

New Ice Age Ahead

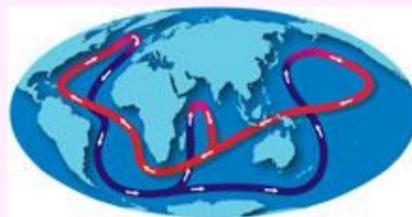
New NAWAPA The efficient option



Trans-oceanic river diversion unaffected by the New Ice Age ahead

A project to enable a concept

We find the water-in-water-conveyance principle already applied in the natural universe in the largest water-transport system on the planet, called the *Great Ocean Conveyor Belt* that distributes vast amounts of heat, minerals, and CO₂ across the planet.



The *Great Ocean Conveyor Belt* consists of a network of warm ocean currents (red) that flow into the Arctic and Antarctic. In the Atlantic Arctic region, for example, the warm water gets cooled and increased in salinity by evaporation, to the point that the cold water sinks. As it sinks, it starts a worldwide network of deep coldwater stream that gets conveyed around the world, some into Indian Ocean, and some into the

Pacific Ocean, where it gets reheated and starts a return path.

In the North Atlantic the system is driven by the warm water from the Gulf Stream. As the water cools in the Arctic and increases in salinity by evaporation, it sinks into an encapsulated basin of cold water that is confined by the Greenland-Scotland Ridge - an undersea barrier between East Greenland, Iceland and Scotland. The gaps in the ridge enable the main body of the basin to flow into the North Atlantic Ocean to the south. The flow is powered also to some degree by the down-slope of the undersea barrier. The conveyance is so efficient that the cold water stream flows all the way to the Antarctic before it flows from there into the Pacific and Indian Ocean where it warms up again.

This system is huge. The North Atlantic loop all by itself moves 8.5 million cubic meters of water per second, that's almost 40 times the average flow rate of the outflow of the Amazon River, or 1,500 times of the NAWAPA diversion rate. This entire huge water conveyer belt from the Arctic to the Antarctic appears to be powered by nothing more than a minute difference in the salinity of the seawater to about 35.25 from the normal ratio of 34.88 in salinity units (grams of salt per liter) while the temperature drops in the process from 8.5°C to 2°C or less before the water begins to sink. The resulting flow in this system is so immense that it carries with it 300 million kilograms of salt per second, and distributes over 300 million megawatts of thermal power in its flow.

The water-in-water conveyance principle that we see in action here, is the most efficient principle for water transport that is available. It reflects the Least Action Principle that governs all natural processes in the Universe. Thus, the same principle is evidently also the most efficient principle for bringing fresh water into the American and Mexican deserts. For this purpose the diverted fresh water would flow in large-diameter submerged arteries (thin-walled 'hoses') as an application of the same principle than enables the efficient movement of water throughout the oceans by the Great Ocean Conveyer Belt.

For the application fresh water would be conveyed within thin-walled pipelines of large diameters, made of woven basalt in automated industrial processes. The pipelines would be placed into the oceans by which the water transport infrastructure would operate with near-zero pressure differential, and would operate efficiently over long distances, like the conveyer belt. The NAWAPA objective could thereby easily be met by simply diverting some of the outflow of one of the great southern rivers, such as for example the Orinoco River in Venezuela (that dumps 850 million acre feet per year into the ocean) into the dry U.S. and Mexican desert regions, where the water is needed. The Orinoco River in Venezuela, presently dumps more than six times the amount of fresh water into the oceans than the NAWAPA project aims to transfer from the North. The water-in-water transfer from the South could, for example, be channeled across the Gulf, and via a 50-mile sea-level tunnel across Panama, and from there to the north North, to the North American deserts. All this could be accomplished with relative ease and with a far greater volume potential than the NAWAPA plan presently envisions or ever could provide for the lack of available water in the North.

A small pilot project might be run initially, up the West Coast to divert the outflow of the Columbia River or from the Fraser River, or from a collection of lesser rivers, that all presently flow unused into the Pacific. These all by themselves would provide several times the water resources than the northern sources would or could ever provide. The Columbia River presently dumps 200 million acre feet of water per year into the ocean. That's twice the NAWAPA delivery rate to the US South and Mexico.

By the same principle, the water outflow of the Congo and Amazon rivers could be diverted to irrigate the Sahara Desert, and so on. Also the resulting water-in-water transfer system, when applied for uplifting the American and Mexican deserts, could be build in a small fraction of the envisioned NAWAPA development timeframe. In addition, the Least Action Principle would also be applied to the construction of the water transfer system. In accord with this principle, the transfer system would be produced almost entirely with automated industrial processes, utilizing nuclear power for process heat and basalt for the process feedstock. Basalt is a hard volcanic stone that is 10 times stronger than steel, is non-corrosive, melts at 1400 degrees C., can be extruded into fibers for countless applications, and is infinitely abundant on the planet in vast surface deposits in many places. [Kelvar](#), may also find an application here for creating the thin-

sheet arteries for water transport in the oceans until basalt comes on line to offer more efficient options.

Nothing less than a universal shift in the productive processes onto the Least Action Principle, and this being applied increasingly universally, will be sufficient to break the economic logjam that has crippled mankind in the shadow of globalized imperial financial looting.

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