EIRNS

The parking area of Mexico City's Palace of Fine Arts, where the subsidence of the heavy marble structure is visible to the naked eye.

for the United States (see **Figure 4**).

Mexico's known aquifers are mapped in **Figure 5.**

But things are worse, still, as can be seen by looking at annual aquifer withdrawals compared to annual aquifer recharge—i.e., the amount by which annual precipitation refills those aquifers. For Mexico as a whole, the withdrawals are 35% of annual recharge. When you look at the Northern Zone, the withdrawals are 97% of annual recharge (see **Figure 6**)!

Again, the averages here conceal the disastrous over-exploitation of specific aquifers which is occurring in many parts of the country. For Mexico as a whole, 21% of all known aquifers are either over-exploited (i.e., more water is withdrawn than is recharged each year), or have problems of salt-water intrusion or brackish water. In the Northern Zone, a dramatic 30% are over-exploited. **Figure 7** shows the location of these over-exploited, endangered aquifers, according to the latest data provided by the official National Water Commission (CNA) of Mexico.

Mexico City is a story unto itself: the entire city is literally sinking, visibly, into the drying lake bed of Lake Texcoco, on which the city was originally built by the Aztecs, and then by the Spanish. In the Valley of Mexico, which comprises metropolitan Mexico City with its 20 million inhabitants, withdrawals from aquifers are 120% of their annual recharge. Tourists who have visited downtown Mexico City can't help but notice the shocking evidence of subsidence: sidewalks are buckling all along Avenida Juárez; steps from buildings down to the adjoining street are now twice their original height—a dangerous discovery for visitors; and the famous Palace of Fine Arts (Bellas Artes), constructed entirely from heavy Carrara marble, is now sinking down into the bowels of the earth by a few centimeters every year.

A more eloquent metaphor of the imploding global financial system can scarcely be found.

LaRouche-López Portillo Battled To Power North America

by Gretchen Small

The last Mexican government which fought to develop that nation into a modern, nuclear-powered industrial nation, was that of President José López Portillo. As President from 1976 to 1982, López Portillo told the Mexican people time and again, that "the historic moment has arrived to say 'enough' to the ancestral misery of the Mexicans." To accomplish this, he proposed that Mexico gear up production of its newly discovered giant oil reserves, and exchange that oil for technology, emphatically including nuclear technology, from the industrialized nations. "We have to rapidly accustom ourselves to thinking big," he often said. "We must plan large development projects with ambition and vision."

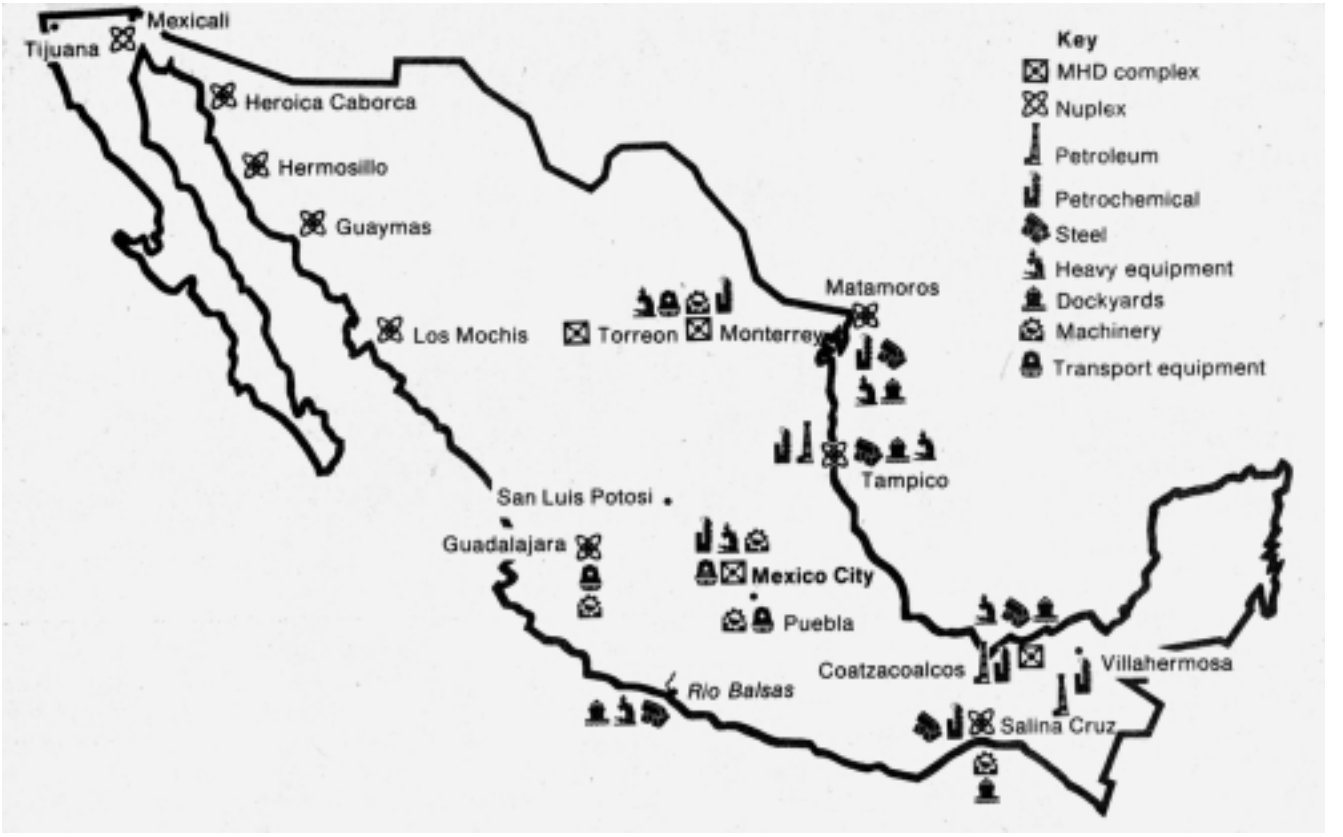
As part of that drive, he travelled to the United States, France, Japan, the Soviet Union, India, and other nations, in search of allies in the construction of a New World Economic Order, so that his and other nations could develop. From 1978-80, in particular, López Portillo focused on the urgency of securing a global commitment to the rational, ordered development of the world's energy resources, sharing knowledge of the technologies of the future, so as to power progress in all nations, without leading to war. His call for the equivalent of an "energy Bretton Woods," excerpted in the documentation below, still stands as a valuable contribution to the energy battles of today.

One López Portillo's the closest collaborators in this development mission, was U.S. statesman Lyndon LaRouche, whose 1976 election-eve national television broadcast denouncing (among other things) George Ball for organizing *genocide* against Mexico had established LaRouche's name as an outspoken defender of Mexico's right to sovereign development.

López Portillo, well known as an intellectual and avid reader, already knew of LaRouche's political and economic writings before he became President, having met, as Finance Minister in the previous government, with members of LaRouche's youth movement of the time from the Mexican Labor Party. That contact with LaRouche's young Mexican collaborators continued throughout his Presidency, and when the financiers unleashed all-out financial war against Mexico and all of Ibero-America in 1982, López Portillo personally received LaRouche at the Presidential seat, Los Piños, in May.

That meeting, after which LaRouche gave a press confer-

Proposed Locations of Some Agroindustrial Nuclear Complexes (Nuplexes) by the Year 2000
(1981 Proposal)



Large agroindustrial complexes based on advanced energy sources are essential for Mexico's overall development. Nuclear reactors—optimally, high-temperature gas cooled reactors—and magnetohydrodynamic power generators will provide the base for chemical fertilizer plants, steel plants, desalination plants, and electricity grids.

This map and caption were published in 1981 by Lyndon LaRouche's associates in the Fusion Energy Foundation and the Mexican Association of Fusion Energy.

ence at Los Piños, occurred during the third of LaRouche's four visits to Mexico in the last half of the López Portillo government. His first was in March 1979, when he was invited to the 50th anniversary of the ruling PRI party. In a press conference during that first visit, LaRouche emphasized that it was important that he, as a patriot in the tradition of the American Revolution, "take this opportunity to be in Mexico at this time, because, although the government is not a power by the ordinary standard of world powers, it is at this moment, one of the most important moral forces in the world, and . . . one of the leading forces of the new world economic order on behalf of developing nations."

Power and Water

By that time, the world knew that Mexico had become, as *EIR*'s Nov. 28-Dec. 4, 1978 cover story put it, "The Oil Giant Next Door." The government was at work putting together plans to double Mexico's industrial plant in six to seven years, eliminate subsistence agriculture through mechanization of the countryside and irrigation projects, and build entire new ports and cities. As early as 1977, government studies projected that a generation hence, nuclear power should be the dominant energy source, and government officials drew up a nuclear program whose goal was the construction of 20 nuclear reactors by the year 2000, to supply some 70% of the nation's electricity.

Developing Mexico's water resources was also high on the government's agenda. Action was revived on the Water Plan of the Northwest (PLHINO), the large project that had been part of the planned hydraulic revolution which was formulated as far back as the mid-1960s. Asked in 1977 about the proposal for the great North American Water and Power Authority, NAWAPA, López Portillo answered that one day this "extraordinarily interesting project" would be built, but to do so, sufficient power would have to be generated to move such great amounts of water. Those are the levels of power

which Mexico and the United States, today, can no longer refuse to create, by continuing to block nuclear energy. Likewise, nuclear desalination was under study.

LaRouche's magazine, *EIR,* rapidly became *the* journal of record on Mexico, turned to by businessmen and policy makers in the United States and other countries who wanted "in" on Mexico's industrial boom. That was not only because LaRouche's magazine was the only source which extensively chronicled the Mexican drive; people knew LaRouche was providing critical intellectual leadership shaping that battle.

In March 1981, LaRouche made his second visit to Mexico, a ten-day tour which took him from the northern city of Monterrey, to the capital, Mexico City. His theme here was the urgency for the United States and Mexico to adopt agreements under which Mexico would trade its "20th-Century surplus resource, petroleum, for the technology of the 21st Century," including nuclear technology. LaRouche proposed that the United States sell Mexico $100 billion or more in capital goods and technology, under such an "oil for technology" initiative. As you can read in the excerpts which follow, LaRouche emphasized, as he continues to do today, that this kind of U.S.-Mexico collaboration would "represent in principle the model for a new economic order in North-South relations," which would change the entire global strategic geometry.

Mexico was optimistic, in those days. Daily newspapers ran editorials supporting "a great national effort" to train the more than 50,000 technicians and professionals needed for the vast nuclear industry planned.

In February 1981, shortly before LaRouche's second trip, LaRouche associates in the U.S. Fusion Energy Foundation (FEF) and the Mexican Association for Fusion Energy (AMEF) released at a conference in Mexico City, their joint study on *Mexico 2000: Energy and Economy,* which outlined a program for the crash development of Mexico. Their premise was that: "The discovery, starting in the mid-1970s, that Mexico possesses much larger petroleum reserves . . . than had been previously realized, affords it a unique opportunity among larger Third World sector countries to substantially reduce the time . . . necessary to become a modern industrial nation. . . . By no later than the year 2000, the great majority of 115 to 120 million Mexicans should be able to enjoy a standard of living comparable to that of the average inhabitant of the West European nations in the year 1980."

Four officials from the Mexican government spoke at the conference on the development program. Among the officials present, who elaborated the Mexican government's ideas for how to get the job done, were Dr. Alfonso Rozenzweig, director of industrial port development for the President's Office of Special Development Projects; and Mexican Industry Ministry Sub-Director Narcisco Lozano.

The study, which argued that Mexico needed to adopt a South Korean-style infrastructural construction program to solve the bottlenecks in water availability and transport, proposed three locations for the construction of agro-industrial nuclear complexes (nuplexes) by the year 2000, including using nuclear energy to create water, through desalination (see map).

Documentation

LaRouche's 1981 Oil-for-Nuclear Proposal

Addressing an "International Symposium on Economics" at the prestigious Monterrey Institute of Technology on March 9, 1981, as the kick-off for a ten-day visit to Mexico, Lyndon LaRouche spelled out the strategic possbilities which a U.S.-Mexico oil-for-technology agreement would open up—even now, over 25 years later.

Let us assume, for purposes of discussion, that the projected increase in Mexico's production for oil exports to the United States were to reach 2.5 million barrels per day. Let us assume that this means that over the first decade of such an agreement Mexico would receive the current equivalent of $150 billion in high-technology capital goods imports, in addition to other categories of purchases effected with oil revenues.

The export of $150 billion more of capital goods from the United States to Mexico would accelerate investment and capital turnover in the most advantaged basic industries of the United States, accelerating technological progress in those industries, as well as increasing productive employment in the United States. A government of the United States which rejected Mexico's offer of an oil-for-technology program would be a government which ought to be certified to a mental hospital on clear grounds of galloping insanity.

Mexico would benefit. It would be exchanging a surplus of a potentially obsolescent energy source, petroleum, for 21st Century technologies as well as up-to-date 21st-Century industrial and agricultural technologies.

The major feature of global investment over the coming decades must be nuclear technologies Every nation which intends to have a technological future, including most of the semi-industrialized developing nations, must now begin to develop nuclear technologies. Nations such as Mexico must become masters of thermonuclear technologies, developing the research and training programs required

If I were advising the government of Mexico, I would whisper to the ears of my friends in Mexico: "Mexico must have not only nuclear plants, it must also have a reprocessing capability, and must have educational and research centers through which thousands of Ph.D.-equivalent physicists and

chemists specializing in advanced plasma-physics technologies are developed over the coming two decades"

The Caribbean coast of the United States would blossom with new superports at places such as Galveston, New Orleans, and Mobile. The riparian transport system, the railroads and air freight capacities, would blossom anew. All this would be catalyzed by the need to process capital goods and related traffic with Mexico and other nations.

[The key for this] is the organization of credit relationships on a state-to-state basis. In the case of the United States, the Export-Import Bank is the obvious vehicle for facilitating oil-for-technology agreements. This requires that the U.S. Congress authorize increases in the capital of the Export-Import Bank up to the level of the combined petroleum earnings deposits and additional credit extended to Mexico.

López Portillo's 'Energy Bretton Woods' Proposal

On Sept. 2, 1979, President José López Portillo proposed in an address to the United Nations, that the nations of the world open formal discussions on collaboration on not merely the use, but the development of world energy resources, to the mutual benefit of all. Echoing the prophetic warning which he would make in October 1982 in another address to the UN on the issue of the debt, the Mexican President warned, that should the nations of the world fail to come to an agreement on a Bretton Woods-style energy development plan, speculation, scarcity, and might, not right, "would again loose the Horsemen of the Apocalypse" upon the world. Excerpts follow.

For seven thousand years our people have inhabited this Earth, and throughout our existence our history has been marked by the search for a common denominator that would identify, bind and unite us all.

Our present circumstances seem to indicate that that unifying element, incumbent on us all, may well be the lack of energy sources.

The energy crisis exists; it is an actual fact. We are witnesses to an obligatory transition period in the world energy situation. We can be authors of that change, and channel it, or we can be simple spectators, and become its victims. . . .

Let us base our relations on what we have in common, and use the differences among us to enrich our analysis. Let us make those relations lasting by basing them on mutual benefit and reciprocal respect. . . . Let us treat others as we would be treated ourselves. . . .

An extravagant and wasteful use of petroleum has been made in the decades when its price was low. For the most part, it has been used as a fuel. That period will be branded with the stigma of folly, for having burned petroleum that could have been turned into foodstuffs and petrochemical products of prodigious benefit to the whole of mankind.

We have turned the petroleum industry into a gigantic mechanism for producing profits and tax revenue to meet urgent short-term needs.

We had forgotten the importance of the future. What is in short supply becomes expensive. What, then, is the price of a commodity whose supply is running out? What is the price of that which no longer exists? . . .

Hydrocarbon prices cannot be considered a matter for bargaining and for a testing of strength between producers and consumers, particularly when their respective positions are made more extreme by the intervention of other, generally transnational structures, many of which no longer recognize any home country and consequently acknowledge neither social obligations nor political solidarity. . . .

Energy sources are the shared responsibility of all mankind.

Energy sources must not be the privilege of the powerful. All abundance is relative. Such sources have a limit, and will come to an end. We want to bridge the gap between extremes by making present-day petroleum supply, demand and price structures compatible with the alternatives we seek for the future. . . .

If at Bretton Woods we were able to establish an orderly structure for handling monetary and reconstruction matters, we could today, in this now fully instituted forum [the United Nations], establish a new and more orderly structure for handling energy and resurgence. . . .

I, therefore, propose the adoption of a world energy plan that covers all nations, both haves and have-nots, is binding on all, and has as its fundamental objective the assurance of an orderly, progressive, integrated and just transition from one age of man's history to the next.

The plan must contain programs designed to:

- Guarantee the full and permanent sovereignty of each nation over its own national resources.
- Rationalize the exploration, production, distribution, consumption and conservation of present-day sources of energy . . . by providing financial and technical assistance.
- Ensure and increase the systematic exploitation of potential reserves of all types, both traditional and non-conventional, which have not yet been exploited owing to lack of financing or applied research. . . .
- Devise measures for the promotion in developing countries of the formation and integration of auxiliary industries in the energy field, and especially of capital goods. . . .
- Set up financing and development funds. . . .
- Institute a system for disseminating and transferring technologies, together with their respective training programs, that would included a worldwide registry of advances and follow-up in energy research and experimentation. . . .
- Support the establishment of an international energy institute. . . .