Water emergencies, are they emergencies based on size or relevance?

Well, lets see!

Lets talk large amounts of water, Hurricane Harvey in Houston 2017.

60.58 inches of rain in a single cyclone event



Lets talk smaller amounts of water, that can be significant in the moment.

My guest bath in November just as my in-laws arrived for Thanksgiving weekend proves that a much smaller amount of water can constitute a water emergency in the moment.



So lets see just how much you know about water emergencies, lets play 20 questions.

•1. In the 4 corners region, flash floods only occur in which season?

a. spring b. summer c. fall d. winter e. a b and c f. all the above

f. all the above

 Most folks have seen intense rain events in the area during the spring, summer and fall. However winter ice release flows can be as rapid and intense as the other flash floods.

https://www.youtube.com/watch?v=glsKTd6N6HU



Lets talk a little about emergencies due to what's in the water.

2. When a domestic water system is under a "boil order" how long at a minimum should you boil the water before it is considered "safe" here in Durango or other nearby communities?

- •A. 10 minutes
- B. 5 minutes
- •C. 3 minutes
- D. 1 minute.

- C. three minutes.
- The CDC recommends bringing water to a rapid boil for one minute to insure that it is safe for consumption, but at elevations higher than one mile, the time should be increased to 3 minutes.



A question on lots of water, local question.

3. When was the record high flow on the Animas River in Durango?

A. Oct. 11, 1905

B. Oct. 5, 1911

C. June 11, 1979

D. July 4, 1776

B. Oct. 5, 1911, 25,000 ft3/s



Now lets ask a few questions about some of the issues related to very little water.

4. How many zones are there in a fire prevention defensible space surrounding a residence?

A. 4

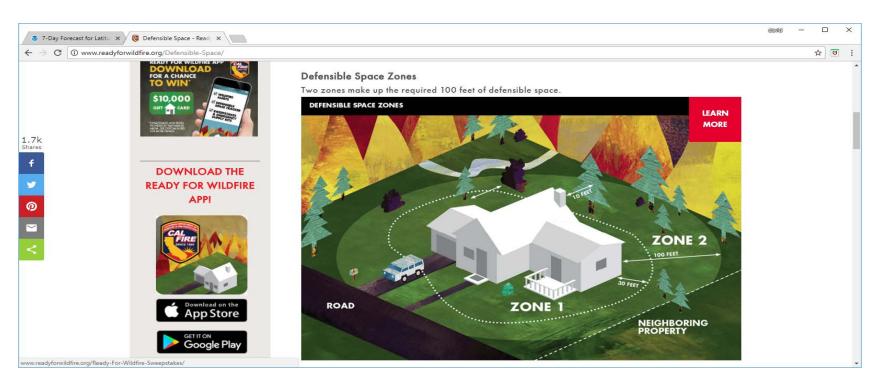
B. 1

C. 3

D. 2

D. 2

There are two zones defining the defensible space surrounding a residence for fire prevention.



5. How far from a residence should the defensible space extend?

A. 25 feet

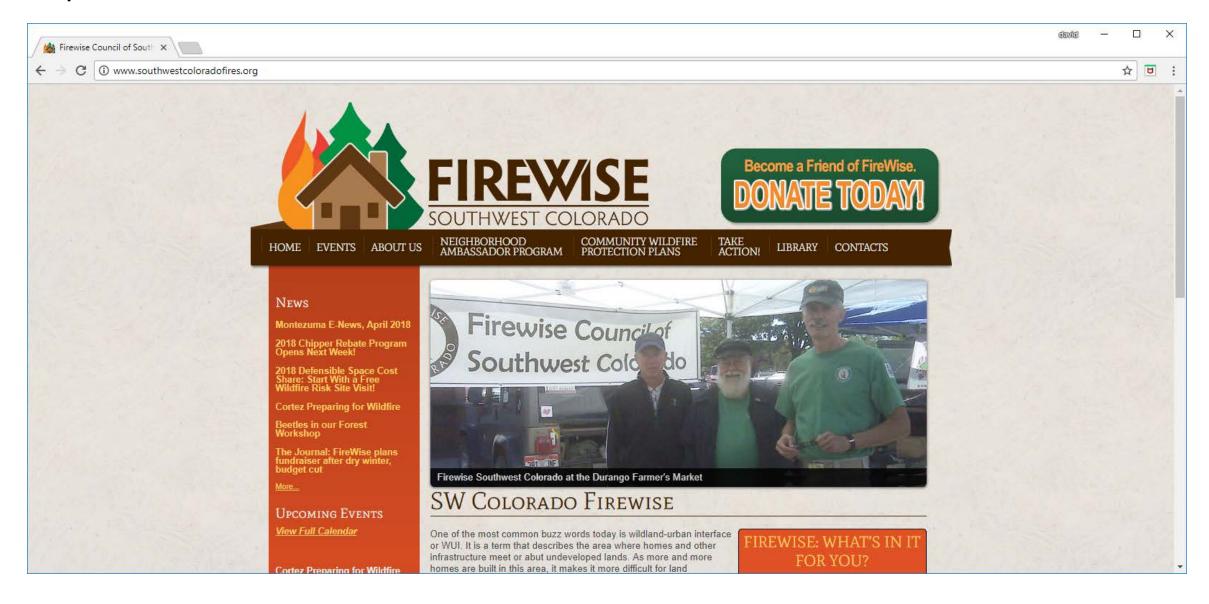
B. 50 feet

C. 100 feet

D. 500 feet

C. 100 feet The two zoned make up the total 100 suggested feet of defensible space.

If you have any questions regarding defensible space, please contact Firewise of Southwest Colorado



Lets say the worst is potentially going to happen.

6. Which items are components of a emergency evacuation plan?

- A. Have a designated meeting location outside of the danger area
- B. Have several different escape routes and practice as a family so everyone is comfortable
 - C. Have an evacuation plan for pets and large animals
 - D. Have a family communication plan that designates a single point of contact outside of the danger area.

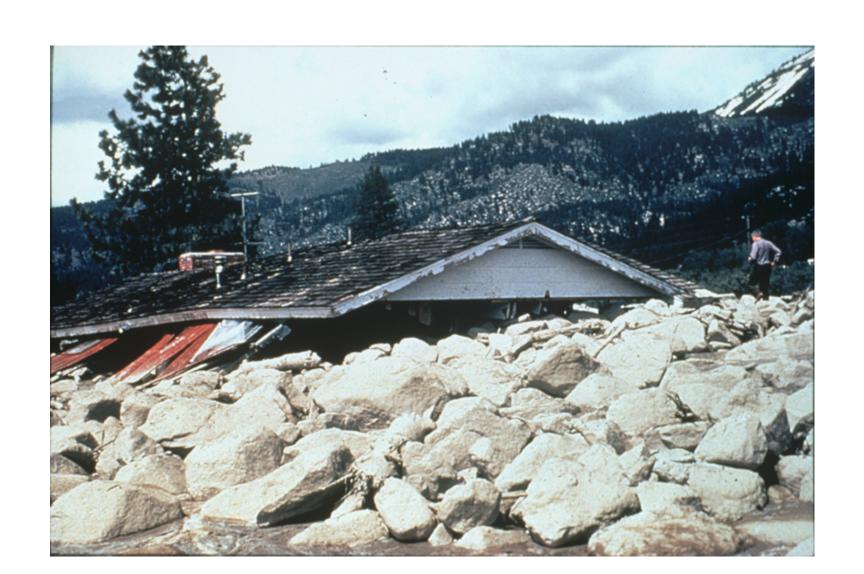
E. All of the above

E. All of the above They all make sense, be prepared!

In the aftermath of a worst case scenario, and you happen to live in a alluvial fan below a burn area.

7. Do most homeowner insurance polices cover debris and or mud flows?

No!



8. So then, what about flood insurance? Does it cover Debris and or mud flows?

Not necessarily. It depends on the amount of water involved. The difference between a chocolate shake and chocolate cake.



•If you happen to live on a alluvial fan, now might be a good time to visit with your insurance agent.

Lets talk a bit about dam safety here in Colorado.

9. Who is not under the jurisdiction and rules and regulations of the Colorado State Engineers office when they build dams?

You guessed it!



Also mine tailing impoundments that are under the jurisdiction of the Division of Reclamation, Mining and Safety.



A few questions regarding current conditions.

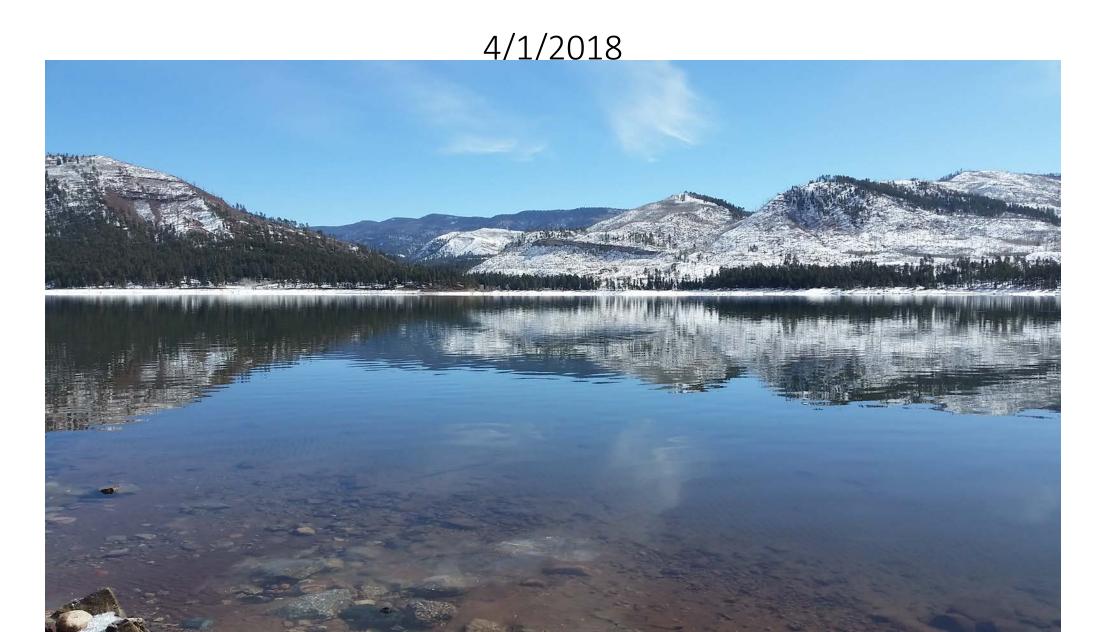
10. When is the La Plata rivers first call from New Mexico going to occur in 2018?

Feb 20



11. What is the current storage in Vallecito Reservoir?

74,209 Acre Feet or 57% of capacity



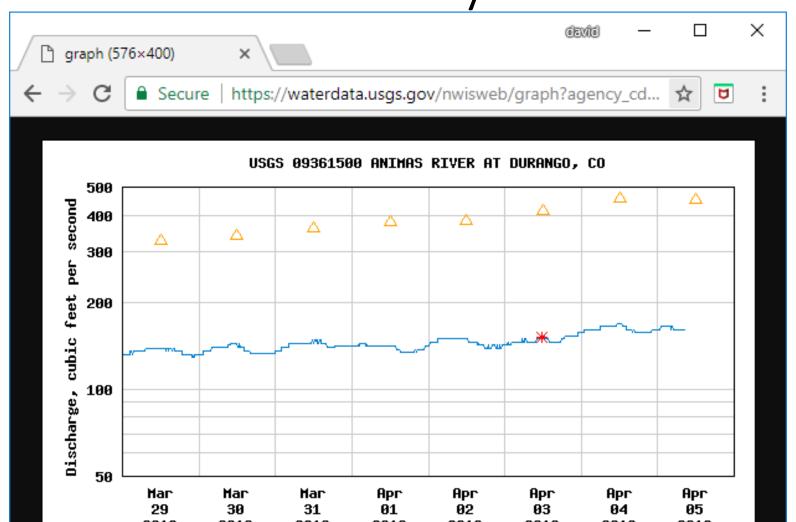
12. What is the Animas River here in Durango's current flow? (I'm using yesterdays flow for statistics)

161 ft3/s



13. And where does that value fit historically?

35% of the median for the day for the past 106 years. Just 18 ft3/s greater than the minimum daily from 1977.



Now a few questions regarding other emergencies if your business relies on water.

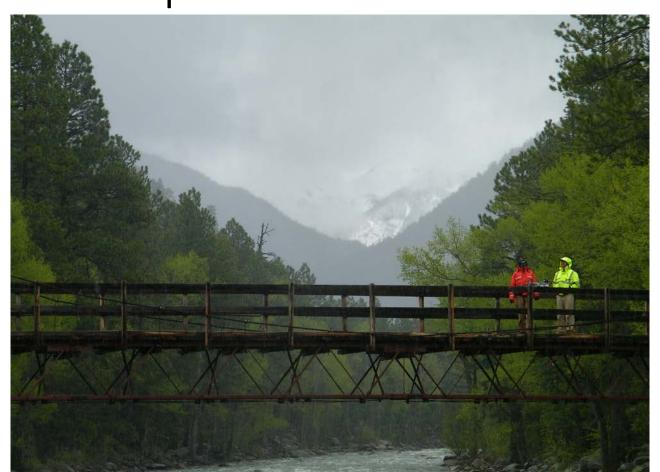
14. At what point are the flows on the Animas in Durango no longer commercially raftable?

Over the years it has been roughly 200 ft3/s. Lower than that the guests spend more time dragging the boats over gravel bars than they want to pay for.



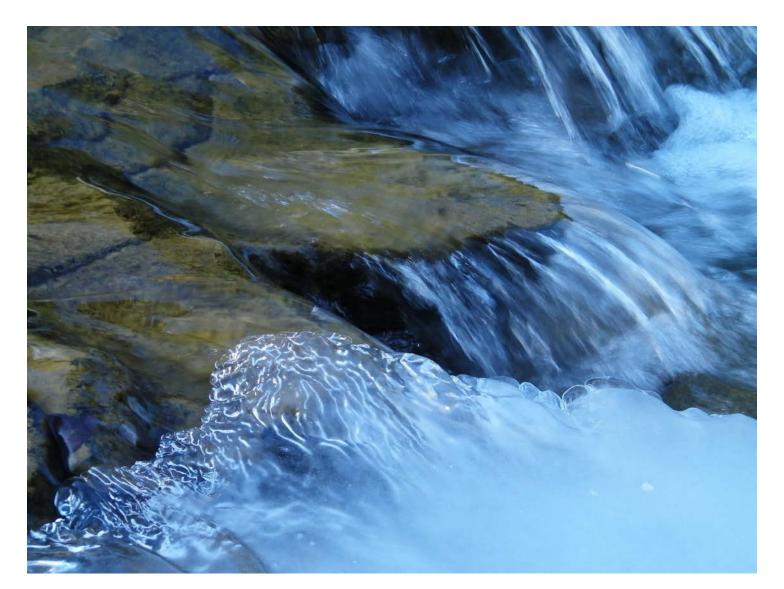
15. What flow does the upper Animas become too high for commercial rafting?

Once again historically when the Animas below Silverton gage reaches 1500 ft3/s the rafting companies stop or limit the trips to experienced boaters.



16. What river does Durango get most of its municipal water from?

The Florida River.



17. Who is responsible for monitoring and enforcing water quality issues in the surface waters of Colorado?

Water Quality Control Division, Colorado Department of Health and Environment. (WQCC)



17. Does the WQCC have a emergency warning system?

Yes! CoWarn Statewide Water/Wastewater Agency Response Network (CoWARN) of utilities helping utilities to prepare for the next natural or human-caused emergency.



18. When and what was the lowest annual mean daily discharge for the Dolores River at Dolores?

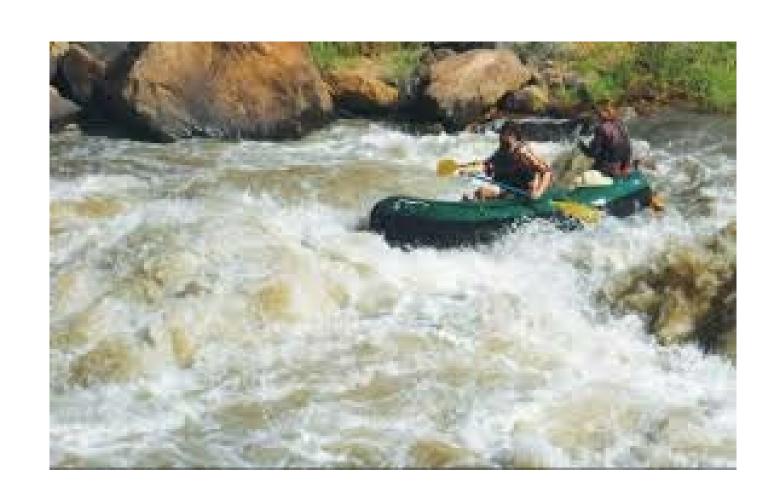
87 ft3/s in 1977



Now, lets go the other way with the Dolores at Dolores

19. What was the highest annual daily mean and what year was it?

790 ft3/s in 1942 (nearly a 10 fold difference)



20. What are the current drought conditions in southwest Colorado.

D-3 to D-4 (extreme to exceptional drought conditions) for nearly the entire SWWCD region.

