## Petrocollapse: Can you live without indoor running water?

Contributed by Jan Lundberg 24 June 2005

## Culture Change Letter #101

The answer to the question "Can you live without indoor running water?" is simple: you'll have to. The passing of abundant oil is not shaping up to be a soft landing for those with the fattest asses. And in this world, we all know which nation leads the way in obesity. Contrast this with the image of slender villagers carrying water casks on their heads, and how their food supply tends to be very local: this will be the envy of U.S. consumers caught short. You can live without functional plumbing, but you cannot live without water. Some indoor plumbing may work after the energy crisis hits with all its might. But, as this report endeavors to warn, the water in your outdoor environment -- such as it is -- will be what you live on (or that doesn't allow you to live at all). What a discovery for the nature deniers to experience. Will frightened hoards be the rule in U.S. cities rather than the exception?

The average amount of water consumed per capita in the U.S. is 183 gallons a day (1990; U.S. EPA). This reflects public water supply usage, and it's twice as high in the western U.S. as in the east. One reason is that irrigation uses 81% of water in the nation. Problems with irrigation: huge energy demand for pumping; drawdowns of ancient aquifers, and salinization.

In Mesopotamia the salinization and deforestation once characterized the beginning of Western Civilization's illustrious march of degrading resources for profit and empire, culminating in today's occupation of Mesopotamia by the U.S. (The serpent is eating its tail.) Clean water is hard to come by in Iraq: 39% of the people don't have it. Deliberate bombing of water treatment and other such facilities has gone on through three U.S. presidents. Petroleum dependence for pumping, when petroleum is lacking in Iraq of all places, is another reason for poor supply. The contamination from petrochemicals and depleted uranium in Iraq is yet another matter for us water piggies in the U.S. to ignore as long as possible.

Back in the USA: picture the state of mind of ornery citizens if four in ten people had really bad or insufficient water. It will be over 9 in 10 come petrocollapse. This is because of the extreme dependence on massively complex and centralized water supply systems that are run with mainly energy or materials from oil and natural gas. Although most of the systems run on electrical energy, and coal is the largest source of electrical energy, there is still a petroleum infrastructure involved: necessary to keep coal supplies moving and for running any system in the U.S. today. Also, petrocollapse -- System Collapse -- is going to bring down the coal sector as well, although not as fast as bringing down the petroleum-supplied aspect of the grid.

Although "every effort" will be made to keep water systems pumping and purifying, when supplies of fuel run short and other systems in the economy are affected and come to a standstill, the basics of industrial progress will show their vulnerability to bad planning and overpopulation. [Community solutions, covered later in this essay, may hold some hope for water supply.]

Water "return flow" means supplies recycled, such as in grey water gathered for the garden, as opposed to lost as in irrigation. Next time you see someone using a gallon of fresh water to wash a spoon, ask the person if that water could be useful for growing tomatoes -- on the balcony if there's no garden.

The U.S. is going to have to throw certain laws and regulations out the window if people are going to use greywater and take other measures for sustainable living. If for some reason water privatization accelerates before petrocollapse, and price rates jump, the behavior of militant Bolivians could be the model in the U.S.A. The U.S. corporation in question was ejected from Bolivia by protesters, and the nation's official leadership lost almost all its clout. [Later in this column: water politics and water history.]

U.S. officials in power today will be laughed about in future, if they're lucky. One hears of future hatred for our whole generation, even of everyone alive today -- although that's going too far.

I try not to pay too much mind to the constant errors and schemes of the wealthy elite and power players. I wish I could say it's because I'm busy writing songs. My main job that I don't like to be distracted from is to point out the main runaway freight trains on the tracks: a collapsing economy and nature batting last. It sure would be nice if the little boys in DC and London (and in most capital cities) would behave themselves, but what can ya do? Vote for a different little boy? It's too late to stop the train wrecks starting to overshadow human drama of the so-called status quo.

I say "so-called" because the status quo of almost anything is going to soon become history. There's good and bad in that, but those many people and other species that don't make it are not going to appreciate the good aspects of complete collapse.

Running water will be cut off and "the pump don't work," not because, as Bob Dylan sang "the vandals took the handles." It will be because energy, usually petroleum, is used for pumping water from major sources a long way from and to the now-teeming cities and wasteful factory-farms. Meanwhile, even drawing some cold water out of one's tap means warming the globe due to pumping-energy. Oops, well at least "I turn the tap off when I'm brushing my teeth."

A more optimistic scenario would include the following techniques, contributed by a reader in rural northern California:

"People in cities and burbs will eventually turn on a tap and get nothing. But they won't panic if enough folks in the community know and teach about rainwater collection, cisterns, barrels, and tanks, bucket composting toilets, composting one's waste (including urine and shit) into fertilizer, greywater reuse, swales, pavement removal, community gardens on a massive scale. -- etc etc etc. Hell, in-depth permaculture training should be mandatory in every school (if only I were dictator, ahh!). Don't sit in the dark quaking with fear, light an olive oil lamp (I've experimented quite a lot with them, and have written an article on it--easily feasible but a bit messy). Plant olive trees now, line city streets with them, so every neighborhood has a local source of veg oil."

I did not ask if you could live without indoor lighting; most places have windows and you can go to bed when it gets dark. In the long run, really living off the "fat of the land" (Hah!) of today's stressed ecosystems may mean the lighting source is rare beeswax candles where olive oil is not handy. What's that you say, "Oh how unlikely!"?

I did not ask you if you could live without food, because you can't. Not for long anyway. You can read my fasting treatise if you like, Culture Change Letter #92 April 8, 2005. Maybe the experience of a long fast will have an unexpected advantage, that of appearing sick and emaciated to those looking for fresh food in the form of human meat. There will be cannibalism for a few months at most, I figure, as the dust settles from petrocollapse. I am not supposed to say this, many readers say, even if it appears certain.

Then we see the Long Emergency, as James Howard Kunstler calls it, although I don't share his visualizing much industrial activity and consuming based on reliance on coal for major electricity generation. Petrocollapse is going to put a massive, crippling monkeywrench into business-as-usual. The extent and degree of upheaval will be matched by its rapidity and apparent suddenness. It is too late to escape it no matter who were put in charge of economics and planning for oil-guzzling nations. Meanwhile, petrocollapse is close on the horizon but is officially ignored. Must that be the way such a watershed of humanity's experience is dealt with? We could call it The Big Oops.

"Peak oil" can almost be an interchangeable concept with peak human population. The correlations on a graph, with plummeting extraction of crude and plummeting population size, are worth contemplating. I would like to be wrong about how imminent and sweeping collapse will be. Still, even if I am a bit premature, it's not like the collapse will "just be our children's children's problem" -- that would be too optimistic as to putting the time off into the future.

As to the potential for large disruption to supply from a relatively small shortfall of petroleum, a recent simulated energy crisis found "It was striking that by taking such small amounts off the market, you could have such dramatic impact" on world oil prices, said Robbie Diamond, the president of Securing America's Future Energy. He participated in the mock crisis on June 23, 2005 in Washington, DC with two former CIA directors and several other former top policy-makers. Drawing from my work at Lundberg Survey where we predicted the Second Oil Shock in 1979, I have been saying for years that the next energy crisis will be triggered by a relatively small shortfall of petroleum.

So, what will you do about clean water? Use a plastic tarp or the asphalt-shingled roof for rainwater when the petrochemicals therein are a health hazard? Yep, you betcha. I even did it myself when I lived in my own shelter in the redwood forest. But I made sure that tarp had been pounded by the rain for a good spell before drinking out of it. Sure was handy though.

For fat-asses to get in shape for petrocollapse, they might switch from drinking soda pops with dangerous chemicals and empty calories from sugar, and instead enjoy fresh water out of the tap (a safer source than plastic bottles).

I look forward to hearing from you on any of the above. I'm getting a lot of inquiries lately, so our new website will soon have a forum/bulletin board system.

Peace.

Jan

p.s. - Water wisdom from Mexico: Culture Change's Editorial Board member Miguel Valencia Mulkay wrote over the weekend,

"Water is in the origin of law and politics; the most ancient recollection of registers speak about water as the center of people's agreements; water has been in history the basis for peace and coming to terms. Since the beginning of the water confinement as tap water in the XIX century, water consumption exploded: from one to three gallons a day per capita to 183 gallons mentioned above; water consumption went up at least twenty times when pipes and pumps were introduced. Today superpumps and superpipes and the use of English WC (defecation in clean water) have become the origin of clean-water exhaustion.

"The 4th World Water Forum to be celebrated in México in march 2006, promoted by the World Water Council (The World Bank and the big water multinationals like Coca Cola, Nestle, Suez Ondeo, Vivendi Veolia, Bechtel, FW Thames and others) is a political marketing effort to change laws in weak countries like México, to promote privatization of all water facilities. The more bottled water is sold the more unclean water comes from tap water; the more fresh water is contaminated by industry the more great business: To produce a liter of milk in México requires 1,100 liters of freshwater. Water in now very expensive for poor people in our country.

"Now, the big business is water: the Blue Gold as is called by Maude Barlow from The Council of Canadians: one liter water costs more than a liter of gasoline."

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Further reading:

Fasting for health and inner peace:

http://culturechange.org/e-letter-Fasting92.htm

Jan Lundberg's analysis of June 20, 2005, End-time for U.S.A. upon oil collapse: a scenario for a sustainable future http://energybulletin.net/6933.htm

Water privatization and the rising conflict: Overpopulation's toll Overpopulation's toll (Culture Change e-Letter #44), by Jan Lundberg:

http://www.culturechange.org/e-letter-water.html

Michael Kane's Beyond Peak Oil (water privatization):

http://www.fromthewilderness.com/free/ww3/091704\_beyond\_peak.shtml

Peak Oil and Community Solutions - second annual conference, Sept. 23, 2005, Jan Lundberg and Richard Heinberg among speakers. Yellow Springs, Ohio http://www.communitysolution.org/05conf1.html

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