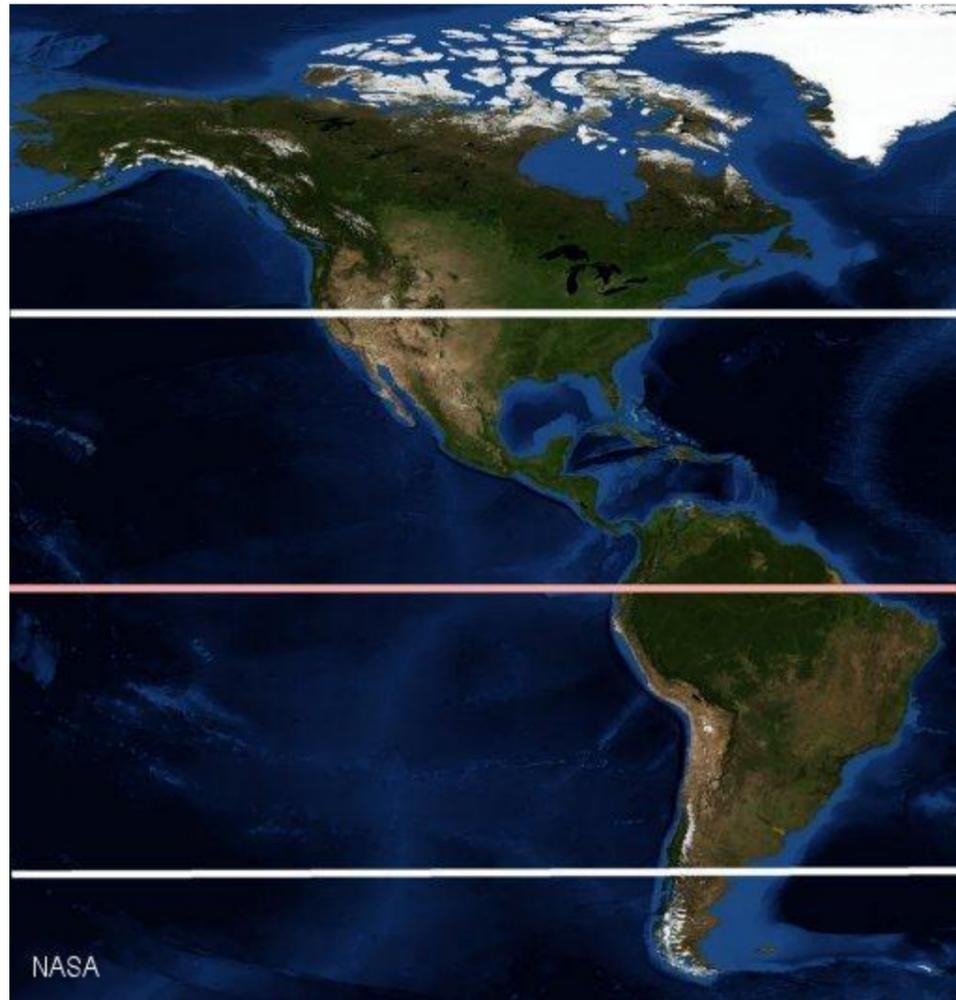


NAWAPA

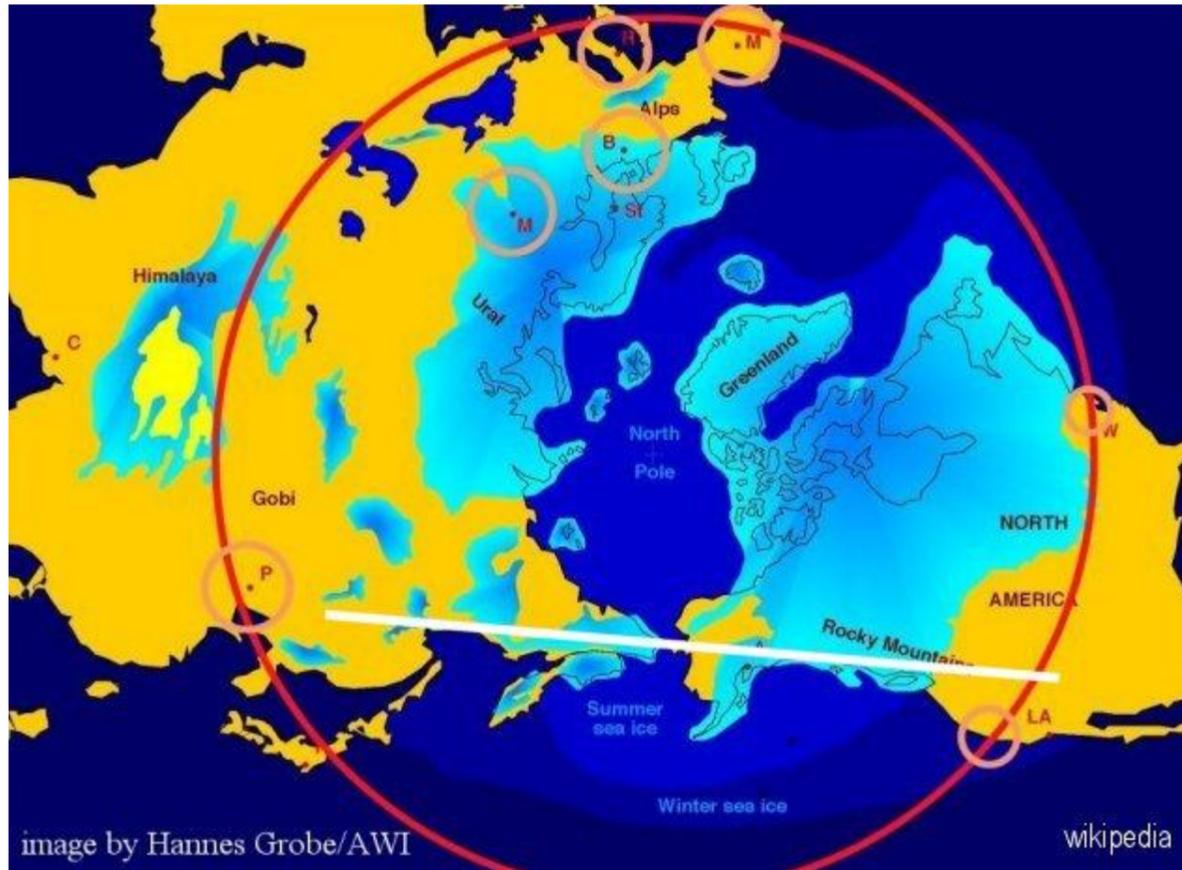
New American Water Agriculture and Power Alliance



the interglacial world is history
a 'smaller' world lies before us
between the 40 degree lines and focused onto the equator

in the face of the now rapidly changing climate
and with the next Little Ice Age developing in the near term
we need to change the way we look at the world

thus the old NAWAPA is history, as it can never be



the old NAWAPA aims to reach into the North
bring water from Alaska to the dry southern deserts,
and build a tunnel-link across the Bearing Strait
to access the minerals in Siberia

It is a dream now lost to the coming snow

the development focus needs to be outside the permafrost circle, focused towards the
equator where humanity's future lies and with it a NAWAPA that extends across the
entire 'remaining' American continent

A New American Water Agriculture and Power Alliance



This is a new NAWAPA, southward oriented and contained between the 40 degree latitudes. It is focused
onto the tropics with floating bridges and floating agriculture built with new materials, new industrial

processes, and new infinitely available energy resources. It is a short-term project in nature, an emergency response to the increasing trend that has begun towards colder, drier, and more unstable climates as the world is moving towards another Little Ice Age and beyond that to the normal Pleistocene Climate that promises to be 30 times colder still.

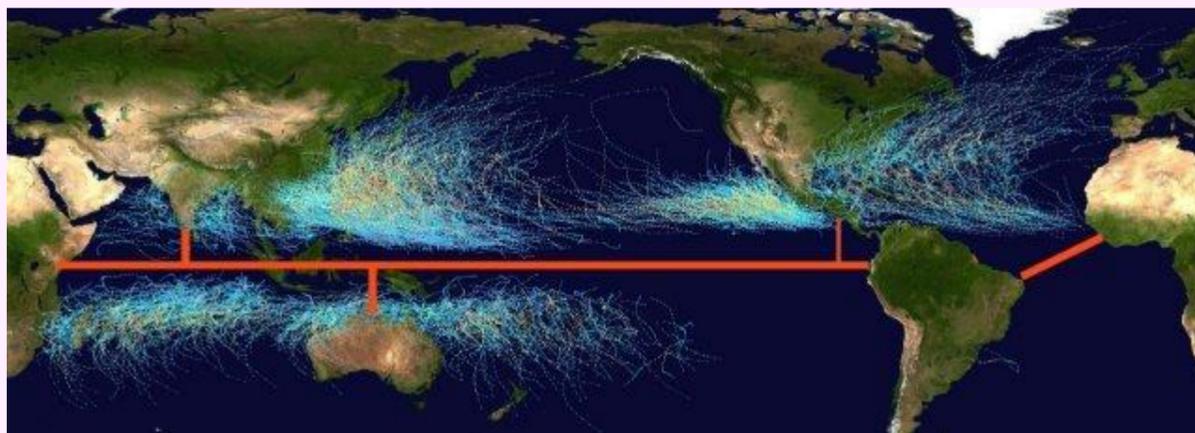
The new NAWAPA proposal replaces the old NAWAPA of the 1960s that sought to divert a portion of the rivers that flow into the arctic seas, southward across 2000 miles of mountains into the dry desert areas of the southern USA and northern Mexico. The 1960s proposal was for a giant project of 360 major infrastructures of dams, tunnels, aqueducts, reservoirs, and pump-lifts, spanning 50 years in construction until the first water would flow, which may never actually flow as in 50 years time the sub-arctic source for the water would likely be owned by the snow that then no longer melts.

The proposal presented here is for a project that can easily meet the original goal and far supercede it, and in addition meet the challenge that the approaching new Ice Age is laying before humanity to create new agricultural resources for its food supply. The new proposal for a NAWAPA would achieve all of this in a fraction of the time of the 1960s proposal, and do it with immediate benefits in creased food production instead of the 50-year delayed benefits under the old NAWAPA proposal.

The new NAWAPA development arena

The trace lines on the above satellite map trace the seasonal hurricane tracks. The presence of hurricanes initially 'forces' the development focus directly onto the equator that is free of hurricanes, where the global mass-agricultural development needs to take place since the tropical oceans are the new frontier with a near infinite development potential. They offer the least resistance, built as floating systems, and an excellent potential for efficient year-round high speed rail transportation between the continents. For agricultural efficiency the floating tropical systems offer the best possible large scale agriculture development that can be achieved, and this far from the unfolding cold in the North and South. Also they offer the best possible fresh water collection potential for this development, and in addition the closest infrastructure distance to the cosmic electric energy that powers the Sun, surrounds the Earth, and becomes concentrated in the ionosphere as equatorial electrojets that presently power the system of hurricanes, tornadoes, and lightning.

Also the American development needs to be on a continental scale, because nothing less will be sufficient, and fit into the larger arena of the World Development Project that the human future depends on, on this planet.



For a new NAWAPA, the combined resources of all the American nations are required. No nation can survive alone in the changing world that is increasingly claimed by the cold and the snow. This requirement applies primarily to the greatest development resource that humanity has, which is not located primarily in land, oil, minerals, and water, but in the human scientific, technological, creative, and productive potential.

The old world is already fading in many respects, with or without the advancing snow that stands on the horizon with the next Little Ice Age already developing and the Pleistocene climate being not too far off. Civilization is breaking down. Starvation is claiming its victims by the millions now, possibly up to 100 million a

year.

In this context the old NAWAPA project for bringing a small river of water from Alaska and Northern Canada, across 2,000 miles of mountains to irrigate the deserts in the South for a marginal increase in food production after 50-years of construction, would be at best vastly inadequate to meet the need if it was built, or at worst be completely useless. It would become totally useless if its source in the high north would remain as but snow, as it likely will in 50 years of the progressively colder climate that is now upon us and will likely continue for some decades on the unavoidable path to the resumption of the Pleistocene climate, as unpredictable in timing as this may be.

We don't know what effect the Little Ice Age had in Alaska and Northern Canada, since civilization hadn't reached that far north in the late 1600s. But we do know that the coming Pleistocene climate that we are heading towards, promises to be more than 30 times colder than the Little Ice Age had been that we may be experiencing again soon on the way to still colder times.

Against this background it becomes obvious that a new approach is needed for both securing and expanding the American and World food supply. From this need arises the New American Water Agriculture and Power Alliance for an ice age renaissance, in contrast to the old NAWAPA for bringing a river of water from Alaska.

Here is what an updated NAWAPA looks like.

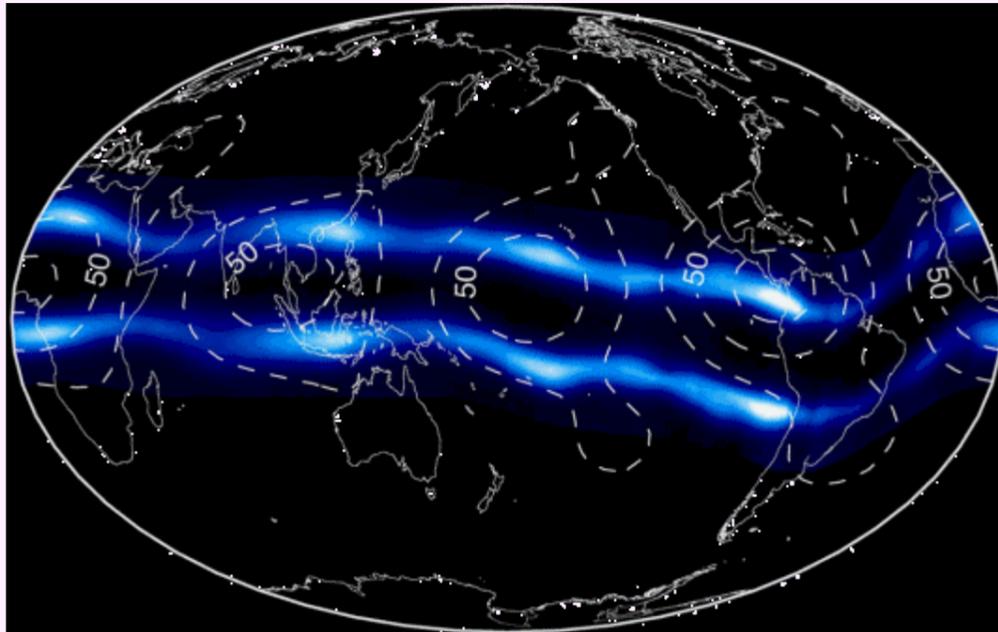
The power component of NAWAPA

The world's energy resources are fading. Coal, oil, gas are all limited and too precious to burn. Standard nuclear power too, is fading with the dwindling of the readily accessible uranium resources. Standard nuclear fission power will soon find its remaining most efficient application in activating thorium, for it to become fissionable, to start the high-temperature Liquid Fluoride Thorium Reactor (LIFTR) system that inherently is self-breeding. There exists a relatively large supply of thorium in the world, more than enough to power the basalt shaping industrial processes to build the floating infrastructures and meet the housing requirements in a changing world. The increasing regression towards ice age conditions will invariably cause mass migrations with the need to rapidly create new cities around the newly developing industries and infrastructures, including the floating agriculture.

But thorium power too, is ultimately limited and insufficient to meet the growing development needs. The continuing development of humanity requires a new energy resource with a potential energy-flux density and resource availability that is at least a magnitude greater than what is running the world today. The energy steps from wood, to coal, to oil and gas, have each been in the range of that kind of increase in magnitude. Standard nuclear power doesn't have the fuel resource to be the next step in achieving the continuing magnitude of increase. This requirement, it appears, can only be met with tapping into the cosmic electric power system that powers the Sun and also surrounds the Earth.

NAWAPA - the dawn of the anti-entropic age

We don't know how energetic the cosmic system is on earth, but considering the energy that is being drawn from it that powers the hurricanes, there is a near infinite resource available to us that is self-renewing and is of a type that tends to become stronger the more of it is being used. The interface to this resource happens to be located in two bands encircling the planet near the equator where the future development thrust needs to be located for climate reasons.



A new NAWAPA needs to be focused right from the start on the development of cosmic electric energy, and this in a big way, because that is where humanity's energy-future is located, just as its agricultural future is located in the tropical equatorial seas. Both developments are critical and need to be pursued simultaneously as a single project, not in isolation. While there is enough thorium-based nuclear power potential available to carry out the entire development of the world, the cosmic energy system offers a richer resource that fits the anti-entropic nature of global development. For this reason, the cosmic resource will be intensively developed.

In the new NAWAPA region the highest density link to the cosmic power-resource is located near the West Coast of South America, where enough of it appears accessible to meet the energy needs of both American continents. A similar situation exist over Africa, and near Australia and Indonesia, and a fourth exists in the mid-Pacific.

The development of this resource would be the primary power-component of a serious New American Water Agriculture and Power Alliance project. Nothing in the history of of humanity comes close to the development power that flows from this kind of electric energy development. No form of electric-energy development of this magnitude has ever occurred or even been envisioned in the entire history of our planet. It becomes humanity's entrance into the anti-entropic age.

The Water component of NAWAPA

Water is the most basic stuff of life. Humanity cannot live without it, neither can agriculture exist without it, and we do need agriculture to produce our food. It is a major component of the global food supply. Fishing doesn't have the required productive density for the scale of its environment, the oceans, to meet humanity's food needs. Fishing was sufficiently dense to meet the minuscule world population of 1 to 10 million people that lived through the last Ice Age. For a greater population density, agriculture is, and will always be, where the bulk of the dinner is coming from. For this water is needed, with a supply density sufficient to meet the requirement.

The current supply density is adequate to meet the need at the present stage, but the supply density is changing. With the now accelerating trend to lower global average temperatures, the evaporation rate is dropping, whereby the atmosphere is getting increasingly drier. This is an unavoidable consequence of the electric climate cycle that the earth is subjected to that affects itself through a weaker Sun and a weaker heliosphere, and so on. The connection is well understood in the oasis of science that has remained honest, versus political.

The climate trend doesn't pose a great problem as it is easy to work around it with some simple projects of water management.



The Missouri, Mississippi, and Ohio River catchments basin

Most of the rainfall in the USA falls in the Missouri, Mississippi, and Ohio River catchments basin, the green patch above, that drains through the Mississippi River into the Gulf of Mexico. The current rain density in the green-patch region is in the range of 40 to 70 inches per year.

Much of that drains unused into the Gulf. The water density in this area is sufficient to supply the agricultural needs in the area possibly for as long as agriculture can be maintained there in the face of the southward creeping colder climate of the Little Ice Age transition that has, according to all evidence, already begun. A complete upgrading of the water management system for flood control that becomes increasingly necessary, and with a nuclear powered distribution networks for irrigation will of course be required in the immediate years ahead during the Little-Ice-Age transition period towards the deeper cooling. In this trend, the currently increasing floods and droughts will likely escalate over the next 50 years.

The 10-20 inch rainfall region from the Dakotas to Texas



This region of the high plains is semi-arid. It doesn't need to be so. Its own water resources are quite substantial. It has numerous rivers flowing across it that drain unused into the Mississippi basin, largely unused, adding to the Mississippi excess that drains into the Gulf.



Efficient water management, storage, and a nuclear powered distribution pipeline network can make the entire area self-sufficient in water for agriculture, for as long as agriculture will remain viable in this area.

