

HOME (/)  
ABOUT  
JOURNAL (/ABOUT)  
MASTHEAD (/NEW-PAGE)  
PROSPECTIVE MEMBERS (/PROSPECTIVE-MEMBERS)  
SUBSCRIBE (/SUBSCRIBE)  
STAFF RESOURCES (/STAFF-RESOURCES)  
PUBLICATIONS  
PUBLICATION ARCHIVE (/PUBLICATION-ARCHIVE)  
VOLUME 1 (2009) (/VOLUME-1-2008-2009)  
VOLUME 2 (2010) (/VOLUME-2-2009-2010)  
VOLUME 3 (2011) (/VOLUME-3-2010-2011)  
VOLUME 4 (2012) (/VOLUME-4-2011-2012)  
VOLUME 5 (2013) (/VOLUME-5-2012-2013)  
VOLUME 6 (2014) (/VOLUME-6-2013-2014)  
VOLUME 7 (2015) (/VOLUME-7-2014-2015)  
VOLUME 8 (2016) (/VOLUME-8-2015-2016)  
VOLUME 9 (2017) (/VOLUME-9-2016-2017)  
VOLUME 10 (2018) (/VOLUME-10-2018)  
SYMPOSIUM  
INFORMATION (/SYMPOSIUM)  
BLOG  
FULL BLOG (/FULL-BLOG)  
BLOG ARCHIVE (/BLOG-ARCHIVE-1)  
SUBMISSIONS (/SUBMISSIONS)

June 6, 2013 (/full-blog/2013/06/water-aquifers-solution-or-further\_6.html)

## Water Aquifers: A Solution or Further Nuisance to the U.S. Drought Issue? (/full-blog/2013/06/water-aquifers-solution-or-further\_6.html)



(<https://static.squarespace.com/static/53fe85a0e4b0516a0c4fed1a/54002444e4b0123f9872f024/54002444be4b0123f9872f0f4/1409295435925/1000w/>)

*Image Source (<http://www.waterwise.org.uk/pages/past-water-people-bulletins.html>)*

By: Lauren Hart, Staff Member

Much of the United States has serious problems with maintaining a natural resource, which is crucial to anyone's survival: water.[1] Many places in the U.S. are prone to droughts and some places out West even must have their water brought in so that those places, and their people, can survive.[2] Many of these cities, which have such distinct water problems, are growing significantly, and the water situation is not getting any better.[3]

Utilizing aquifers is a proposed solution to this ever-growing problem.[4] An aquifer is an underground water source that allows for water to be stored and drawn from there.[5] It is typically an extremely porous rock under the water-table where varying amounts of water can move fluidly through the rock-face.[6] Water can be added to an aquifer during times of plentiful water and then extracted when needed during times of drought.[7] Some places are using aquifers in this way instead of using reservoirs, as they are "natural" and cheaper as they are just "supplementing" the water already in the aquifer.[8]

The ultimate issue is whether or not this tactic is a good one. Ultimately, it is not. The point of using an aquifer is to store more useable water. However, one of the major issues with the artificial use of aquifers is the tendency to create contamination of the water, making it undrinkable and unusable.[9] For example, if there is pyrite in the rock used for the aquifer, there is a higher

likelihood of arsenic poisoning...and we all know that is not good to drink.[10] Ultimately, the chemical make-up that causes this is not the important thing to understand,[11] but what is important to understand is the impact it has on the people drinking the water and that the impact on the environment is not positive.[12]

Although aquifer use is a proposed solution, around the country, many states that have previously used aquifers to store water have been abandoning this course of action due to the enormous contamination issues associated with its practice. Georgia, which is currently in the process of bringing this aquifer issue to the forefront, should be wary of any proposals.

[1] Environmental News Network staff, NWS forecast leaves drought-prone states high and dry, CNN, May 24, 2000,

<http://archives.cnn.com/2000/NATURE/05/24/drought.cnn/>.

[2] Mark T. Anderson and Lloyd H. Woosley, Jr., Water Availability for the Western United States--Key Scientific Challenges, U.S. Dept of the Interior, (last modified: Friday,

January 11 2013, 12:47:22 PM) <http://pubs.usgs.gov/circ/2005/circ1261/>.

[3] Id.

[4] Dave Williams, Georgia taking over water supply test project, Atlanta Business Chronicle, May 16, 2013, <http://www.bizjournals.com/atlanta/news/2013/05/16/georgia-taking-over-water-supply-test.html>.

[5] Idaho Museum of Natural History, What is an Aquifer?, (last visited Jun. 3, 2013), <http://imnh.idaho.edu/digital/ia/hydro/concepts/gw/aquifer.htm>.

[6] U.S. Dept. of the Interior, U.S. Geological Survey, (last modified Mar. 6, 2013), <http://ga.water.usgs.gov/edu/earthgw/aquifer.html>.

[7] Dave Williams, *supra* note 4.

[8] See generally Dave Williams *supra* note 4.

[9] Aquifer Recharge (AR) and Aquifer Storage and Recovery (ASR), Environmental Protection Agency (2012) (available at: <http://water.epa.gov/type/groundwater/aic/aquiferrecharge.cfm>).

[10] Id.

[11] Id. Essentially, it involves redox potential (and by re-dox: reduction oxidation potential), which has to do with the electron make-up of the water, which then would react, with the stone, of the aquifer creating this contamination.

[12] See generally Dave Williams, *supra* note 4.

♥ 0 Likes < Share

COMMENTS (0)

Newest First Subscribe via e-mail

[Preview](#)

Newer Post

iPhone, iPad, iCigs... Really? (/full-blog/2013/06/iphone-ipad-icigs-really.html)

Older Post

A Fresh Solution to a Rotten Problem: Combating Food Waste and Hunger in America (/full-blog/2013/05/a-fresh-solution-to-rotten-problem.html)

631 SOUTH LIMESTONE, LEXINGTON, KY

40508 (859) 257-4747 [BLOG.KJEANRL@GMAIL.COM](mailto:blog.kjeanrl@gmail.com) ([MAILTO:BLOG.KJEANRL@GMAIL.COM](mailto:blog.kjeanrl@gmail.com))