

State's water:

By DENNIS DARROW

The Pueblo Chieftain

Colorado Springs spins a water fairy tale on its Web site.

Pueblo staffs a free-water booth at the Colorado State Fair.

The state publishes every kind of water brochure and book imaginable, from children's coloring books to glossy magazines that look like the Sports Illustrated of the industry.

In short, everyone wants everyone else to understand Colorado water — an industry so crowded by regulation and jargon that no one can seem to agree on the basics.

Yet, it isn't that hard.

Try your luck on this quiz:

1. Colorado's water comes from:

- a) Rain and snow.
- b) Rain dances.
- c) Reindeer.

2. Water rights signify:

- a) Priority use.
- b) A call for water sensitivity training.
- c) The opposite of water wrongs.

3. By far the biggest water users are:

- a) Farms.
- b) Cities.
- c) Car washes.

Now for a bonus question:

4. Water isn't in short supply:

- a) True.
- b) False.

If you answered a) to all of the questions give yourself an A.

Now, that last answer might surprise you. But the truth is, water isn't in short supply.

Not in Colorado.

Not in the United States.

Nationwide, overall water use continues to decline, now down 10 percent

from when the trend was first

spotted in

1980, according to the U.S.

Geological Survey, the

federal agency that tracks

water usage.

Cities' thirst for more

water has been more than offset by

reduced water use on farms, where

improved irrigation techniques are in

place, the agency reports.

Among states, Colorado ranks

fourth in the nation in water use

behind California, Texas and Idaho if

thermoelectric flows are exempted,

according to the U.S. Geological

Survey.

Colorado ranks high due to farm

irrigation. Upward of 90 percent of the

water used by Colorado goes for farm

irrigation, the actual amount second

only to California and Idaho.

Only about 5 percent of Colorado's

water goes for residential use.

In the Arkansas River basin portion

of the state, roughly 85 percent goes

for farm irrigation while 7.5 percent

goes for municipal supply, according

to 1998 estimates by the state Division

of Water Resources.



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Cities' OUR LIFE BLOOD

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Creek carries treated sewage

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Want to try for a



er: A slippery subj

Total leaving west toward Pacific Ocean: 9.1 million acre-feet



Total outflows: 10.4 million acre feet

Biggest rivers flow

- River
1. Colorado
 2. Yampa
 3. San Juan
 4. Animas-Florida
 5. White
 6. Dolores
 7. South Platte
 8. Rio Grande
 9. North Platte
 10. Los Pinos
 11. Arkansas

Source: Colorado Division of Water

TRANSMOUNTAIN



A transmountain water divers water from streams and rivers of the Continental Divide and divide via tunnels or ditches to

comes from rain and snow on the lightly populated West Slope. Only a small portion is diverted to the east for Front Range use.

In all, an estimated 9 million acre-feet of water flows from Colorado toward the Pacific Ocean and 1.3 million flows toward the Atlantic Ocean, the state Division of Water Resources says.

Most of the West Slope water goes for use in California.

As for water that flows into the Arkansas River corridor, Pueblo uses about 24,000 acre feet a year in treated water. Colorado Springs uses about 80,000 acre feet and farms use 2 million acre feet.

An estimated 15 percent of the basin's water comes from the Western Slope.

The farms on the plains need the water due to limited rainfall.

The water concerns faced by Colorado stem largely from ownership and delivery.

Farmers, even though downstream of the cities, own many of the state's top water rights and can hold onto them or sell them to the highest bidder.

Cities also own many of the top rights but most remain on the prowl to upgrade their holdings, either to get access to more water closer to the mountains or as a further hedge against long-term growth.

As reflected in the annual water report the city of Colorado Springs sends to its citizens, cities love the idea of getting their water straight from the mountain.

"Our customers receive water at their tap which has not been previously treated, consumed or recycled... thus being first in water's journey to the oceans," the city boasts.

Cities also constantly hunt for upstream storage sites.

For instance, Colorado Springs wants Lake Pueblo to expand, its efforts to build a reservoir near Buena Vista having stalled. A less attractive option is expanding a downstream reservoir.

And this is where water starts to get confusing.

Want to try for an advanced degree?

5) The city of Pueblo's water is stored at Lake Pueblo:

- a) True.
- b) False.

The answer: False.

Lake Pueblo was built to help Southern Colorado farmers and cities with their storage needs but thus far the city of Pueblo has not needed to use any of the reservoir storage for day-to-day operations.

The city draws its water directly from the Arkansas River, not the reservoir. As for water supply, the city controls enough water to serve a city three times its current size.

To meet its utility-customer's water storage needs, Pueblo maintains separate storage space at Clear Creek, Turquoise, Twin Lakes and Ivanhoe reservoirs.

The city also recently purchased more mountain land for a possible new reservoir. Meanwhile, just to be safe, the city has put in a bid for additional storage at an expanded Lake Pueblo.

Pueblo

Slippery subject

Total leaving east toward Atlantic Ocean: 1.3 million acre feet



Total outflows: 10.4 million acre feet

Biggest rivers flowing out of Colorado:

| River | Average annual streamflow at border |
|-------------------|-------------------------------------|
| 1. Colorado | 4.5 million acre feet |
| 2. Yampa | 1.6 million acre feet |
| 3. San Juan | 769,700 acre feet |
| 4. Animas-Florida | 712,600 acre feet |
| 5. White | 595,100 acre feet |
| 6. Dolores | 568,100 acre feet |
| 7. South Platte | 387,100 acre feet |
| 8. Rio Grande | 325,000 acre feet |
| 9. North Platte | 313,600 acre feet |
| 10. Los Pinos | 175,700 acre feet |
| 11. Arkansas | 142,200 acre feet |

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TRANSMOUNTAIN DIVERSION



A transmountain water diversion involves collecting water from streams and rivers on the Western Slope of the Continental Divide and moving it across the Divide via tunnels or ditches to the Eastern Slope.

Farms.
Cities.
Car washes.
How for a bonus question:
Water isn't in short supply:

True.
False.
If you answered a) to all of the questions give yourself an A.

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