

Lets look at some of the
costs associated with water!

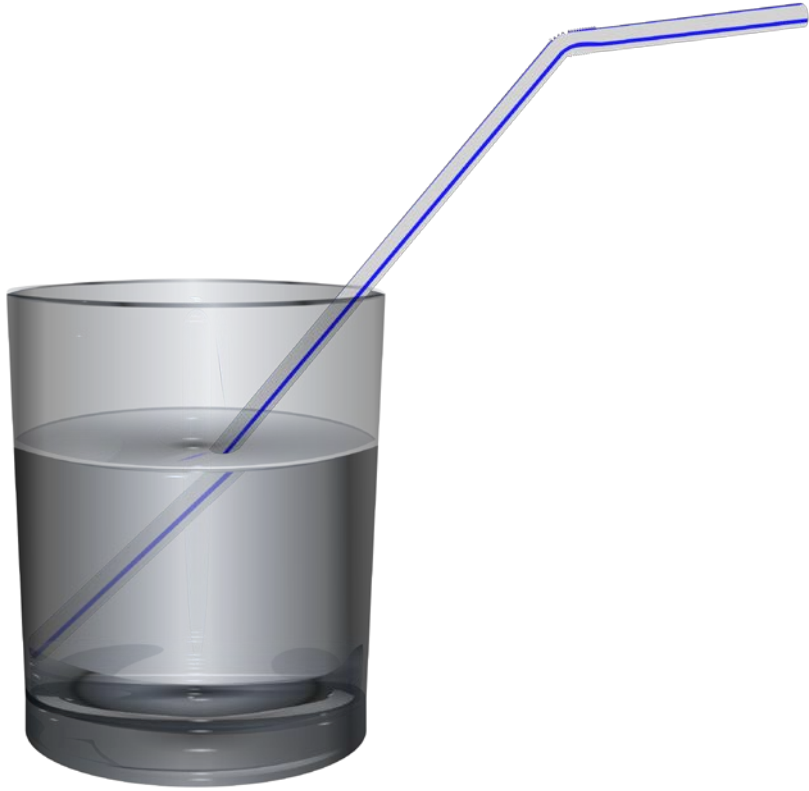
Its not cheap, well mostly not!

The questions will be related to the format in the Water Wizard portion of the Children's Water Festival.



1. What is the cost of 16 fluid ounces of drinking water from the tap in Durango?

00.038 cents



\$3.07 per 1000 gallons
www.durangogov.org.

2. What does it cost for a 16 fluid ounce bottle of water?

No correct answer here.



- But everyone here has probably spent way more than they wanted at a vending machine, sporting event or convenience store. I paid \$5.00 once for a bottle of water at a concert.

Lets move to some storage project costs.

3. What were the construction costs for Glenn Canyon Dam?

\$135 million dollars, 1966 cost, \$997 million in 2017 dollars

https://en.wikipedia.org/wiki/Glen_Canyon_Dam



4. How about the cost of Hoover Dam?

\$49 million, 1931 dollars, 700 million
2017 dollars

https://en.wikipedia.org/wiki/Hoover_Dam



5. Lets get local, construction costs for the Dolores Project?

\$500 million, 1986 dollars.

https://en.wikipedia.org/wiki/McPhee_Reservoir

<https://durangoherald.com/articles/31763-fifty-years-of-mcphee>



6. Even more local, ALP
construction costs?

\$587 million +/-, 2017 dollars



Communication with Bruce Whitehead 4/6/17
<https://www.waterinfo.org/node/7199>

Water seems to be costly, whether you have too much or too little. Lets ask about some Colorado floods.

7. What was the cost damages associated with the 1965 front range floods?

\$543 Million, 1965 dollars (21 lives)



<http://www.westword.com/news/the-1965-flood-how-denvers-greatest-disaster-changed-the-city-6668119>

8. How about the costs associated with 1976 Big Thompson Flood?

\$35 Million, 1976 dollars (143 lives)

<http://blogs.denverpost.com/library/2012/07/31/big-thompson-flood-disaster-colorado-1976/2795/>



9. More recent flood, what was the cost of the 2013 front range flood?

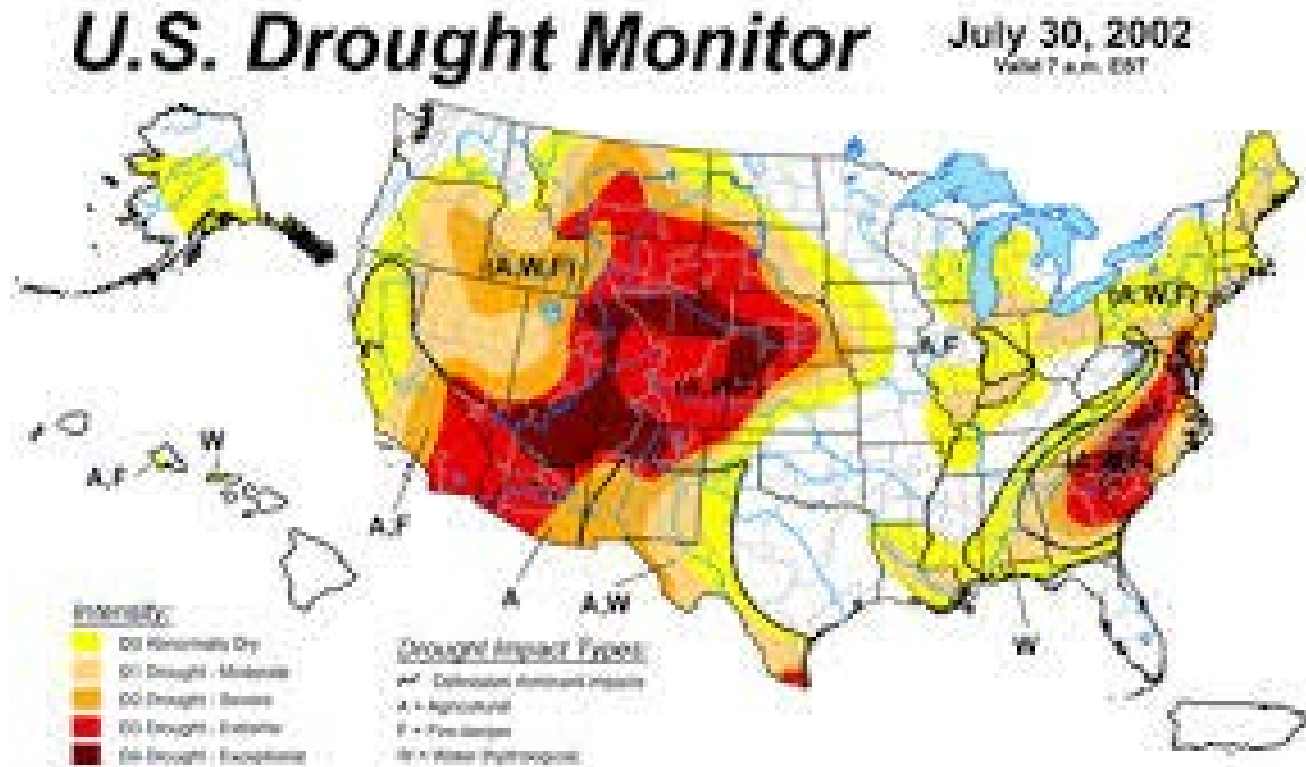
How about when we don't have enough water?

10. What was the 2002 droughts economic impact to Colorado?

\$1 to 1.5 Billion Dollars.

<https://www.yourwatercolorado.org/headwaters-archive-template/278-drought-2002>

https://www.google.com/search?q=2002+colorado+drought&tbm=isch&imgil=82SMwos7sEpF1M%253A%253B0jvCtkhwrfX0CM%253Bhttps%25253A%25252F%25252Fdenverwaterblog.org%25252Fcategory%25252Fyour-denver-water%25252Fpage%25252F27%25252F%25253Fiframe%2525253Dtrue%25252526preview%2525253Dtrue%252525252Ffeed%252525252F&source=iu&pf=m&fir=82SMwos7sEpF1M%253A%252C0jvCtkhwrfX0CM%252C_&usg=__Zp4rG9ps8lr7qXLXtq-IFpNWOxs%3D&biw=1278&bih=774&dpr=1&ved=0ahUKEwi3wNnx5IjTAhUDw4MKHRYpBK0QyjclVQ&ei=L4PiWPfsCYOGjwSW0pDoCg#imgrc=82SMwos7sEpF1M:



How about the costs to monitor water, volume and quality.

11. What does it cost to operate a stream gage in 2017?

\$16,950 per year, USGS surface water stream gage

Conversation with Steve Anders,
USGS western Colorado Data Chief



12. What is the cost to become a certified drinking water operator in the state of Colorado?

\$115.00, that includes application, examination and administration fees.

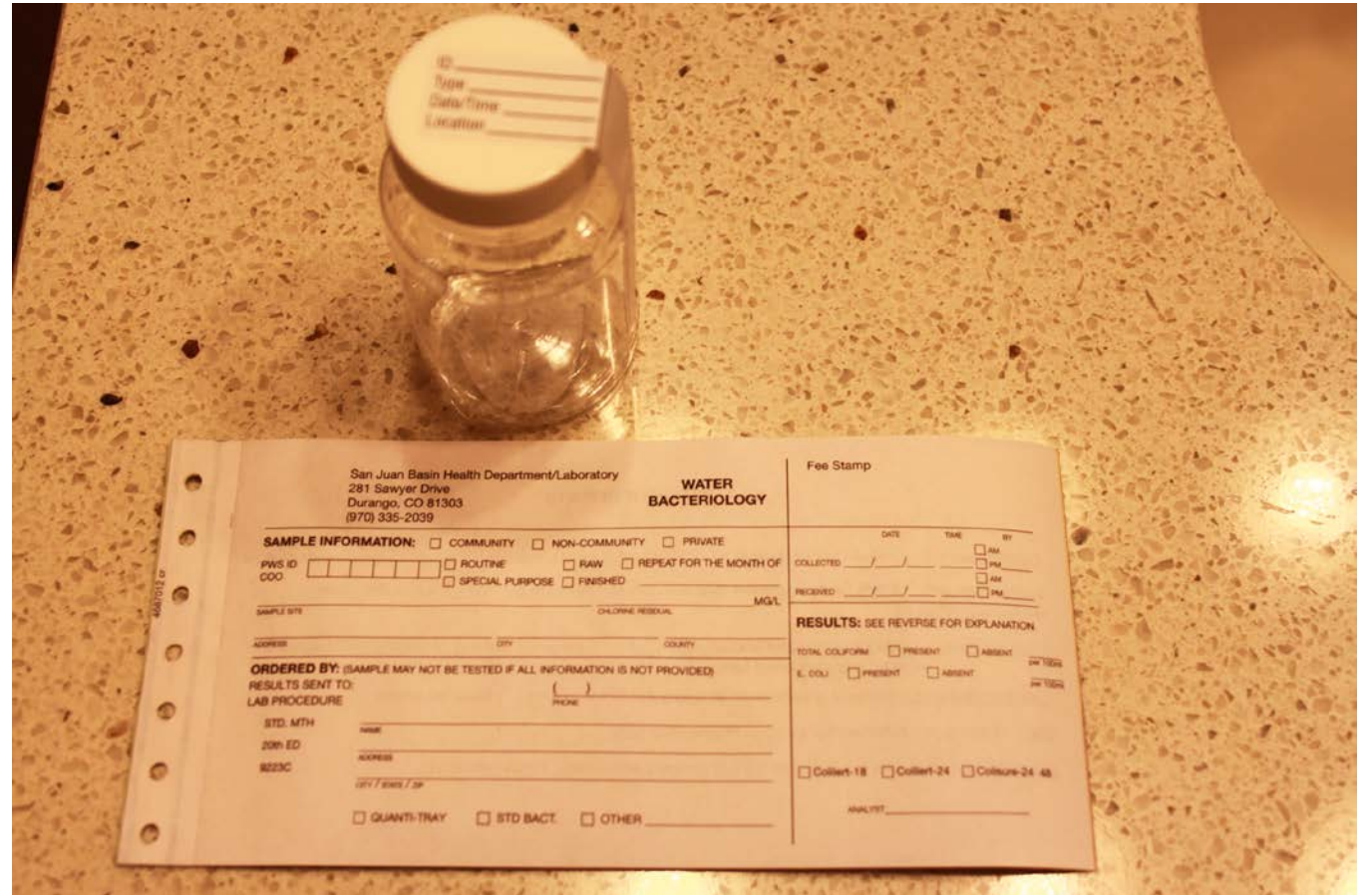


<https://www.ocpoweb.com/index.cfm?p=reg100>
section 110.19

13. How much does the State of Colorado lab charge for a water bacteriology sample?

\$25.00 per sample.

https://www.colorado.gov/pacific/sites/default/files/Fees_Lab_External.pdf



How about looking at the costs to clean up water that has quality issues.

14. What does it cost to make sea water potable?

58 cents per cubic meter of water.



<https://www.technologyreview.com/s/534996/megascale-desalination/>

15. Roughly what does the EPA say the total cost of leaking mine cleanup in the US be? (does not include coal mines)

\$20 to 54 billion dollars



<https://www.usnews.com/news/us/articles/2015/08/12/navajo-nation-says-it-feels-brunt-of-colorado-mine-leak>

16. How much does Durango spend on wastewater treatment a year?

\$6,103,546 was the 2016 budget total.



17. What was Silverton's domestic water budget in 2016?

In 2016 the budget
was \$505,951.

<https://www.colorado.gov/pacific/townofsilverton/budgetsaudits>



Lets talk litigation associated with water.

18. What is the total amount claimed against the EPA due to the 2015 Gold King Mine spill ?

\$1.2 billion dollars,
73 total claims as of
Jan 18, 2017



<https://durangoherald.com/articles/128111-epa-rejects-1-2b-in-claims-from-gold-king-mine-spill>

19. What is the cost per hour for an experienced water lawyer?

\$180-275 per hour in Durango. In Denver
the rates will run from \$250-450 per
hour



Conversation with Barry Spear 4/4/17

And finally, the cost to legislate water related issues.

20. How much water can be stored behind 112 million square feet of embankment? (or 21.6 billion dollars)

Ask your federal legislator!

