

## Water and rail projects for the Americas

In *Won't You Please Let Your Grandchildren Have a Drink of Fresh Water?* Lyndon LaRouche in 1982 wrote that "the greatest single environmental danger to the American people over the coming two decades is the danger that whole regions of our nation will simply run out of usable freshwater supplies." He called for major water development programs such as the North American Water and Power Alliance (Nawapa), and extensive nuclear-powered water desalination projects, but these were rejected by Washington as not "cost-effective." The multibillion-dollar costs of the droughts and devastating floods of the 1990s have again proven how urgent these projects are.

Nawapa is an engineering plan developed in the 1960s by the Ralph M. Parsons Co. which would divert some of the unused water now flowing north to the Arctic Ocean, southward through a natural and engineered Rocky Mountain Trench, to provide an additional 135 billion gallons of freshwater per day to the Canadian and U.S. plains, the Great Lakes, U.S. Southwest, and Mexico (**Map 21**).

But the Nawapa project was never implemented. Regional water projects were also stalled, and desalination research and development were all but shut down. The results are water shortages and ecological degradation—all man-made problems. Today, serious water supply problems are worsening in California and other western regions; Florida and the Southeast; the upper Missouri Basin; and the coastal regions of New Jersey, Virginia, and the Gulf of Mexico.

People are suffering water supply problems because necessary water works developments were systematically halted over the past 25 to 30 years. The entire U.S. population is feeling the effects of inadequate and declining per capita supplies and usage of water, especially for farming, food processing, manufacturing, transport, and power generation.

The Nawapa plan is based on the fact that the sparsely populated northwestern region of North America receives about one-quarter of all the rain and snow hitting the entire continent. Nawapa would divert 15% of this flow (now draining northward) into a natural wonder reservoir—the 500-mile-long (and up to 10-mile-wide) Rocky Mountain Trench in British Columbia.

The project should proceed in three phases, so that the benefits in each stage lay the groundwork for subsequent development.

**Phase 1:** Transporting water eastward across the Cana-

dian plains provinces, providing water for irrigation there, as well as navigable channels that would connect into the Great Lakes, allowing for the regulation of the lakes' levels and St. Lawrence Seaway for the first time.

**Phase 2:** Transporting water southeast across Montana and the Dakotas, and southward, where it would recharge the depleted Ogallala Aquifer beneath the High Plains, augment the flow of the Missouri and Mississippi rivers, and link the Canadian plains with the Mississippi by a navigable canal.

**Phase 3:** Channeling water to the dry southwestern United States and to Mexico.

In addition to developing new water supplies and navigation routes by carrying out the Nawapa designs, a mobilization to make large-scale water management improvements can complete projects that have been left unfinished for decades. The foremost example is the inadequate flood control system of the upper Missouri and Mississippi systems. Because the necessary levees, dams, soil conservation practices, and other water management infrastructure were never completed here—although the hydraulic designs were fully elaborated—millions of people suffered during the "Great Flood" of 1993, whose destruction would have been minimized if the infrastructure had been in place. The Great Flood had minimal impact on the lower Mississippi basin, because for the most part, the required infrastructure was completed there.

Another North American river basin system overdue for improvements is the Rio Grande River. According to the U.S. Geological Survey, the Rio Grande was at capacity per capita and per square kilometer water volume use in the 1970s. When this watershed—the border between the United States and Mexico—later became the location for the model "free trade" factory towns, the *maquiladoras*, no new water infrastructure was built. Hundreds of thousands of people are now subsisting with high rates of diseases, without safe water, and no sewage treatment.

### Navigating a continent

In 1986, the Schiller Institute published a book-length study, *Ibero-American Integration: 100 Million New Jobs by the Year 2000!* commissioned by Lyndon LaRouche, which detailed the rail, water, energy, and other development projects necessary to pull Ibero-America out of backwardness. It emphasized as decisive the proposed water and rail projects shown on **Map 22**.

A **Pan-American railroad** (a continental north-south railroad), with a few critical east-west spurs crossing the Andes mountain range, is desperately needed in Ibero-America. Without it, neither serious national industrialization nor regional integration can occur. The proposed route follows the path of the Pan-American Highway through Central America, cuts across the Darien Gap into Colombia, and then runs south from Bogotá, Colombia, to Santa Cruz,



*The Panama Canal cannot handle even a modest increase in traffic; a development plan for the Americas requires the construction of a new canal across the Panama Isthmus.*

Bolivia, along the narrow strip of flatlands on the eastern slope of the Andes before the Amazon jungle proper begins. In Santa Cruz, it would link up with existing rail lines running to São Paulo, Brazil and Buenos Aires, Argentina. The two most important trans-Andean spurs would run from Iquitos to Chiclayo in Peru, and from Santa Cruz, Bolivia to the port of Arica in Chile.

One of the major reasons that these projects have never been built, apart from the lack of funds available under prevailing International Monetary Fund policies, is the opposition from the international environmentalist movement, which is run by the British royal family. The proposed rail routes, for example, run into a multitude of environmental protected areas and parks which are off-limits, by law, to development. First, the Darien Gap route is blocked by protected areas. Then, there are parks in Ecuador, Peru, and Bolivia throughout the proposed route along the eastern slope of the Andes. And, finally, both of the proposed trans-Andean spur routes run across protected areas.

A **new interoceanic canal** across the Panama Isthmus is urgently needed. The current Panama Canal is outmoded and grossly inadequate to handle even a modest increase in the volume of regional and world shipping. A new sea-level canal capable of handling supertankers of up to 300,000 tons deadweight needs to be constructed. The preferred route (known as Route 10) lies just west of the existing canal. A

second option is the Atrato-Truandó Canal in Colombia (known as Route 25), which takes advantage of existing rivers and lakes.

Both routes are blocked by existing and proposed protected areas. Route 10 cuts across the planned Path of the Panther, designed to stretch along the length of Central America from Guatemala in the west to the Panama-Colombia border in the east. Route 25 lies in the Darien Gap area of Colombia mentioned above, and the entire projected route overlaps dozens of small parks and protected areas.

**River integration.** The single most important infrastructure project needed to open up the interior of the South American continent to development and population increase, is the integration of the area's three great river systems—the Orinoco, the Amazon, and the Rio de la Plata. When completed, ships could sail directly into every country in South America, with the exception of Chile. Some 68% of the projected 10,000-kilometer route is already navigable by barges and ships. Another 28% requires relatively minor hydraulic and dredging work to be made navigable—such as those under way along the Tiete-Paraná-Paraguay water highway. The remaining 4% requires major projects centered on the construction of two critical sets of canals—one linking the Orinoco and the Amazon in southern Venezuela; the other connecting the Amazon and the Paraná River tributary of the Rio de la Plata system in western Brazil.