

Primary Water – Water for a Thirsty World

WHERE DOES WATER COME FROM, WHAT A SIMPLE QUESTION TO CONSIDER,
BUT DO YOU REALLY KNOW THE ANSWER?

“Primary water, the original source of our oceans, is still being created by geological forces. That water, usually in a potable form, comes to the Earth's surface in thousands of places, some well known like Jericho and Bahrain where it has provided drinking water for thousands of people for thousands of years. It pours into deep mines all over the world. The hallmark of new, or primary, water springs and wells is that they provide water at constant temperature and flow. But this worldwide source of “new water” has been ignored by geologists and laymen in most countries including the United States. They were taught that all potable

water comes from the “hydrological cycle” which merely recycles water already on the surface.”

“Primary water is new water formed by chemical reactions deep in the Earth. This water, driven by massive pressure, works its way toward the surface through faults and fissures in normally impervious crystalline rock. While you may have to drill deeper for Primary Water, it is generally not subject to pollution or variations in rainfall, and usually sustains production for decades.”

--- Michael H. Salzman, author of the deeply compelling book, “New Water For A Thirsty World”, published in 1960.

AS SEEN IN SCIENCE TO SAGE MAGAZINE



Thermal Pool

Hot Springs

Volcanic Activity

= Water





**PRIMARY WATER WELLS ARE
NOT A NEW PHENOMENON.**

“Michael H. Salzman, an engineer and administrator, researched, wrote and published a book providing detailed information on “new water”. As published in 1960, it can be read and/or downloaded from this website. It is not readily available in libraries. <www.newwatersources.org>

“Mike was a long time friend. He handed me one of his last copies in 1970 and asked me to see if I could get some recognition for it. He told me some wealthy people wanting to get approval for funds to build an aqueduct to bring water from the Colorado River to southern California (they succeeded) had bought up and burned all the copies they could find. They also tried (and failed) to have him fired as Director of the Los Angeles Housing Authority.” ---- Roger Willcox, President Emeritus, National Association of Housing Cooperatives <www.newwatersources.org>

Folsom Lake, in Sacramento, is down to a third of its normal levels. Governor Jerry Brown, is trying to get a tunnel built, to bring water from the mountains to provide water, at a cost of over \$50 Billion. He's counting on snowpack in the mountains to provide water, but sadly he hasn't been paying attention to the recent news from the 2013 Fall Meeting of the American Geophysical Union, as they announced studies that

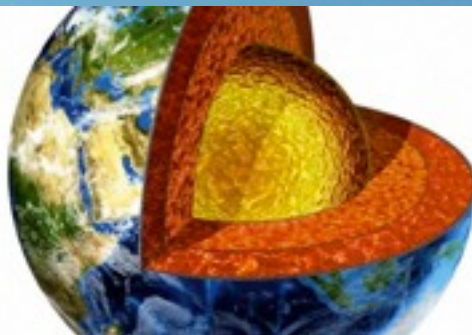
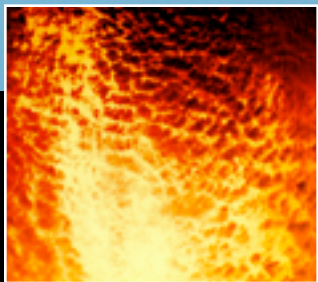
indicate the western states are in the midst of a possible 'mega-drought' that may well last for decades. <www.climatecentral.org/news/is-the-wests-dry-spell-really-a-megadrought-16824>

Fresno-area meteorologist, Steve Johnson, who has been tracking weather in California for decades, *said on a drought scale of 1 to 10, last year was a 14. “After I looked at the numbers around the state, I was in a state of shock on New Year's Eve,”* he said. *“That's because records were not merely broken. They were obliterated. Think about it. Weather records usually are broken by only small percentage points. Not this time. Many old records fell by more than 40%. In the case of downtown Oakland, it was 58% – the 1976 record being 10.02 inches of rainfall and the 2013 total being 4.24 inches.”* <www.mercedsunstar.com/2014/01/07/3429298/earth-log-dry-2013-records-shock.html>

“California water officials call drought outlook 'scary'. “It's scary, to put it bluntly,” said David Guy, President of the Northern California Water Association, which represents rural water districts. “It's the combination that the reservoirs are at all-time-low levels as well as the fact that we simply do not have inflow coming into the reservoirs.” ----- George Warren ---- <Gwarren@news10.net>

PRIMARY WATER (ALSO CALLED

EARTH-GENERATED, JUVENILE OR MAGMATIC) FORMS WITHIN THE EARTH'S CRUST OR MANTLE AND IS FOUND IN CRYSTALLINE ROCK SYSTEMS.



“Enter Pal Pauer. Pal is one of the world's leading authorities on primary water. Primary water (also called earth-generated, juvenile or magmatic) forms within the Earth's crust or mantle and is found in crystalline rock systems at depths of only 100 feet or more. This water is the source of all water on the Earth, and eventually reaches the groundwater, soil water, and surface through vents and unconfined aquifers to become part of the hydrological cycle when extracted.”

“According to Pal,”It's hard to get the point across to many people in the U.S. that the Earth makes water. We can access it and solve our problems. We don't need massive storage facilities or aqueducts. Clean, virtually infinite sources of water might be right under our feet.”

“Primary water wells are not a new phenomenon. Stephan Riess was drilling wells all over California and in the Middle East as far back as the early 1930s. Pal has traveled to Africa numerous times, and earlier this year, drilled six wells in Kenya and Tanzania, producing over 3,000 gallons of water per minute in an arid land with less than 10 inches of rainfall per year. One well supplies water to 15,000 people people and is free flowing at 30 gallons per minute.”

<http://worldwidedrillingresource.com/archiv/2011/october11>> ---

“SuperEarths are expected to have deep oceans that will overflow their basins and inundate the entire surface, but we show this logic to be flawed,” said Nicolas Cowan, at Northwestern University in Illinois. “Terrestrial planets have significant amounts of water in their interior. SuperEarths are likely to have shallow oceans to go along with their shallow ocean basins.”

“Scientists suggest that tectonically active SuperEarths store most of their water in the mantle – the rocky part

that makes up most of the volume and mass of the planet.” “In their model, the researchers treated the intriguing exoplanets like Earth, which has water in its mantle. The rock of the mantle contains tiny amounts of water, which quickly adds up because the mantle is so large. Because of this, deep water cycle moves water between oceans and the mantle.

www.dailymail.co.uk/sciencetech/article-2538549/could-super-earths-climate-like-giant-worlds-huge-amounts-water-hidden-beneath-surface.html

“Water-bearing fractures in the underground bedrock represent geological discontinuities that are commonly expressed in soils and topography of the surface. The traces of these discontinuities manifest themselves as subtle linear features that are visible to the trained eye on aerial photographs and topographic maps.” ---- <http://csggeotech.com> --- Nick Evans, Chief Hydrogeologist

“According to the 2007 State Water Plan, the population of Texas is increasing and is expected to continue to grow from 20.9 million residents in 2000 to an estimated 45.6 million residents in 2060. This growing population puts additional demands on a limited water supply. For example, in 2000, state consumption was approximately 17 million acre feet of water per year; however, estimates reported in the 2007 State Water Plan show that 21.6 million acre feet of water per year will be required to meet the state's demands by 2060.” ---- www.twdb.state.tx.us Texas Water Development Board -

Basically, terrestrial volcanism is the product of the explosive interactions between water and magma.

Hydrothermalism (like geysering), where circulating waters are heated by a distal heat source, such as plutonic intrusions – Phreatomagmatism (or hydromagmatism), which is generated by close contact of magma with external waters (coming from wetted sediments or from a lake or river). --- Strombolian, Vulcanism, Plinian Vulcanism, which are produced by exsolution and expansion of juvenile steam (i.e. water, which was initially dissolved in the magma). Volcanic gases are mainly composed of water (over 80% in volume) with other volatiles (Co₂, So₂, H₂S ...) and minor amounts of salts (NaCl, ...) ----- http://www.obs.univ-bpclermont.fr/lmv/perso/thierry_regis/mater





“Magmatic water or juvenile water is water that exists within, and in equilibrium with, a magma or water-rich volatile fluids that are derived from a magma. This magmatic water is released to the atmosphere during a volcanic eruption. Magmatic water may also be released as hydrothermal fluids during the late stages of magmatic crystallization or solidification within the Earth's crust. The crystallization of hydroxyl bearing amphibole and mica minerals acts to contain part of the magmatic water within a solidified igneous rock. Ultimate sources of this magmatic water includes water and hydrous minerals in rocks melted during subduction as well as in primordial water brought up from the deep mantle.” ----- <www.freebase.com/m/06zkg06>

“Hypothesis of Leaching by Hot Springs of Magmatic Origin ----

When lava cools at the surface, great quantities of the expelled waters pass off as clouds of steam. As the crust slowly hardens, and the congealing magma becomes further away from the surface, the escaping waters will become cooler in their passage upward. A stage will finally be reached when they will not entirely be vaporous on emerging at the surface, but will become liquid. They will, in fact, emerge as hot springs, and it is probable that the change from steam jets (fumaroles) to hot springs is the normal process of cooling volcanoes.”

“The water which is given off at the contact of an intrusive mass of igneous rock, and which is frequently so active in producing rock changes or metamorphism, must also exist after it has accomplished these changes. We may suppose that if there are any channels, such as are afforded by fissures or faults, this water may find its way upward, and perhaps even reach the surface. Springs having this origin may be called (following Professor Suess of Vienna) juvenile springs, the term referring to the recent birth of the water from the magma.”

----- *“Geology Applied to Mining – A First Book of General Geology and Metallology”* by Josiah Edward Spurr (1926) ---- Pages 125 – 126 ----- <http://hdl.handle.net/2027/uc1.b31547> – Hathi Digital Library

“My discovery was put to a field test by locating and drilling many wells. The records to date from these tests is 70 producing wells out of 72 attempts, all drilled in hard rock, all located in distress areas generally considered unproductive.” --- Stephan Riess (1954)

“Research undertaken by Stephan Riess in 1934 showed enormous quantities of virgin water could be obtained from crystalline rocks. This involved a combination of geothermal heat and a process known as 'triboluminescence', a glow which electrons in the rocks discharge as a result of friction or violent pressure, that can actually release oxygen and hydrogen gases in certain ore-bearing rocks. This process, called cold oxidation, can form virgin or primary water. Riess was able to tap straight into formations of hard desert rock of the right composition and produce as much as 8,000 liters per minute.” ---- www.scribd.com/doc/6190656/primary-water-theory

“This book had its inspiration in the demonstrated discovery by Stephan Riess that fresh, potable water flowing in deep-seated solid rock fissures could be scientifically located from the surface of the Earth, and economically intercepted by drilling through the hard, impermeable rocks so as to constitute an abundant water supply which heretofore has been virtually neglected. This initial inspiration has been refueled repeatedly by the adventures of discovering more and more evidence, already in the literature but dispersed throughout many fields of specialization, that support his basic concept.”

During the last twenty-five years of field experience and observation, Stephan Riess has been able to refine his own work and concepts so that his demonstrations demand attention. Instead, because he goes beyond the hydrologic cycle theory, his work has been ignored with but few exceptions which only now are beginning to grow. According to Du Bridge, president of the California Institute of Technology, there is infinitely more to be learned than has been learned.

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The more science learns the more deeply it realizes its “staggering and overwhelming” ignorance. Those who refuse to even look beyond the hydrologic cycle theory, in the light of Riess' demonstrations, are lost to science.”

---- Quotes above from “New Water For A Thirsty World” by Michael Salzman (1960)

“A Dictionary of Earth Sciences ---- Juvenile Water – original water, formed as a result of magmatic processes. Juvenile water has never been in the atmosphere. Magmatic water can form in very large quantities. A magma body with a density of 2.5, an assumed water content of 5% by weight, a thickness of 1 kilometer, and an area of 10 km squared contains some 1.25×10^9 meters cubed of water.” --- <<http://oxfordindex.oup.com>>

“For among rocks there are some from which rivers gush forth; others there are which when split asunder send forth water.” ----- The Qur'an, Surah 2, Verse 74 ----- <www.saudiaramcoworld.com/issue/200701/seas.beneath.the.sands.htm> ----

By now, perhaps you have seen that many people do not know where water comes from, while there are those who

do, now you are one of them. It is up to you what you do with what you have learned today. It is my hope, for the children who die daily for a lack of clean water, and the cities, and nations at risk from a lack of water, that you will take a very active role in promoting the knowledge of, and develop of primary water sources to end thirst and drought in all nations. There are nations that depend on the waters of the Jordan River in the Middle East, becoming increasingly hostile over water rights, they have forgotten the river has its source in primary water springs at the river's headwaters, and that same source lies beneath their very feet.

If you want to help end thirst and drought for all people, and nations, please consider joining our efforts at the Primary Water Institute, to help Pal Pauer teach younger generations where to find primary water, and to bring it forth in wells across the world. <<http://goneill51.wix.com/waterinstitute>>

By Greg O'Neill

<http://whitetiger511.tripod.com>