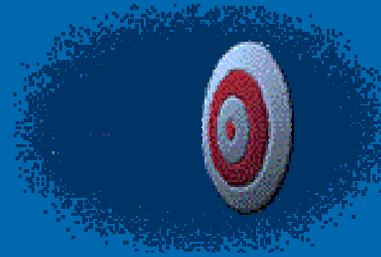
## Regional Coordinator

Reagan Waskom



# OBJECTIVES

1. Design and conduct a state-wide survey to better understand:
  - Attitudes
  - Public awareness
  - Behaviors toward water quality and the environment
  - Educational preferences
2. Gather data to identify potential future programming needs



# COLORADO SURVEY METHODS

➤ Sent out 600 surveys



- 309 surveys returned completed - for a return rate of 51.5%

# DEMOGRAPHIC INFORMATION

- Age
- Gender
- Education
- Occupation
- Size of Community
- Time of Residence



# QUESTION SET 1:



## Feelings about the environment

How important are each of the following water issues to you?

- Clean rivers
- Clean groundwater
- Clean drinking water
- Water for power generation
- Water for livestock
- Water commerce / industry
- Water for household landscapes
- Water for recreation
- Water for irrigation
- Water for aquatic habitat
- Water for municipal use

# Very / Extremely Important Issues

ISSUE	PERCENT
Clean drinking water	97
Clean rivers	95
Clean ground water	95
Water for aquatic habitat	82
Water for irrigation	82
Water for livestock	75
Water for municipal use	62
Water for power generation	61
Water for commerce	61
Water for recreation	45
Water for landscaping	30

# QUESTION SET 1:

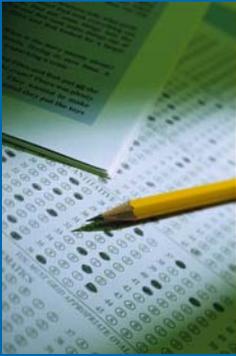
## Feelings about the environment

How important are each of the following actions in protecting our water resources?

- Better agricultural practices
- Preservation and restoration of riparian areas / wetlands
- Whole watershed management
- Restoring disturbed lands
- Cleaning urban stormwater runoff
- Preservation of ag land and open space
- Improved grazing land management
- Better management of recreational activities

# Very / Extremely Important Actions to Protect Water Resources

ISSUE	PERCENT
Better ag practices	83
Preserve ag / open Space	80
Watershed management	76
Water for livestock	75
Improved grazing	68
Preserve riparian areas	68
Urban storm water runoff	61
Better mgmt of recreation areas	51



## QUESTION SET 2: Water Issues

20. Where do you get your drinking water?

Individual well

Community well system

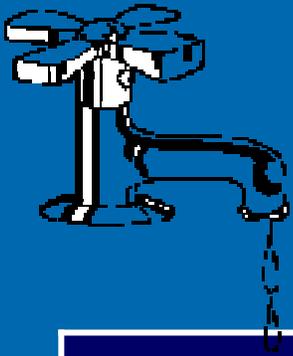
Rivers, streams, ponds, lake

City water system

Purchase bottled water

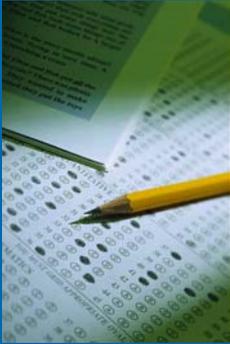
Treat with reverse osmosis

I don't know



# Drinking Water Sources

<b>SOURCE</b>	<b>PERCENT</b>
City water system	74
Individual well	13
Community well system	8
Bottled water / reverse osmosis	5
Rivers, streams, lakes	0
Don't know	1

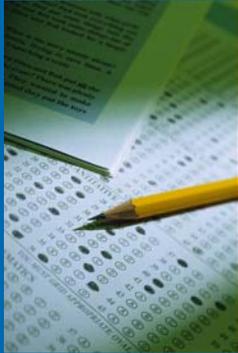


## QUESTION SET 2: Water Issues

21. Please check all conditions that apply to your home drinking water system.

# Home Drinking Water System

<b>Condition</b>	<b>%</b>
Satisfied with my drinking water	68
Use bottled water for drinking	39
Water filter on my sink	25
Never buy bottled water	20
Not satisfied with my drinking water	18
Regularly purchase 5-gallon containers	6
Drinking water separated from water supply	4
Have water softener	8



## QUESTION SET 2: Water Issues

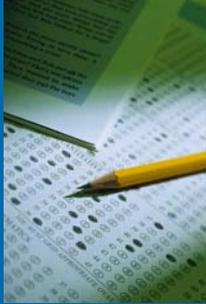
22. Do you feel your home drinking water is safe to drink?



# Home Drinking Water Is Safe To Drink

SAFE?	PERCENT
YES	92
NO	8

Note: Not significantly different by categories of Community Size; Time in Colorado; Education, or Occupation



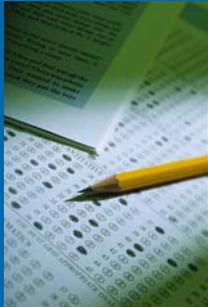
## QUESTION SET 2: Water Issues

23. In your opinion, what is the quality of groundwater in your area?
24. In your opinion, what is the quality of surface waters where you live?

# Quality Of Groundwater and Surface Waters

Quality	Groundwater	Surface Waters
	------%-----	
Good or excellent	20	15
Good and improving	9	17
Good but deteriorating	25	25
Fair	14	23
Poor but improving	1	2
Poor	4	8
No opinion / don't know	27	10

Note: Not significantly different by categories of Gender; Education, or Occupation

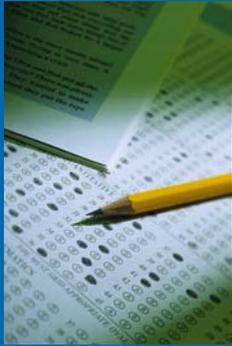


## QUESTION SET 2: Water Issues

25. How do you rate your awareness of the following factors affecting water quality?

# Awareness of Factors Affecting Water Quality

Factors	Very Aware	Somewhat Aware	Unaware
Ag Water Management	11	50	39
Animal Waste Management	9	37	54
Drink Water / Human Health	31	57	12
Environmental Restoration	11	59	30
Nutrient / Pesticide Mgmt.	12	43	45
Pollution Prevention/Assess	13	54	33
Water Conservation	39	51	10
Water Policy / Economics	13	61	26
Watershed Management	10	49	41

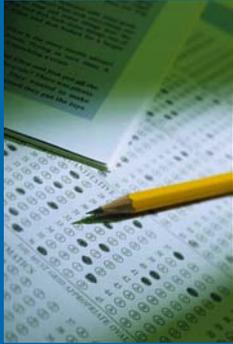


## QUESTION SET 2: Water Issues

26. Do you know of or suspect that any of the following pollutants affect water quality in your area?

# Awareness of Conditions Affecting Water Quality

POLLUTANT	NOT PROBLEM	DO NOT SUSPECT	DON'T KNOW	DO SUSPECT	IS PROBLEM
High bacteria	7	26	47	15	5
Fertilizers/ Nitrates	6	19	41	25	9
Heavy metals	7	21	46	19	8
Minerals	6	19	43	26	7
Pesticides	6	21	42	26	5
Mining Waste	11	22	41	17	8
Salinity	16	34	38	10	2
Pharms	10	25	49	15	2

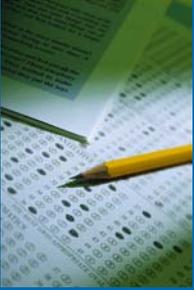


## QUESTION SET 2: Water Issues

27. What factors are the most responsible for existing pollution problems in rivers and lakes in Colorado?

# Most Responsible for Existing Pollution Problems

Factor	% Respondents
Wastes from urban areas	44
Industry	38
Drought	36
Mining	35
Animal Agriculture	28
Erosion from roads / construction	26
Forest fires	23
Runoff from landscapes	18
Agriculture (crops)	14
Septic systems	11
Military bases	7
Forestry (wood harvesting)	3
Rangeland Management	2

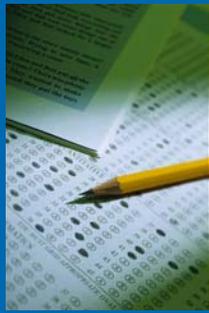


# QUESTION SET 3: Protecting and Preserving Water Resources

29. Who should be the most responsible for protecting water quality in your community?

# Responsibility For Protection

RESPONSIBILITY	PERCENT
State government	51
City and county	23
Federal government	12
Individual citizens	7
Other	5
Don't know	2



# QUESTION SET 3: Protecting and Preserving Water Resources

30. Have you or someone in your household done any of the following as part of an individual or community effort to conserve water or preserve water quality? (check all that apply)



# Water Conservation or Water Quality Actions

<b>ACTION</b>	<b>% Respondents</b>
Changed the way your yard is landscaped	73
Changed how you use water in the house	68
Bought or installed a water saving device	68
Changed how you wash your vehicle	50
Chose to dispose of household chemical or yard waste at approved facility or pick-up time	49
Changed how you deal with motor oil	40

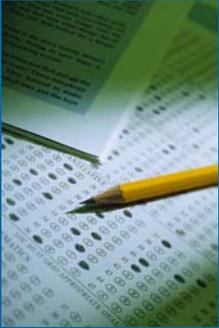


## QUESTION SET 4: Water Quality Education

33. Would you like to learn more about any of the following water quality issue areas? (circle all that interest you)

# Water Quality Issues

ISSUE	% WANT MORE EDUCATION
Protecting drinking water	55
Watershed management	34
Water Policy	33
Community actions on water issues	33
Fish and wildlife needs for water	33
Nutrients and pesticide management	28
Animal waste management	25
Private well and septic system mgmt	24
Irrigation management	23
Forest mgmt and water issues	22
Small acreage resources mgmt	21
Watershed restoration / committees	20



## QUESTION SET 4: Water Quality Education

34. If you had the following kinds of learning opportunities available, which would you most likely take advantage of for water quality issues? (Check up to 3 items)

# EDUCATIONAL PREFERENCES

<b>OPPORTUNITY</b>	<b>PERCENT YES</b>
Read printed fact sheets	58
Read newspaper articles	58
Visit web sites	43
View demonstration/display	19
Watch a video	18
Volunteer activity	12
Attend fair/festival	9
Home, farm water practices assessment	9
Attend short course	9
Take a course for certification or credit	6
Training for volunteer position	6

# Summary

- Majority of the respondents are concerned with drinking water and water quality
- Many were satisfied with drinking water and think it is safe
- Many don't know what conditions affect their water quality
- Educational opportunities are present concerning water quality and drinking water
- Barriers to educational opportunities need to be addressed
- Regional survey responses differed from Colorado
- Opportunities exist to explore perceptions at the watershed level in Colorado

# Contact Information

- Matt Neibauer
- Colorado State University
- (970) 491-5124
- [matt.neibauer@research.colostate.edu](mailto:matt.neibauer@research.colostate.edu)