We Can Solve the Water Problem!

by Creighton Cody Jones

In the Fall of 2005, the LaRouche Youth Movement began a project to break through the popular misconception that economics is primarily driven by monetary processes, by developing animated representations of the physical economy. The challenge was to get across the higher conception of the way in which breakthroughs in the human creative process act upon living and non-living nature to transform the Noösphere and Biosphere. This is an essential step in organizing the population to understand why they must fight for a science-driven economic development program, as the only path to survival.

Since that time, alternating four-person teams from our youth movement have been working in concentrated two-week periods on a mapping/animation project. We began by gathering statistics on some basics of the U.S. physical economy over long historical periods, including the spread of population from the East Coast inland and the development of the national railroad grid, and developing these into computer animations.

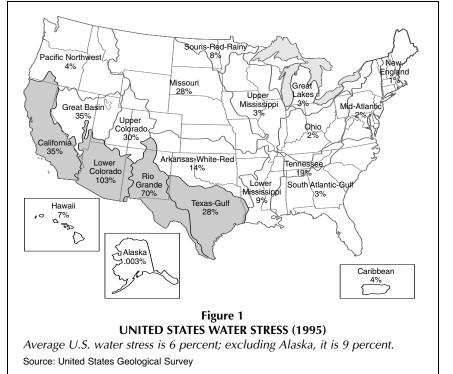
Recently, the animation project turned



Robert Detloff/EIRNS

Cody Jones: "We've got the solutions."

its focus to the world water crisis, which Lyndon LaRouche identified as one of the key problems of human survival that must be addressed. The main perspective we started with came from some of the more recent writings by LaRouche. One of the first things we did was to read through some of the relevant sections in his paper "Economy Despite



Alan Greenspan: What Connects the Dots, "¹ where he defines the problem of economic animations.

The greatest challenge comes in portraying those upshifts and downshifts of a transcendental nature, which are the actual driver of economic advance or decline. We also were looking at LaRouche's "Vernadsky and Dirichlet's Principle"² and his "Science: The Power to Prosper"³ paper.

Of special relevance there, is the question of what occurs when you take a productive process, say, some kind of manufacturing, and move it to a location with lower wage levels and less development of productive infrastructure, as has become the pattern under globalization. Effectively, you have moved into a lower economic potential field. So, even though you may have the exact same technology operating at the point of production, by virtue of it existing in a lower potential field in respect to the economic infrastructure—including skill levels

and general infrastructure development—you've actually lowered the productive potential of the economy, overall, worldwide.

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You see that in Mexico, in the water crisis which is part of the general economic crisis facing Mexico. But, what we've found is that the same thing is going on within the United States itself (Figure 1). One of our team has an animation in the works which is particularly looking at the High Plains aquifer. We also have the data for county-by-county across the country, of groundwater level readings.

Water and Economic Health

In some areas, there were really drastic drops in acceptable groundwater levels, particularly in the High Plains aquifer. In West Texas, farmers have had to shift to what they call "dry farming," because the cost of accessing the water is beyond any kind of profit level for the crop produced. This means a shift in crops to such things as cotton—not exactly something that's going to feed hungry people in Detroit.

As the water level drops, you have to go deeper to get it, which means using a

lot more power, electricity, to run the pumps to bring the water up. You also have a situation where the deeper you have to go, the longer it takes to bring the same amount of water to bear on your irrigation. And so, as these aquifer levels drop, you're reaching a situation where you're actually operating in a much lower potential field. If you combine the fact that you have to use more energy to get the water, and it takes longer to bring that same amount of water to bear on your irrigation process, plus the fact that energy costs are going up-we're reaching a point where it's just not economically viable for these farmers any more, to continue the same kind of irrigation and crop growing that they once had.

We've got the data collected on irrigation density for farming. And what you'll find is that the most productive farming

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takes place under conditions of irrigation as opposed to just reliance on rainfall. We're talking about the breadbasket of the coun-

try, and at one point, much of the world: where you just don't have the farming going on, and the density of farming that you once had, to be able to really support a hungry world population.

So, one of the things we're working on is a 3-D animation of the United States, where 1949 will be base levels: You'll have a flat United States. And over time, you'll start to see the country depressing—morphing down—as a function of the lowering of the depth to which you have to go to access groundwater.

One of the problems we've run into, is that the statistics and data, really haven't been collected in the way that is needed, up to this point. For example, some of us went to the U.S. Geological Survey (in Reston, Va.) for help with maps and data. One person found that when he explained the project we're engaged in, of tracking collapsing water levels and aquifers, the response was something to the effect of, "Oh yeah, this is something we've been wanting to do for 100 years." That gives you an idea of some of the problems that are out there.

All Aquifers Are Not Recharged

Another problem we found was in the oversimplified assumptions made about the question of recharge. Looking at some of the studies, you see they're very open about it: "Well, we assume that if so much water comes down in rain, you're going to have this much evaporation; some of it's going to make it into streamflows; and then this much is eventually going to make it in to recharge the aquifers." They use this kind of linear statistical modelling, which may be 100 percent off.

As Lance Endersbee wrote in his book *A Voyage of Discovery* (see article, p. 20), in many places the concept of recharge from rainfall and from river runoff is totally bogus; it doesn't exist. As Endersbee showed in a location he studied in Australia, the water comes from deep in the Earth, and was formed a long time ago. He actually talked about this kind of bubbling up from the core of the Earth, in the form of plasmas, where you actually then start to see the forming of water as it makes its way up to accessible layers in the aquifers.

So, in some places the water may be absolutely non-rechargeable by rainfall, but solely as a geothermal process. And this really does intercept our efforts to look at physical economy from the standpoint of Vernadsky, of the interaction of human noetic processes with the biosphere.

We saw the same thing in the studies of recharge by the Mexican water authority, where they're looking at the percentage of water being taken for irrigation and other purposes, away from the recharge levels. Well, they're assuming that this recharge is taking place. Now, it very well may be the case, that it's not taking place.

In California, there is the Central Valley aquifer. Now the most recent data they have on water levels for this aquifer, are from 1985! This is on the website. And they talk about studies done in 1985, which say, "Well, we probably have enough water in the aquifer to continue irrigation through the year 2010"! Right? Four years from now! And, as far as I know, nothing's really been done to address that.

There's the other problem down around the Imperial Valley, where bills were passed, including by our Congressman in southern California—we call him "Drunken" Hunter—to take water away from the irrigation there, from the Salton Sea, and pump it into San Diego, just to meet the demands of the growing population for simple drinking water.

We've Got the Solutions

So, we're really careening towards a cataclysmic crisis in food production and accessibility of water, and it intersects the energy crisis, because, if you don't have the energy, you can't continue to do the pumping.

But we've got the solutions. Most of them have been on the books for a long time. If you get nuclear desalination, you can overcome both these problems: You'll have the abundance of energy, and you'll have the ability to get fresh water by desalination. And we can bring in the North American Water and Power Alliance (NAWAPA) project (Figure 2) to bring melt water down through the Rocky Mountain Trench from Alaska and Canada. This plan has been around since the 1960s.

The Metropolitan Water District of Southern California commissioned a report back in 1993, calling for the development of desalination projects. General Atomics, based in San Diego, then came up with their study—they'd actually done the study several years prior to that which concluded that the best form of desalination was nuclear. They looked at the different alternatives, such as using diesel power, and the various methods used in Saudi Arabia and elsewhere, and they concluded that the safest, most environmentally friendly, and cost-effective method was nuclear desalination.

But, none of this was ever implemented.

So, you've got all the solutions on the books, like the NAWAPA, which has been around for half a century. Getting it done now really comes down to a political question. And that's where we come in. In California. four LaRouche Youth Movement members who are on the Central Committee of the Los Angeles Democratic Party have formed a grouping of young Democrats, with support from the party, called the FDR Legacy Club. Our aim is to educate party members and voters on the economic program we need for the 21st Century, and especially to get them to learn how to think about it. We have to turn around 40 years of brainwashing and demoralization of the Baby Boomer generation, which turned against science and industrial technology. Nuclear power, a modern national rail system with electrification and maglev, and large-scale water projects are all part of this.

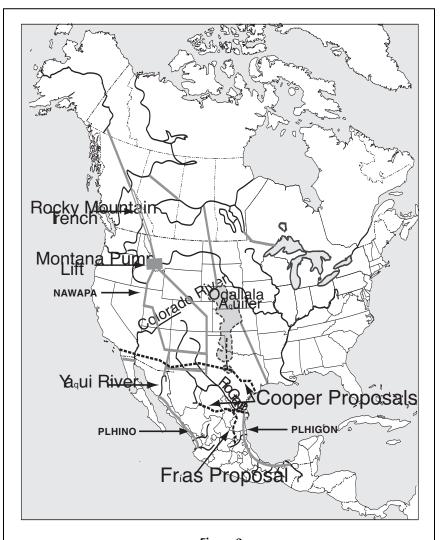


Figure 2 NORTH AMERICAN GREAT WATER PROJECTS

The map combines the proposals of the North American Water and Power Alliance (NAWAPA) study to bring abundant runoff and melt water from Alaska and the Canadian Rockies to the U.S. Southwest and high plains, with several Mexican proposals. These include the PLHINO (Plan Hidraulico del Norte) which delivers water from the southern states of Sinaloa and Nayarit to the agricultural state of Sonora, and the PLHIGON (Plan Hidraulico del Golfo Norte) which carries water from the water-rich jungle region of the Tehuantepec isthmus to Mexico's Gulf coast. From there the Frías and Cooper proposals deliver it to dry interior areas.

Sources: Parsons Company, "North American Water and Power Alliance Conceptual Study," Dec. 7, 1964; Hal Cooper, Manuel Fras Alcaraz; EIR

Allying Scientists and Labor

We'll be bringing in scientists and labor leaders, whom we already have contact with, to help us. I've talked with one auto union leader who's really excited about coming out to California, and helping us jump-start the work with the unions. We've created the political infrastructure where we can revive the same kind of thing that, I understand, existed with the Fusion Energy Foundation in the 1980s. We start bringing together these scientists, with the unions, with the laborers, with the political forces, with the elected officials. And then, through the Youth Movement, we are going to have this ability to start to bring all this back together.

So, when I get back to California, we're going to contact the people we know in science and industry, to see what they have, and to start to set up forums, where we bring in our political contacts, people from the Democratic Party. Particularly as we get these animations moving, we can present the crisis; present the proper epistemological focus through LaRouche and his ideas; and then bring in these scientists, bring in these laborers, to discuss the solution, to discuss the viability of the solution and to discuss the viability of the technology, and what's out there. And then, the ball's really in the court of the political institutions as to whether or not they're going to make the moral decision to do what's right.

We've got similar potential in Texas, where our Youth Movement is active. In west Texas, the University of Texas of the Permian Basin and General Atomics have just signed the contract to build the first research facility for a high-temperature gas-cooled reactor. [See p. 53.] We've got a potential for a broad political alliance around the development of nuclear power and water desalination. Typical is a farmer we know out there. He's a Republican, but he's all jazzed up about working with LaRouche around the farming situation and water crisis there.

So, you start to bring these networks together: You've got these farmers, and these political networks. You bring them together with what's going on in the scientific and research and development facilities in developing the technology for nuclear desalination. Then you can really start to build a real base and a real political force to start moving things. So, that's definitely going to be the direction we're going to move things in the coming days, weeks, and months ahead.

Creighton Cody Jones is a leader of the LaRouche Youth Movement in California and a member of the Central Committee of the Los Angeles County Democratic Party. The article is adapted from a presentation he made in Leesburg, Va., March 25, 2006.

- 1. Lyndon H. LaRouche, Jr. *Executive Intelligence Review*, Feb. 17, 2006. (www.larouchepub.com/ lar/2006/3307connect_dots.html).
- Lyndon H. LaRouche, Jr., 21st Century, Winter 2005-2006. (www.larouchepub.com/lar/2005/3222 vernad_dirichlet.html).
- Lyndon H. LaRouche, Jr. Executive Intelligence Review, Apr. 16, 2005. (www.larouchepub.com/ lar/2005/3217science_prosper.html).

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