Applying knowledge to improve water quality



Southern Regional Water Program

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This guide is an original publication developed for the Irrigation Water Management program of the SRWP

Agri-Agua

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Marsha M. Wright¹ R. Craig Runyan²

1 Soil & Water Conservation Specialist, New Mexico Department of Agriculture 2 Extension Water Resource Specialist, NMSU Plant Sciences Department

for

The Irrigation Water Management Program Team

Craig Runyan, New Mexico State Univ., Chair Tom Obreza, Univ. of Florida, Co-Chair Sam Dennis, Tennessee State Univ. Bob Goodman, Auburn Univ. Garry Grabow, North Carolina State Univ. Alton Johnson, Alcorn State Univ. Jeff Koch, Prairie View A&M Univ. Joe Massey, Mississippi State Univ. Bryan Smith, Clemson Univ. Phil Tacker, Univ. of Arkansas Jim Thomas, Mississippi State Univ. Ted Tyson, Auburn Univ. Rad Yager, Univ. of Georgia

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Agri-Agua

You won't need pen or paper to take this quiz about water use in agriculture. Just start at #1, and follow the directions to the next station. Even a wizard might learn a thing or two about our most precious resource. Good Luck!



1 Which crop uses more water per pound of dry matter produced? Alfalfa. Go to 3 Corn. Go to 5

2 No, but water used for washing and drinking totals almost 9 gallons for every gallon of milk produced Go to 6

3 Alfalfa uses more water, but requires little or no nitrogen fertilizer and, as livestock feed, provides twice as much protein as corn. Go to 7

4. Water pollution will always occur where excess livestock manure is generated.

Yes. Go to 11 No. Go to 9

5 Nope. Corn has fewer stomata (pores) in its leaves, and uses water more efficiently than alfalfa.

Go to 3

6 A cow drinks three to four gallons of water for every gallon of milk produced. More water is needed to process her feed. 7 How much water does a dairy cow need to drink to produce a gallon of milk? 4 gallons. Go to 6 9 gallons. Go to 2

8 Which soil type contains more water at saturation? Sand. Go to 10 Clay. Go to 12

9 That's right. Proper management practices greatly reduce pollution risks from manure.

Go to 8

10 Sorry, Sand has large pore spaces, but less total pore space than clay, so it holds less water when saturated and drains easily. Go to 17

11. Not always. Risks posed by manure are minimized with good facilities and sound management.

Go to 8

12 Right. Clay has smaller pores, but more total pore space than sand, so it hold more water at saturation and resists draining.

Go to 17

13 Not true. Poor quality water can reduce pesticide effectiveness, damage spray equipment, and contaminate food crops.

Go to 14

14 If hay is selling for \$100 per ton, how much is the water in the hay worth? \$10-\$15. Go to 18 \$20-\$25. Go to 15

15 No, with that much moisture it is likely to spoil, but you could put it in a bag and make haylage.

Go to 18

16 Good answer. Poor quality water can reduce pesticide effectiveness, damage spray equipment, and contaminate food crops. Go to 14

17 Is ditch or pond water as good as well water for mixing and applying pesticides? Yes. Go to 13 No. Go to 16 18 Good quality hay contains 10%-15% moisture. Higher moisture content reduces quality and may increase spoilage.

Go to 19

19 Congratulations! You

made it through. And hopefully learned something in the process. Now take what you've learned and do your part to conserve and protect our water resources.



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