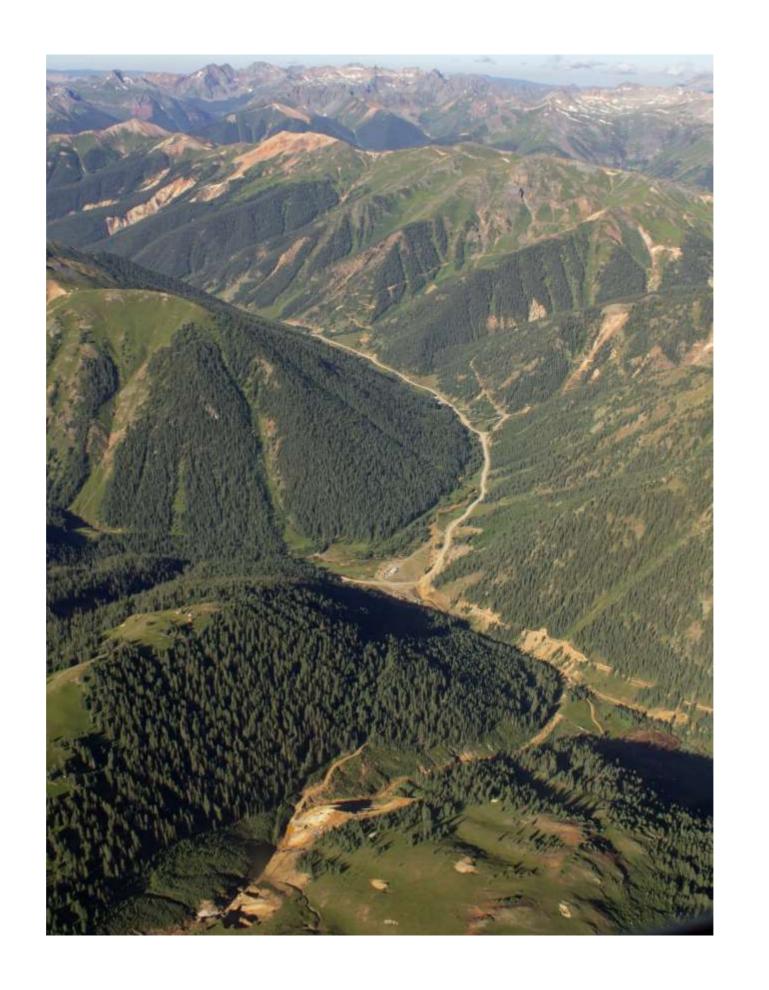
Gold King Blowout

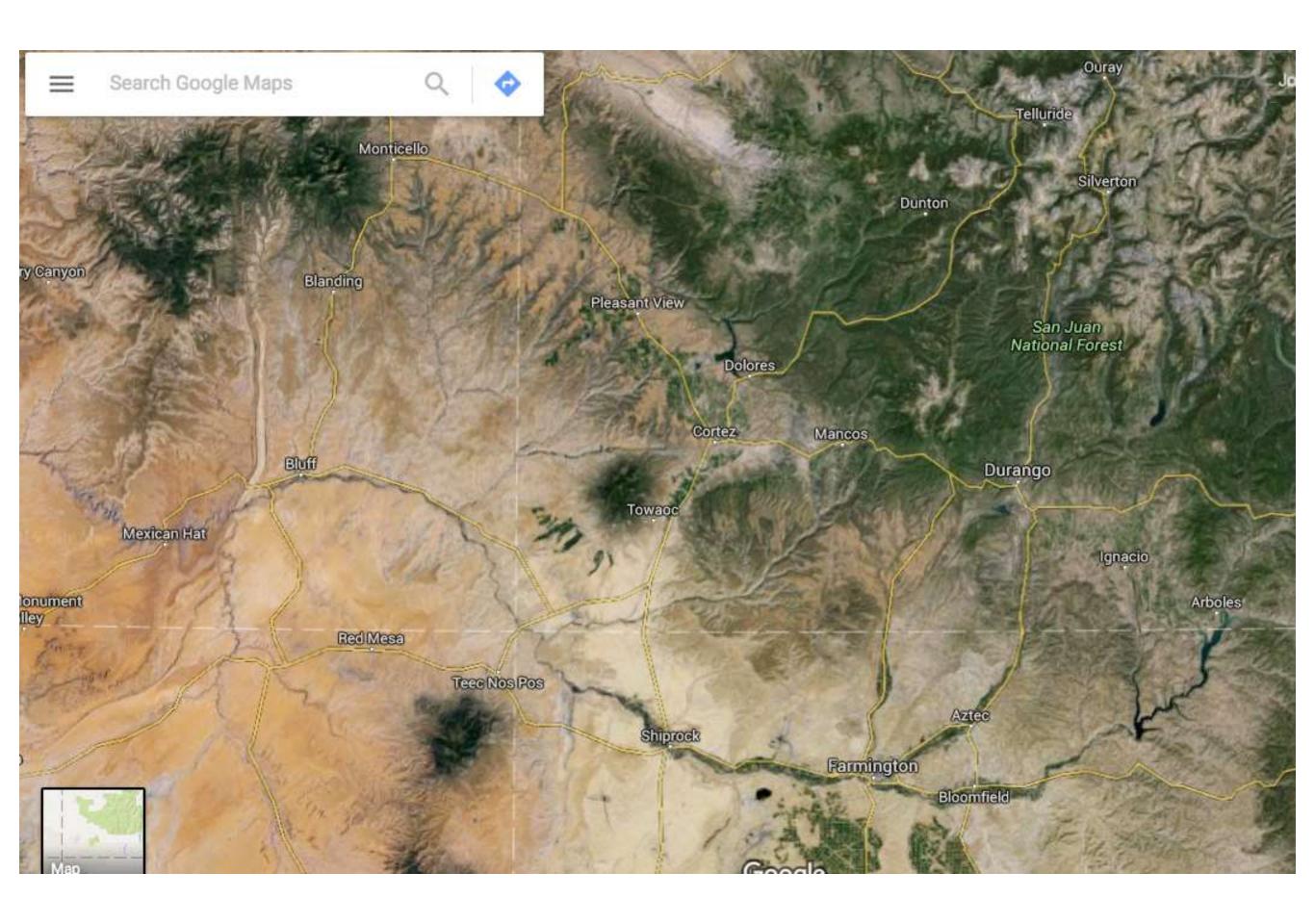
And the history of mine-related pollution in Colorado

On August 5, 2015, at about 10:30 in the morning, 3 million gallons of orange water, mixed with sludge, came bursting out of the Gold King Mine above Silverton, Colorado.



Figure 53.—Photograph showing the blowout at 10:56 a.m. on August 5, 2015 (photograph from EPA project files).





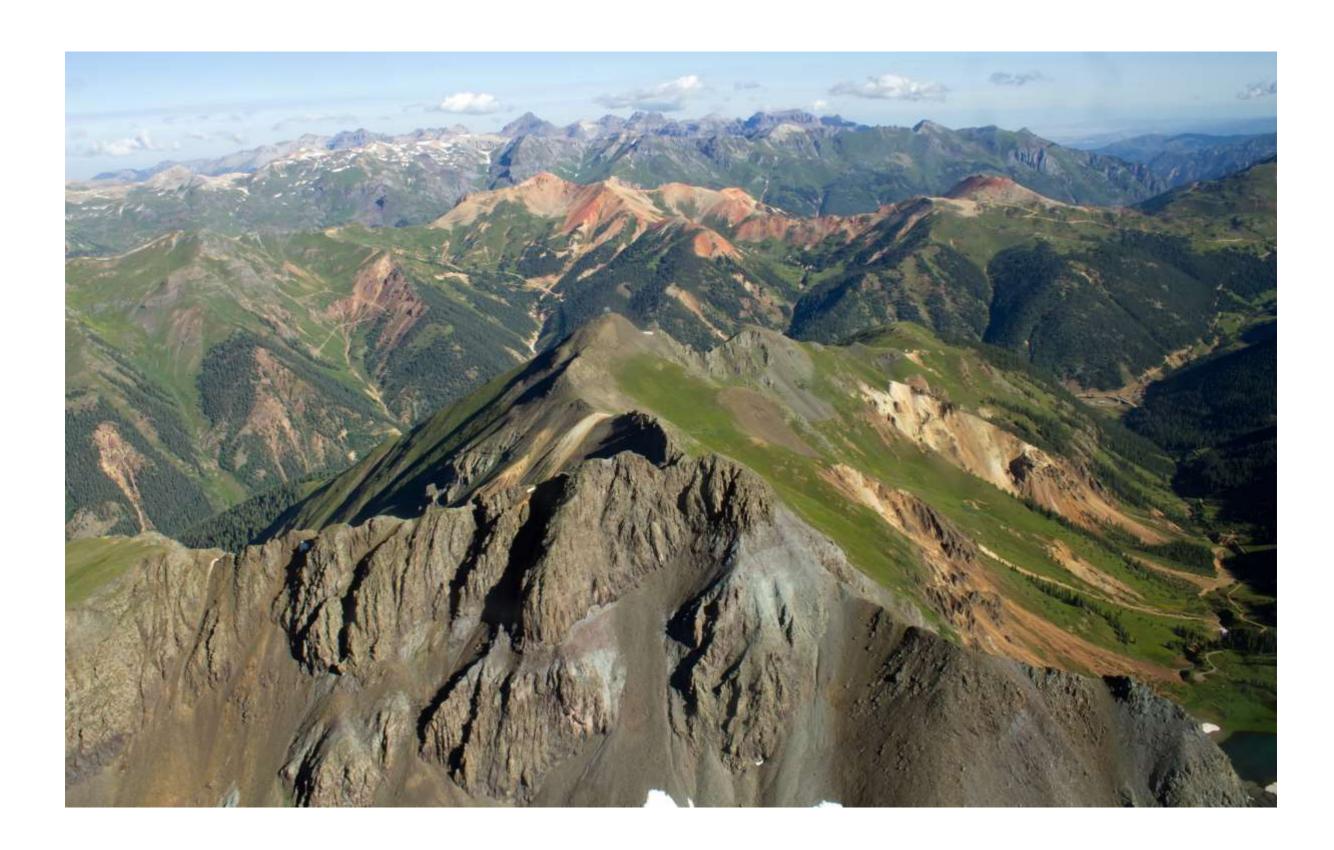






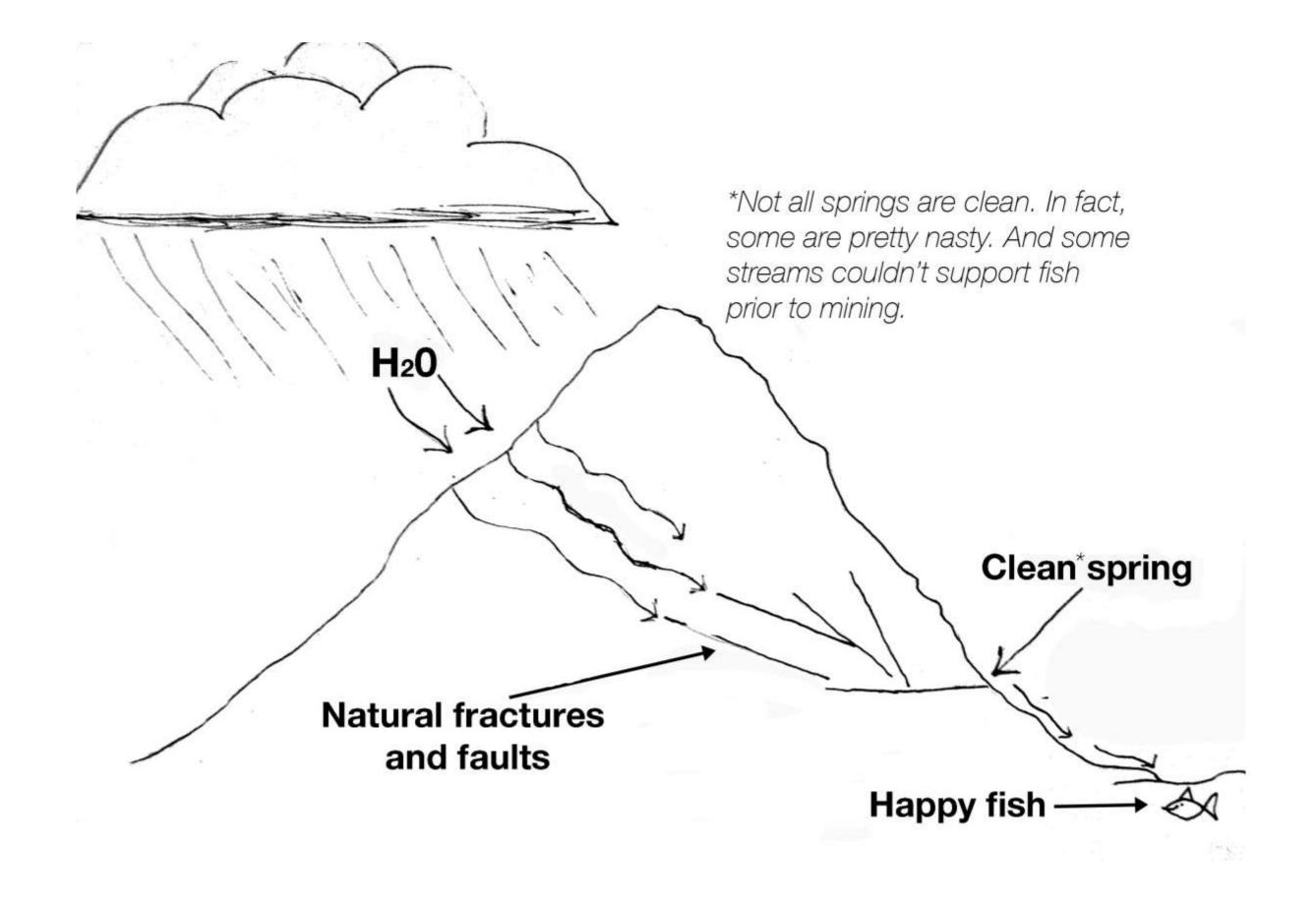
What was that nasty orange stuff in the river?

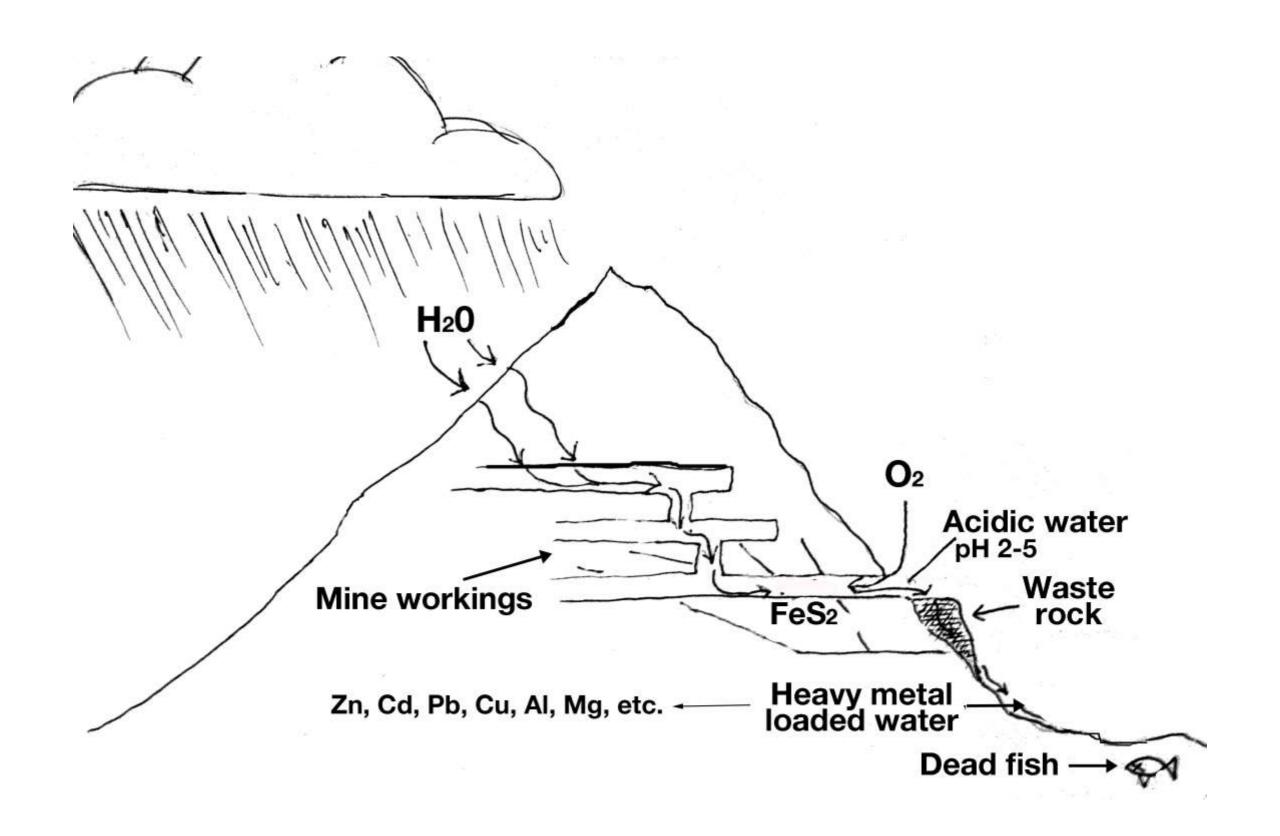
Actually, the orange stuff wasn't the worst of it. That was merely suspended iron oxides, which make a pretty nice dye, if you're into electric orange (and it's what makes the mountains red).



Far more worrisome, insidious and persistent than the color, though, is the water, itself, or...

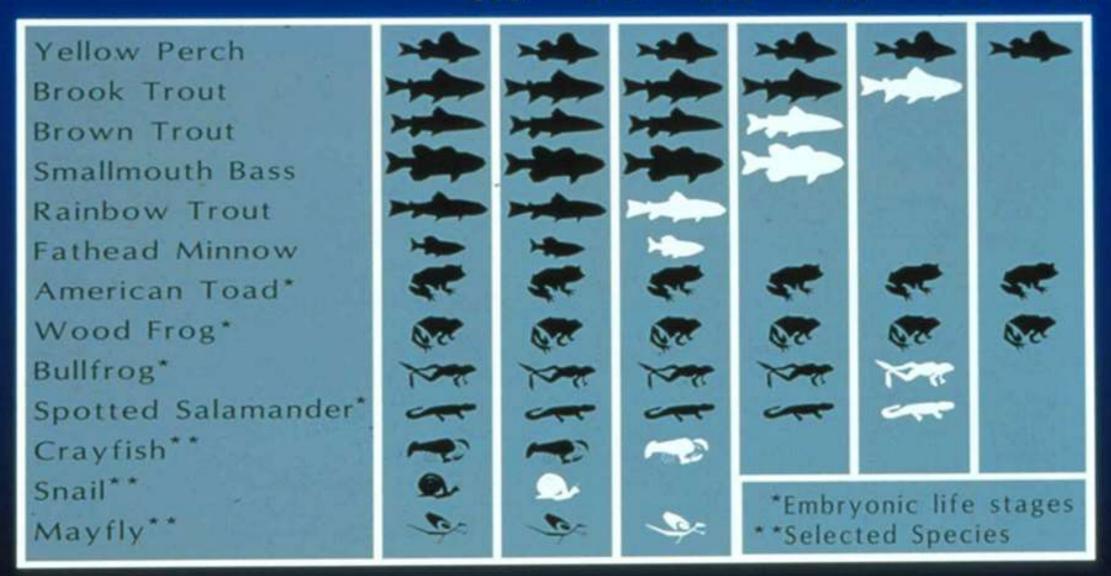
Acid Mine Drainage





Critical pH Levels for Selected Organisms

6.5 6.0 5.5 5.0 4.5 4.0

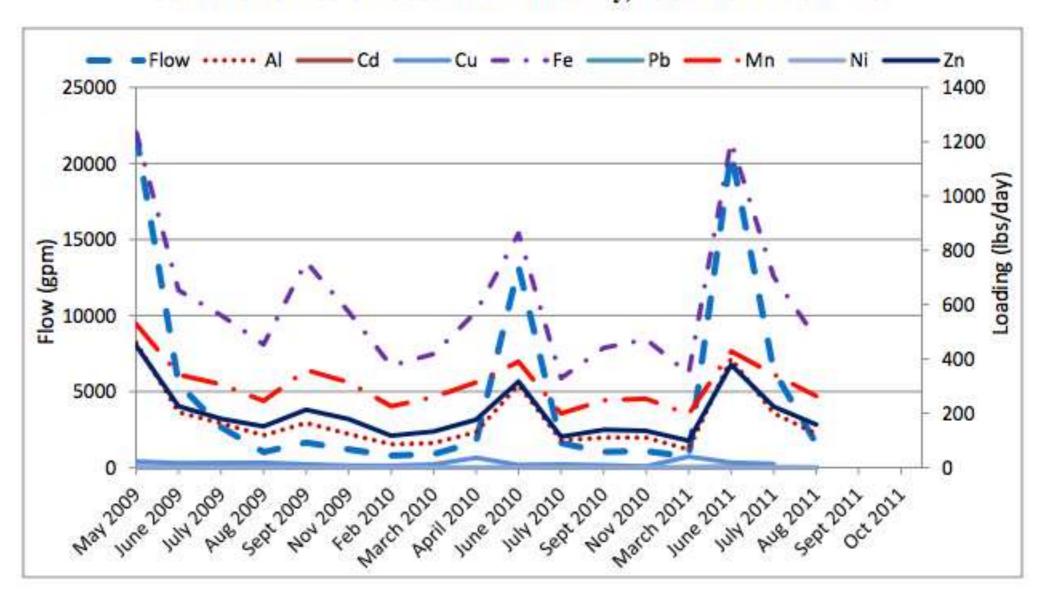


Many species are at risk.

Figure G

Metals Loading & Flow Rate – Sample Location CC18:

Cement Creek above the South Fork Tributary, Below the Mine Site Area





- 1882: Farmers in Jefferson County push for legislation to stop upstream miners from dumping tailings into Clear Creek because minerals in sediment "covers and chokes the soil wherever it settles, suffocating vegetation and preventing growth of plants."
- 1897: Owners of Ames power plant above Telluride win lawsuit against upstream mine over tailings mucking up hydropower turbines.
- 1897 Forestry, game and fish law: "It shall be unlawful to empty ... any sawdust or other destructive substance into any of the waters of this state containing food fish..."
- 1898: Water in Roaring Fork below Aspen found to have high levels of arsenic, zinc and other metals, corresponding w/ ores treated at upstream mills. Aspen Tribune: "All summer long ranchers living on the banks of the Roaring Fork have reported the death of cattle from poisoning..."
- 1900, *Durango Democrat*: "The Animas river is being destroyed as a beverage and agency for irrigation by the unlawful recklessness of Silverton mill men.... was once a beautiful, clear and sparkling flow of wholesome water, and the home of the finest specimens of mountain trout in the state."

- 1913 Nucla, down San Miguel River from Telluride: "The pollution of these streams by mine operators has not only ruined all good fishing but has contaminated the water so that it is not fit for drinking purposes and is causing great expense to the ditch companies to operate their canals."
- 1919: Jefferson County farmers still fighting to stop Clear Creek pollution to no avail.
- 1929: Durango-area farmer writes: "... in low water time our stock refuses to drink the water, so filled with slime is it. Within the last few years, what few fish (suckers) are left are having a hard time to survive."
- 1935: Colorado Supreme Court rules that tailings can't be dumped into streams.
 Leads to some tailings impoundment, but problems continue.
- 1937: Another Durango-area farmer writes, of the Animas: "Instead of a pure, sparkling stream of water, an opiate for tired mind and jaded nerves, what do you see? A murky, gray stream of filthy, slimy, polluted water, a cesspool for the waste of man."
- Downstreamers vs. upstream miners and millers battle continues, basically until mining stops.



