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NAWAPA: An Anti-Entropic Upshift In Global Economy

he theories of Adam Smith and Karl Marx converge upon the erroneous belief that physical economic value is created by the labor of the individual operative at the point of production in factory, farm, or mine. The history of human creative mastery over nature, that is, physical economy, proves otherwise. It is not the individual hours of labor embodied in a commodity, but the total development of the physical and conceptual infrastructure of economic organization, which determines the productivity of the individual and the society as a whole, and therefore defines economic value.

NAWAPA, the North American Water and Power Alliance, will be the next dramatic proof of this basic truth. NAWAPA is the program, first projected in 1964 by the Parsons Engineering Company, to bring fresh water, now lost as runoff to the Pacific and Arctic Oceans, southward to the dry regions of the Canadian and American West, Southwest, and plains states, and to northern Mexico.

By diverting approximately 117 million acre feet per year (about 17 percent) of the unused runoff from the mountains of Alaska and the Yukon Territory, NAWAPA will provide enough fresh water to assure adequate water supplies for the next century or more. An additional flow, up to 48 million acre-feet per year as required, from the unused runoff of the eastern slopes of the Rocky Mountains and Arctic Basin will be diverted into the Great Lakes to alleviate falling water levels and pollution, and increase power production. An included result will be the creation of a navigable waterway from Vancouver on the Pacific to Lake Superior, and another to the Arctic Ocean.

In the process of solving the desperate need for water in the western regions, this massive engineering project will transform the economic geography of the North American continent by creating a sea link between the Atlantic and the Pacific and Arctic Oceans. The value of goods produced in the interior of the continent thus increases, and the vast untapped mineral potential of the Far North is opened up. New towns and cities will arise in interior regions, bringing with them the opportunity for cultural development.

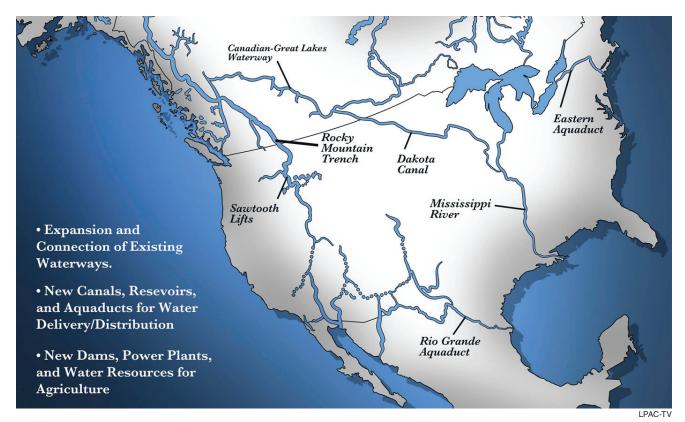
In addition, NAWAPA will generate a surplus of hydroelectric power. When that is combined with a renaissance in nuclear power production, including the urgent production of at least 6,000 new 1-gigawatt nuclear plants by the year 2050, a truly human living standard for all the world's people can be achieved.

The greatest power requirement for NAWAPA, comes at the Sawtooth Lift on the Idaho-Montana border, where the entire mass of water accumulated in the Rocky Mountain Trench, must be lifted about half a mile up. While originally designed to be powered by diversion of water into falls that would eventually reach the Columbia River, the use of nuclear power to drive the massive pumps would avoid the waste of a great volume of water. It is an ideal location for a cutting-edge nuclear facility, employing advanced reactor designs, and perhaps incorporating prototype hydrogen fuel production capabilities.

The proximity of the Idaho National Laboratory, where the Department of Energy's research on advanced reactor design is conducted, and of the Hanford complex in Washington state is fortuitous.

Man-Made Climate Change

NAWAPA is also a program for climate change. NAWAPA will bring an amount of water sufficient to irrigate 86,300 square miles of newly productive agricultural land. This is the equivalent of a 35 mile-wide strip of farmland stretching for 2,500 miles, from 500 miles north into the Canadian agricultur-



The North American Water and Power Alliance, proposed in the 1960s, is a program to truly green the United States, and uplift the nation and world in the process. For a brief video overview of the project, see http://www.larouchepac.com/node/15570. Other NAWAPA videos are available at www.larouchepac.com.

al belt, to 200 miles south of the border into Mexico. Increased photosynthesis—the proper use for solar energy!—will mean an increase in rates of evapotranspiration, water vapor content of the air, and cloud cover.

The vast irrigated areas will create local microclimates, bringing an estimated 2.7 inches of rainfall for every inch of water supplied. Further, the increase in groundwater flow over broad areas will mean a conversion of marginally arid scrubland to prairie.

Along with NAWAPA will come the next phase of development of the railway grid, an intercontinental link across the Bering Strait and a railway link through the Darién Gap from North to South America. A Bering Strait tunnel will connect North America by land to the markets of Eurasia, forever changing the Atlantic orientation of trade. A rail passage through the Darién Gap, the still-unfinished section of the Pan American highway, combined with the long-delayed development of a South American railway system, means the final end to poverty and underdevelopment for

the Hemisphere.

Human Economy Is Anti-Entropic

From the time of the earliest recorded transformations in man's relationship to nature, characterized by scientific advances in astronomically guided transoceanic navigation, the source of economic value has always resided, not at the point of production of commodities for exchange or use, but rather in ideas. The uniquely human capability for discovery and transmission of new universal principles, and the incorporation of such principles into means for transforming nature to the benefit of present and future generations, is the true and only location of value.

As the successive exponential improvements in human relative population density potential over history demonstrate, that process of human creative intervention into nature, puts to rest all silly ideas of a universal principle of entropy. Human economy is anti-entropic, and willfully so. Thus, any physical theory which seems to prove the universal existence of a law of entropy is, by definition, false. Entropy is not a universal law but a restricted one. The theorizer has left

out of his theory the possibility of his own existence.

The urgent question for today is: How best to foster the global expansion of human creative potential to achieve that urgently needed anti-entropic upshift in human physical economy which can carry us into the future? A mobilization of national economic resources for NAWAPA provides the answer to that urgent question. With NAWAPA and the related development projects worldwide, we can achieve that necessary turnaround in global economy which will make the future of the human race secure for the coming century. The end to global hunger and poverty, the tragically overdue development of the underdeveloped nations of the world, and the preparation of mankind for the journey into the Solar System and beyond, all await us.

There is no other viable proposal in sight. Solar panels and windmills will not cut the cake. A failure to act now for the urgent implementation of the NAWAPA program means a descent into hell, its adoption a renaissance for humanity.

-Laurence Hecht