A NEW 'MISSOURI BASIN AUTHORITY'

Midwest Flooding Is National Emergency: Space-Age Mobilization Required

by EIR Staff

April 20—The new "Moon-Mars" directive by President Donald Trump, committing the nation to an accelerated return to space, is the necessary spirit for the spaceage mobilization required to respond to the severe flooding and food production emergency now playing out in the Missouri-Upper Mississippi River Basins. That spirit will enable us to deal with the vast damage, and also act to create a new, modern platform for higher productivity in the Midwest and nationally. From immediate flood relief, to a full buildout of needed water management, new rail lines, nuclear power, and other infrastructure in the center of the continent, and population growth, not depopulation, in these rural counties—this is the right disaster response.

There is no "natural" reason for the vast damage now taking place in the multi-state region, from the Dakotas south through Nebraska, Iowa, Kansas, Missouri, and into the Lower Mississippi. The Federal "Flood Control Act of 1944" mandated the building of a "Missouri River Basin Project," which was an integrated plan encompassing more than 100 dams on the tributaries and mainstem of the Missouri River, plus hundreds of miles of levees, new irrigation areas, navigation and other features.

Additional legislation authorized upper watershed dams to be built on smaller feeder streams, under the U.S. Agriculture Department's Watershed Protection and Flood Prevention Act of 1954.

All these improvements taken together would have



Aerial view of what's left of the Spencer Dam on the Niobrara River in Nebraska, which gave out March 14, 2019.

prevented the destruction we are now seeing in the High Plains, and expected to continue on in to May. But this Missouri River Basin Project was never completed.

The very limited infrastructure that was built involved five new mainstem dams (constructed 1946-1966) and a small number of lesser dams, levees, irrigation programs, etc. Therefore, huge flood disasters have repeatedly occurred over the past half-century.

The Missouri, second longest river in North America, has the largest watershed in the United States. The Missouri Basin is home to a large share of the corn and soybean output of the U.S., which in turn, accounts for a third of total world production. Much of this area is now in crisis. The National Weather Service forecasts above-average rainfall to continue in the Missouri Basin on into June.

After the last two huge flood disasters in the Upper Midwest in 1993 and 2011, *EIR* printed a full report on the original 1944 water management program, the Missouri River Basin Project, called the Pick-Sloan Plan, after its design engineers, Gen. Lewis A. Pick from the Army Corps of Engineers and William Glenn Sloan from the Bureau of Reclamation.

It is time to finally act on the Pick-Sloan Plan, as updated by experts. This is the needed agenda focus of the newly formed Missouri Basin Governors' Task Force, whose first meeting April 3 in Council Bluffs, Iowa called for actively building flood control; and for a series of public meetings by the Army Corps in the Basin. It is citizens' leadership that will force the action.

Mobilizing for action in the Missouri and Upper Mississippi Basin, also calls for finally moving on relevant disaster defense systems, and infrastructure build-up for all the other obvious places across the country hit by, or vulnerable to disasters, for want of infrastructure.

Most outstandingly, this includes, the New York/New Jersey region, hit by Hurricane Sandy in 2012 and still waiting for a sea wall and other defenses, and modernized transportation, etc.; the Western drylands, hit repeat-

edly by floods and wildfires, as in California, for want of the continental-scale NAWAPA (North American Water and Power Alliance, proposed back in the 1960s); the Gulf Coast and Florida peninsula, and most outstandingly, the need to fully build up Puerto Rico, constructing modern systems of transportation, power, soft infrastructure—schools, medical services, housing, and a port system to figure in the Caribbean's position in the newly expanding world Silk Road.

All this is coherent with and will contribute to the nation's commitment to resume manned space missions, as announced by President Trump. In his Space Policy Directive No. 1, issued December 2017, Trump stated, "This time, we will not only plant our flag and leave our footprint [on the Moon], we will establish a foundation for an eventual mission to Mars and perhaps, some day, to many worlds beyond."

This was the lead statement on the new White House Fact Sheet released March 24, setting a five-year goal







Lyndon LaRouche commissioned many infrastructure reports in his campaign to raise U.S. and world productivity.

for a new manned mission to the Moon.

Implied in this imperative, is the long-overdue revival of U.S. industrial capacity and productivity, in collaboration with other nations, to produce the metal, plastics, chemicals, fixtures,

designs, machine tools, and skilled people, to carry out the mission.

All the elements required for space activity call upon the ability to produce the highest precision requirements. But the components for disaster defense on Earth, and modern infrastructure-building likewise are a challenge to provide in quantity and quality. In the case of water management, this ranges from brigades of heavy construction machinery, to culverts, lock and dam gates and fixtures, to pipes, pumps and turbines.

The Rust Belt must be restored as a powerhouse in this process. Plus, putting the space program, and disaster response forward as the same mission, breaks the current impasse on how to fund U.S. infrastructure-building and thus get it going again.

Five years ago, statesman and economist Lyndon LaRouche outlined the steps needed to create the national credit and commitment to carry this through. Released in 2014, his <u>proposal</u> is called "Four Laws to Save the U.S.A. Now!"

In this document, LaRouche spells out how to restore sound banking through the reinstatement of the Glass-Steagall law; secondly, creating a national bank for priority infrastructure funding; thirdly, making plentiful credit available for essential economic activity in industry, agriculture, infrastructure, science and so forth; and lastly, carrying out science-driver projects for space and for the earliest development of fusion energy.

Over the last half century, LaRouche issued study after study and many mass-circulation reports on the necessity of "big projects" in infrastructure, space exploration, advanced nuclear power, together with the way to create and circulate credit to fund such endeavors. LaRouche worked tirelessly to turn out such studies for the United States, but also internationally, in-

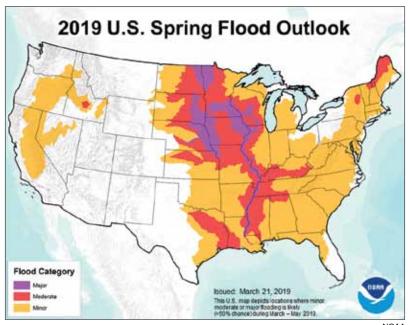
cluding the 50-year plan of projects to develop the nations of the Indo-Pacific Basin, and the 50-year plan for the development of Africa.

Not merely a series of "good ideas," these programs were essential. The funding mechanism he proposed then—especially in the United States—will also serve to prevent the financial chaos and total economic breakdown being brought on by the anti-development Wall Street/City of London system now near blow-out.

To succeed in creating this urgent shift into a new financial system for development, LaRouche repeatedly called for the "Four Great Powers"—the United States, China, Russia and India, and others, to come together and confer on this task. In effect, to initiate a new "Bretton Woods" process of deliberation to create a financial architecture to serve the development interests of all.

Great power collaboration on lunar and space exploration, in the spirit of President Trump's new Moon-Mars initiative can lead the way for this. La-Rouche identified this as the vantage point from which to pursue basic science questions here on Earth, such as how to conceptualize the atmospheric water cycle in a way to go beyond even recurring patterns of droughts and floods, to where man can intervene directly in the dynamic which causes them. This is described below.

Thus today's terrible devastation in the huge Missouri Valley and upper Midwest is the occasion for a national mobilization to restore the nation to its found-



NOAA

ing national identity of deliberate advancement, both at home and internationally.

Scale of Emergency

The scale of the flooding crisis is indicated in the annual Spring Outlook weather forecast of March 21, provided by the National Oceanographic and Atmospheric Administration (NOAA). The map shows the area where there is a greater than 50 percent chance of flooding of some degree, in the March through May 2019 period, and that the flood areas are concentrated in the watersheds of the Missouri and Mississippi Basins, including the Tennessee River.

This NOAA projection has come to pass. The precipitation has even included two "bomb cyclone" phenomena of high winds and snow hitting the Dakotas and Minnesota and nearby, one in March and then again in April, the latter which dumped two feet of snow. Some farmsteads and homes suffered days of electricity outage.

Beginning in March, the volume of run-off in the huge Missouri River system, was beyond the impoundment and control capabilities in place with the dams. Flooding spread widely, and continues.

The Missouri—known as the "Big Muddy" for its silt load—runs nearly 3,800 km (2,500 miles). Its watershed area covers one-sixth of the United States, and has parts of ten states and two Canadian provinces, Alberta and Saskatchewan. The ten states involved in the Basin are: Montana, Wyoming, Colorado, North Dakota, South Dakota, Minnesota, Nebraska, Iowa,



USAF/Rachelle Blake Offutt Air Force Base, home to the U.S. Strategic Command, near Omaha, Nebraska, under water on March 17, 2019

Kansas, and Missouri. Their combined population—though not all in the flood zone—is 29 million.

These states now face burdens in their operations and budgets from the emergency, to one degree or another. The features of the destruction include both the damage to every category of basic community and government functioning, as well as to agriculture—the leading economic activity in the region.

Transportation. Both rail and road grids were extensively disrupted by wash-outs and other incidents, some of which have been fixed, but others remain out. BNSF and Union Pacific (plus Kansas City Southern), the main freight carriers, re-routed much traffic (ethanol, grain, fertilizer, cement, bentonite clay, and other cargo) but the flood disruption is showing up even in the way that the total national volume of rail freight haulage (number of carloads) declined during the flood weeks, because of the Midwestern disruptions. In the week ending March 30, the Association of American Railroads reports nationwide carloads down nearly 9 percent, reflecting the Midwest flooding impact. The effects are made worse by the fact that the rail grid is so limited throughout the High Plains. For example, there is no High Plains north-south passenger route at all. Connectivity has been dramatically reduced since 100 years ago, when the U.S. grid was at its maximum extent in the 1920s.

Roadways. Roadways sustained big damage, seen in significant closures of major highways, such as on Route 29 the main north-south artery in western Iowa, and on rural secondary roads. At one point during the March floods, an estimated 20 percent of all Nebraska's road grid was closed. Gravel roadbeds were scoured out of existence down to the culverts and underground

cables. Dozens of bridges remain out. Some residents now have to drive up to 40 miles to a destination once reached in 10 miles, pre-flood.

Water and sewage. Hundreds of rural wells are now contaminated with microbes and chemicals from the dirty flood waters. Central treatment plants are also damaged or destroyed. Many schools, churches and homes are functioning only with portable toilets and bottled water.

Public buildings. There is widespread damage to public buildings of all kinds, from medical centers, to government offices. The point is made by the military installations which were under water, for example, Offutt Air Force Base in Nebraska, home to the U.S. Strategic Command, which oversees U.S. nuclear strike capabilities for The Pentagon.

Levees and dams. There is widespread damage to flood protection structures, including breaches to Missouri River mainstem levees, with water still pouring through, and more flooding to come. Col. John Hudson, Commander of the Army Corps Omaha District, which oversees the Missouri River system, said at a briefing April 11, "We have an enormous amount of work to get done" on repairs. For example, there were more than 40 levee breaches in the 280 miles of levees between Council Bluffs, Iowa, and the Iowa-Missouri state line.

In addition, those not breached are still very damaged from having been overtopped by floodwaters for more than four days. The town of Pacific Junction, Iowa is still under water in mid-April. Its residents have been under mandatory evacuation for over 25 days.

There are other losses. In northeastern Nebraska, on March 14, the Spencer Dam broke, on the Niobrara River, a tributary of the Missouri.

Power. One outstanding success during the current flooding, is the continued maximum functioning of the Cooper Nuclear Power Station, at Brownville, Nebraska, on the Missouri River. All its flood-protection measures are working properly.

However, the negative pattern in the region has been the take-down of nuclear capacity in the multi-state area, and the installation of wind and solar, which don't

FIGURE 1

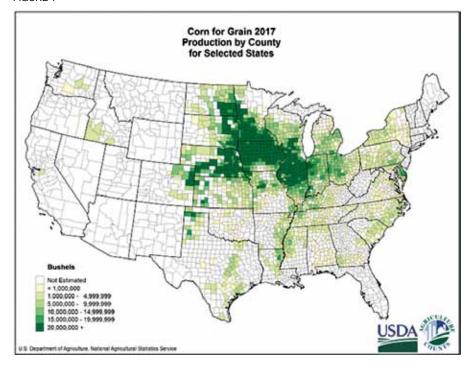
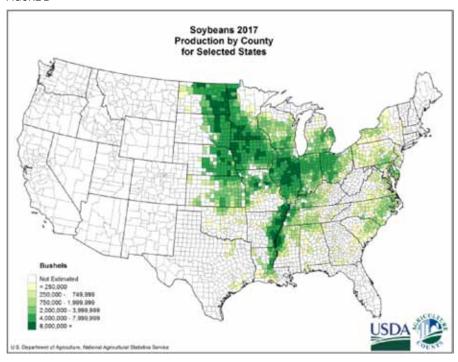


FIGURE 2



U.S. corn and soybean production is concentrated in the Missouri Basin and nearby states.

function in storms. Iowa is reliant for up to 30 percent of consumption on wind power, and many farmers—in need of cash from losing money at farming, have turned to installing solar units for revenue.

In Iowa, two sites for potential new nuclear power reactors were cancelled, when Warren Buffett's Berkshire Hathaway took controlling ownership over Mid-American Energy in 1999. Mid-American has announced a goal of becoming the first investor-owned utility to provide all its electricity to customers sourced from "renewables" by 2020, when it completes a gigantic \$920 million Iowa wind farm.

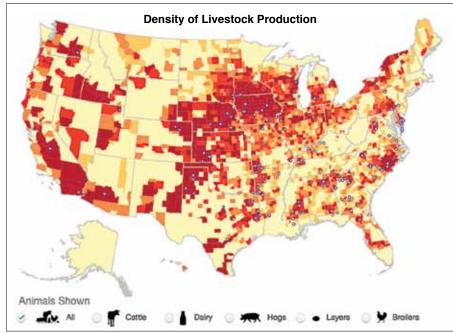
Case: South Dakota. The Pine Ridge Reservation is home to the Oglala Sioux. There are some 20,000 residents of this area—the size of Delaware and Rhode Island combined—in the Missouri River watershed, which was flooded. Water supplies were disrupted for 8,000 people. Homes, roads and public buildings are damaged or destroyed, creating an impossible situation where 10,000 of the residents are way below even the already low Federal poverty line.

The status of aid to the entire region, as of mid-April, is that dozens of counties in each of the Missouri River and other watershed states have been declared Federal disaster areas, eligible for Federal Emergency Management Agency (FEMA) and other programs; plus National Guard corpsmen continue with diverse functions in some states, from delivering water, to dropping hay to stranded livestock.

Vast Agricultural Damage

The Missouri and Upper Mississippi Basins are the location for a huge share of U.S. agriculture

activity. The two maps [Figures 1 & 2] show the concentration of corn and soybeans in the region, which is also home to significant livestock production. According to NOAA's projection, an estimated 55 percent of



USDA/Food and Water Watch

U.S. corn and 60 percent of soybean fields were at risk of flooding this spring. This is turning out to be the case.

In addition, farmers had more carryover of corn and soybeans in storage on their land, held out of the market hoping for a better price. The flooding not only ruined this grain, but the swollen corn and beans burst open the metal storage bins. There is no market at all for the ruined grain. Not even ethanol plants will take the corn, because the distillers grain byproduct would be contaminated and unsaleable

Spring plantings will be disrupted for large parts of the cropland. Land under water now is almost surely not going to be seeded this year. Debris in the fields ranges from metal shards, to rocks, to silt and sand. The United States Department of Agriculture (USDA) April 12 weekly crop report showed that plantings are running behind. For example, farmers in Missouri had only 6 percent of their corn planted, in contrast to the 5-year average of 15 percent as of early April. Kansas farmers had planted only 6 percent of their corn crop, compared with their 5-year average of 14 percent. Iowa reported no corn planted at all (too wet and too cold everywhere) vs. their average of 2 percent by now.

There is also a big problem with ruined pastures. The perennial grasses are gone in many fields, and piles of sand are left all over. What kind of annual forage crop can be planted, if any, is a big question. The core Missouri Basin states hit by flooding—South Dakota, Nebraska, Iowa, Missouri and Kansas, account for 27 percent of U.S. cattle. Some 26 million head are in the region, mostly in the flood regions of eastern Nebraska and northwestern Iowa.

The larger region—Iowa, Minnesota, Illinois, Nebraska, Missouri, Kansas and South Dakota—have 48 percent of all U.S. hogs. Egg production is concentrated here, with 34 percent of all U.S. egg output in the six states of Iowa, Minnesota, Nebraska, South Dakota, and Illinois.

Thousands of livestock have perished either due to extreme cold weather, blizzard conditions, or extreme flooding. The fact that the disaster comes during spring calving season has increased the animal losses everywhere. Flood waters penetrated feed lots and hog and poultry barns. Surviving cattle are suffering significant trauma after-effects, including disease susceptibility and lack of weight gain. There are increased infections. Humans and animals alike are stressed.

The loss of potable water in many areas has caused big trouble for large livestock operations, necessitating hauling in supplies. Cattle feedlots report losses adding up to \$1 million a day, from the increased logistics costs of all kinds.

Case: Nebraska. Most of the state's 93 counties are now officially declared as disasters. The state was ground zero for flooding, from the raging Missouri River on its eastern border, and the overflowing Platte, Elkhorn, Niobrara and other rivers draining into the Missouri. The state's plight is an automatic hit on the U.S. food output capacity. Nebraska is the third-ranking state for corn production, and fifth for soybeans. It is the largest cattle state in the Missouri Basin, with its third largest state crop, after corn and soybeans, being hay for winter feed. The American Farm Bureau Federation, National Farmers Union and others are raising funds, and shipping in hay donations to sup-



Flooding in Bellevue, Nebraska in March 2019.

spite record productivity in corn and soybean yields

port stricken ranchers. As much as 10 percent of the new calves may have been lost due to the floods and cold.

Nebraska is the first in the nation for amount of area irrigated, having 8.3 million acres, which is 14.9 percent of the U.S. total. Its normal yields per acre are therefore very high. California, once first, now ranks second, at 7.9 million acres, because of decreasing water supplies. Much of Nebraska's irrigation system—pipes, pumps, pivot apparatus and other fixtures, was ruined by flood water.

The types of "normal" Federal aid offered to farmers in these disaster circumstances, is in the realm of covering only 75 percent of what is lost. Most is handled through the USDA's Farm Service Agency (FSA). For example, the Emergency Conservation Program may pay up to 75 percent of the costs of restoring grazing lands to pre-disaster conditions (removing debris, grading, etc.) The Federal Livestock Indemnity Program (LIP) pays 75 percent of the *market value* on lost livestock, and so on. But the market value was already *below* the rancher's costs of production.

Farm Income Crisis, Farmers Quit

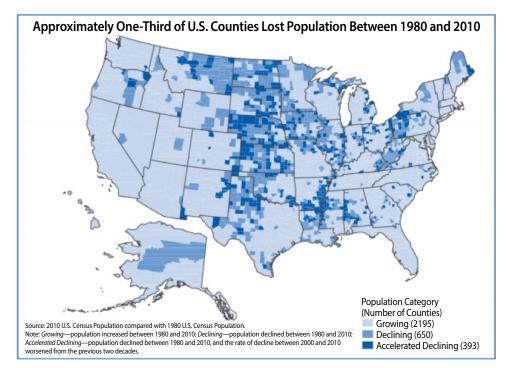
The flood disaster hits farm communities when already more than half of U.S. farm households lost money farming in recent years, according to the USDA, which estimated that the median farm income for U.S. farm households was *minus* \$1,548 in 2018. This is de-

spite record productivity in corn and soybean yields and meat production!

U.S. farm debt has grown to \$409 billion, the highest debt volume in 40 years, not seen since the farm crisis of the 1980s, when farmers staged a cross-country tractorcade to Washington, D.C. in protest. This has hit both large-scale farms that grew rapidly on rented land, and smaller farms run by families working multiple offfarm jobs. Farm bankruptcies—filing of Chapter 12 under the Federal code—are surging in the Midwest. North Dakota southward through Arkansas, has seen the number of Chapter 12 bankruptcy filings rise over 95 percent from 2008 to 2018.

The low prices to farmers come from the rigged commodity pricing structure, after the phase-out in the 1970s of the parity-based Federal pricing system, though the spin you hear puts all the blame on the Trump trade disputes with China and Mexico, for low oilseed, corn and meat prices. Likewise, low milk prices are blamed on overproduction and retaliatory cheese tariffs by China and Mexico. The buildup of U.S. meat supplies is blamed for lower beef and chicken prices.

But the totality of the farm income crisis, and ruin of the independent family farm household derives from a whole set of Wall Street and City of London-serving policies, including non-enforcement of anti-trust, and furthering of vast monocultures of soy and corn as cheap supply sources for the mega-trading houses—



Bunge, Cargill, Louis Dreyfus and the rest—to get guaranteed returns from dominating trade.

The process has reached such a stage of concentration in the supply chain that outright depopulation of the Farm Belt is now at the crisis phase. The latest five-year Agriculture Census, released by the USDA this month, documents certain features of the situation. The "2017 Agriculture Census" data show a decline in the national number of mid-sized family farms—operations between 500 and 999 acres—over the 30-year period between 1982 and 2012, and many of these were in the Midwest. During this same three decades, the number of much larger farms—2000 acres and up—have grown 27 percent; and otherwise, the number of small operations, often niche or hobby operations, has also increased.

Just in the last five-year census period, 2012-2017, there was a total loss of 3.2 percent of all farms—down to 2.04 million as of 2017, and within that short time, the trend continued for an increased number of larger farms and smaller farms, and fewer mid-sized farms. When broken down, the data show that a dramatically small number of 78,865 U.S. mega farms—3.8 percent of total U.S. farms—today produce over 66 percent of the \$389 billion in total value of all U.S. farm production. If even a small number of these "megafarmers" go out of operation, a big percentage of our

nation's food production capacity will be knocked out. That threat is live and growing in the Midwest right now.

The 1.56 million farm operations—77 percent of all operations classified as farms—account for just 2.9 percent of the value of U.S. agriculture production. Many of these are small, "life-style" farms.

On the national map of counties experiencing depopulation over the past 30 years, the entire High Plains Farm Belt stands out strongly, as people die or leave the region.

What this means for food

security, is that when the large, as well as remaining mid-size farms are hit by a disaster, in a region accounting for such a large share of one commodity, there is automatically a food shortage threat.

Case: South Dakota. The "2017 Agriculture Census" reports that the number of farms in the state dropped by 6 percent over the period 2012-2017, to 29,968, a level below 30,000 for the first time in decades. That is a loss of 2,000 independent farms in just five years, or an average of 30 farms gone per county.

Average net income per farm from 2012 to 2017 dropped 20 percent, down to \$81,763.

And, there are fewer and fewer young farmers. The average age of a South Dakota farmer in 2012, was 54.3 years; in 2017, it was 56.2. Only 12 percent of the state's farmers are 35 years old or younger. This is in a state where an amazing 89 percent of its land area is in farming, compared to the national share of 39 percent.

ACTION MEASURES— 'Missouri Basin Authority'

Required in this flood disaster region, is not only immediate emergency relief for the general community, and agriculture in particular, but also full-scale infrastructure building.

Water management infrastructure. The following core proposals based on the original 1944 Pick-Sloan Plan are the starting point for building a comprehensive Missouri River Basin water management system for flood control and multi-purpose uses—power generation, irrigation, navigation, recreation, and so forth.

This is best carried out, in the tradition of the Tennessee Valley Authority, to also include in intent, plans for an upgraded electrical, telephone and internet network, expanded and improved rail grid, a modernized medical system, and all other necessities supporting a growing population, including new cities. Not to mention the most advanced agriculture equipment and techniques, based on independent family farms—a "Missouri Basin Authority."

One thousand five hundred miles of levees from Sioux City, Iowa to St. Louis, Missouri could be built from river dredgings to deepen the channel to 12 feet. This would allow larger barges, and increase the river flow at peak volumes, while preventing spill-over during times of high water.

Jobs created: an estimated 8,380 for five years. The non-levee flood control dams, reservoirs, and channelization in the Missouri River Basin Rivers. This includes, 18 dams, 8 power stations, 235 miles of channeling, and 175 miles of levees on the Grand, Gasconade, Osage, Fishing, Platte, Chariton, and Meramec Rivers.

Jobs created: 7,220 jobs lasting five years. Irrigation acreage expansion. With the new dams and lakes, the system for 4.5 million acres under irrigation should be built.

Extended navigation. The Missouri River navigation channel can be extended another 850 miles from Sioux City northward to Williston, North Dakota, at the new 12-foot depth, as originally proposed by Col. Pick.

Infrastructure platform construction. There are baseline projects required to lift the region not only out of flood danger, but to new levels of productivity.

Nuclear. In the context of a national plan to advance nuclear power generation, a plan for the central states is urgent. Take the measures necessary to make nuclear power provision the priority, and phase out the extensive wind energy throughout the entire Midwest, and likewise, phase out the ethanol production system, centered in this region.

At present, in the upper Midwest, there are *no* nuclear power plants—in Montana, Wyoming (coal states), the Dakotas or Colorado.

Nebraska is down to one plant at Brownville, after the shutdown in 2016 of the Ft. Calhoun nuclear station in Omaha. Iowa has one nuclear plant, the Duane Arnold Energy Center. Missouri has the Callaway Energy Center. Wisconsin has only the Point Beach plant left, as its Kewanee nuclear plant was shut down in 2013. The sole plant in Kansas is Wolf Creek. Minnesota has three reactors at two sites, Prairie Island and Monticello. Illinois leads the country, with six nuclear stations, having 11 reactors.

Rail. Take the measures necessary to provide the density of rail grid necessary for this central region of the continent to function. This is best seen in the context of corridors of development, in the World Land-Bridge concept long promoted by Lyndon LaRouche, and Helga Zepp-LaRouche.

This perspective requires selected high-speed rail routes, double-tracking to separate freight and passengers, and coherent "local" lines

One outstanding feature of what is required, is a north-south rail-based development corridor on the High Plains, in addition to that of the Mississippi River Valley. This should interconnect in the far northwest, with the inter-continental Land Bridge linking Eurasia, via the Bering Strait, with the Western Hemisphere nations all the way to Cape Horn at the southern tip of South America.

Transportation engineer Hal B.H. Cooper, Jr., PhD, P.E. has delineated the proposed U.S. route, integrating roadway, pipeline and utility lines into a single corridor, coming down through the Dakotas, skirting the Black Hills, going southward through Nebraska via Valentine and North Platte, proceeding into the Oklahoma Panhandle through Liberal, Kansas, thence into the Texas Panhandle and onward to Mexico. Cooper commissioned an artist rendering of this "Central Corridor," as part of the World Land Bridge.

Hospitals. Launch a new round of the original Hill-Burton survey of medical services in the Midwest, as part of a national effort, to determine the number of licensed hospital beds, diagnostic, natal and other services are needed per 100,000 residents. At present, at least 20 percent of the remaining hospitals in rural areas are facing shutdown for financial reasons.



Courtesy of Hal B.H. Cooper, Jr.

Artist's rendering of a proposed transportation/utility corridor, running north-south over the High Plains, to further development and population growth.

The original 1946 "Hospital Survey and Construction Act," commonly referred to as the Hill-Burton Act" after its two Senator co-sponsors, Lister Hill (D-Ala.) and Harold Burton (R-Ohio), determined how many beds per thousand residents in all 3,000 U.S. counties were needed, and then over a 25 year period, supported building up the hospital system to provide this. This very positive approach was all later discontinued, with the introduction of deregulation and "market" economics.

New cities. Mobilizing to create the new hard and soft infrastructure described above not only creates conditions for the former ghost towns in the farm communities to come to life, but for new cities to be born and grow up in the High Plains. The fruited plains of Central Plains Corridor are an obvious spine for new points of industry and urban growth, with supporting educational, scientific and cultural centers.

Immediate Relief

As of mid-April, the projection is for continued flood danger, and bad weather. The full combined relief and clean up services of state agencies, e.g., the National Guard, as well as Federal agencies, are both necessary. In addition to FEMA, U.S. military capability

should be deployed where necessary, given the scale of the crisis.

In addition, the regular and reserve military engineering cadre are an invaluable asset to be deployed on projects to shore up impaired infrastructure on an interim basis, and to aid in the damage assessment, design and construction of new infrastructure systems. Civil engineer Cal Smith, P.E., calls for the Federal government to redirect forces like the U.S. Army Corps of Engineers, Naval Facilities Engineering Command and Air Force Civil Engineering currently deployed in support of our military overseas.

Space Age Agriculture Capacity

The physical economic measures listed above are essential for modern agriculture. Financial measures must also be taken for supporting a restored system of independent family farms.

Apart from first-response aid, the massive flooding poses the urgent need to restore sound financial conditions in the agriculture sector. The following measures are the kinds of actions called for on an emergency basis:

A moratorium on farm foreclosures. This measure, implemented at different times in the past, is urgent now, because of the impossible financial conditions farm families face, after five years of prices for their commodities being below their costs of producing them, and no degree of off-farm income able to make up for the prolonged gap.

Indemnity for lost crops in storage, livestock losses and any other such types of farm disaster.

Funding for clearing and restoring fields, rebuilding bins, irrigation systems and other essential structures and farm infrastructure.

Clamp down on the farm/food commodities speculation at the Chicago Mercantile Exchange (CME) and other exchanges by restoring regulation

of currently out-of-control commodities trading. Immediately re-do or cancel the 2001 Commodities Futures Modernization Act, in order to restore such controls.

Reinstate parity-based pricing measures for farm commodities through the Department of Agriculture's existing (Commodity Credit Corporation (CCC) authority, using production management.

A moratorium on mergers of food processing and other vital corporate functions, plus reactivating antitrust enforcement, to bust up existing large concentrations in the food chain, in order to restore a system favoring the independent farmer, which serves the national interest in fostering ingenuity and productivity.

Initiate win-win food trade consultation with trading partner nations, to mutually determine which commodities being traded will serve the interests of both sides, for what period of time, and related details, instead of trade deals being determined by Wall Street/City of London trade and food cartels.

For example, Mexico may choose to resume producing more corn, and Nebraska corn producers—currently a big supplier to Mexico—can be supported to diversify to other crops and markets. The same holds for the China-U.S. soybean trade. Institute all necessary measures, such as Country of Origin Labeling (COOL), and end cartel-driven global sourcing of food for profiteering.

Initiate a "million new farmers" program to back the return of young farmers, and independent familyscale operations, with a package of tax credits for older farmers transferring operations to selected youth, and special inducements to young farmers and other means.

Reinstate the Glass-Steagall Act, to restore sound banking in the U.S., by separating commercial banking—which merits Federal insurance and similar measures—from speculative financial activity—which should not have Federal Deposit Insurance Corporation (FDIC) protection, or any more bail-outs.

On April 9, a Glass-Steagall restoration bill was introduced into the House of Representatives, H.R. 2176, the "Return to Prudent Banking Act of 2019." President Trump explicitly stated his support for the Glass-Steagall restoration in the months before his election. It is now urgently necessary, if any of the relief and infrastructure-building is to proceed, and also to put in place, before an uncontrolled financial meltdown occurs.

Create the Credit and Full Funding

Following Federal disaster emergency aid to farm households and businesses across the affected region, the issuance of national credit can begin with the creation of a Missouri Basin Reconstruction Authority (MBRA) charged with creation of a new flood-control and economic infrastructure. Its leadership will need engineering, agricultural and business experience, and to work in cooperation with the U.S. Army Corps of Engineers, Agricultural Department and farm organizations.

Critical cooperation with the National Aeronautics and Space Administration (NASA) will be needed because of the importance of laser and space-based location and reconnaissance technologies to both water management in great river basins, and agriculture generally; and for the development of new construction and other materials and techniques.

For the MBRA to deploy the billions of dollars required to complete the Pick-Sloan Plan and related transportation and power infrastructure projects, it will have to receive credit from a national credit institution modelled on the Roosevelt Administration's Reconstruction Finance Corporation or the "Hamiltonian" national banks of the 19th century. This institution is long, long overdue for creation by Congress, given the national deterioration and the major failures of infrastructure across North America, not to speak of the long-standing plain lack of critical economic infrastructure, as painfully shown in these repeated Upper Midwest flood disasters.

The Treasury can simply issue special U.S. Treasury bonds for the purpose of funding the operations of a new Reconstruction Finance Corporation; it can organize capitalization of a new national bank for infrastructure by itself and by private investors; or it can issue its own currency, Treasury notes, to provide the operating capital for a national credit institution, supported by new taxes collected over a long period into the future.

As for the Missouri Basin Reconstruction Authority itself, it can combine its own spending—especially working with the Army Corps of Engineers on the Pick-Sloan Plan itself—with lending to state and county agencies for the restoration of their flood-destroyed basic economic infrastructure at the same or a higher technological level.

NO MORE FLOODS!

Pick-Sloan: The Missouri River Development Project

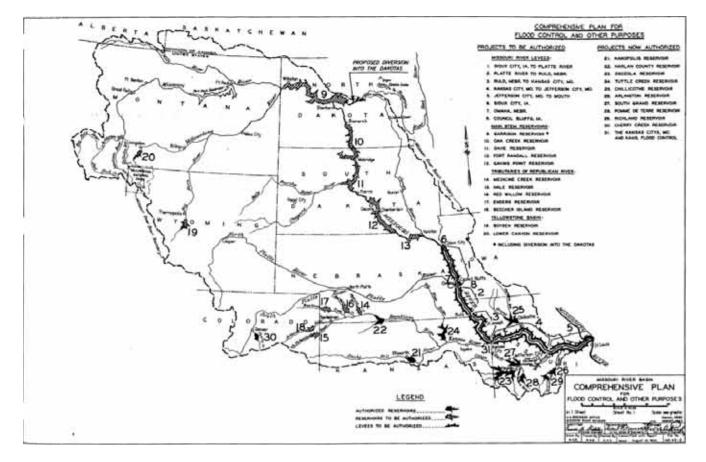
The map here shows features of the "Comprehensive Plan" for flood control in the Missouri River Basin, proposed in early 1944 by Col. Lewis A. Pick of the Missouri District of the U.S. Army Corps of Engineers, after the devastating Missouri River flooding in 1943.

Later in 1944, the Pick Plan was combined with other plans proposed by William Glenn Sloan of the Bureau of Reclamation for the Western Missouri Basin, for irrigation, erosion control, and other improvements, to soon become a joint Missouri River Basin Project approved by Congress and President Franklin Delano Roosevelt by the end of the year, as part of the "Flood Control Act of 1944."

From 1946 through the 1970s, important features of the Pick-Sloan plan were carried out, including five new mainstem dams completed by 1966—Garrison, Oahe, Big Bend, Fort Randall and Gavins Point; but the full program of improvements to the land and water resources base was never carried out. Critical infrastructure improvements including creating new irrigation areas and hydro power, to lift the productive economic platform for the future were likewise not carried out. This lack of improvements continues to cause harm, even today, especially to the tribal peoples in the region. The obstruction of water management infrastructure comes strongly from the green movement, led by the Britain-centered "wildlife," anti-population campaign, and from the Wall Street/City of London circles, lying that infrastructure is "too expensive."

The result has been repeated and devastating floods. After the terrible 1993 Missouri Basin/Upper Mississippi flood, *EIR News Service* published a full report on the Pick-Sloan Plan titled, "No More Floods! Build the Missouri River Development Project," by Anthony DeFranco. After the terrible 2011 flooding in the same region, *EIR* reprinted the article in June 2011. It is long overdue for action.

The full *EIR* report is available at https://larouchepub.com/eiw/public/2011/eirv38n23-20110610/13-27_3823.pdf



The Missouri Basin and NAWAPA: Space-Age Water Management

Beyond the immediate need to deal with Missouri River Basin flooding, is the urgent requirement to commit to building continental-scale water management infrastructure, called for more than 50 years ago but persistently obstructed.

The map here shows the North American Water and Power Alliance (NAWAPA), which had widespread support in Washington in the 1960s, to divert a portion of run-off going into the Arctic, southward throughout

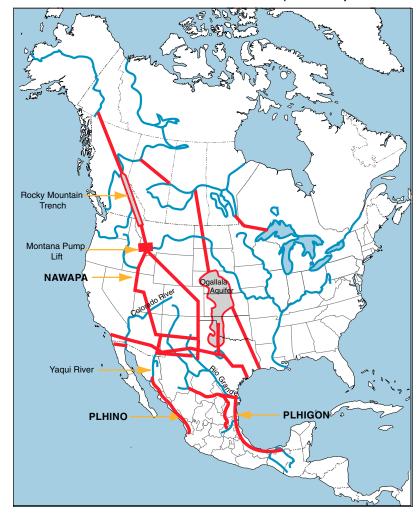
the entire dry western regions. The plan, which also involved hydro-power, would foster favorable biospheric effects through greening of large areas of now-barren desert. Hydrologists have studied how to make the core NAWAPA plan coherent with the Missouri-Mississippi Basins—to augment the flow in these rivers during drought; and to divert westward the flow, when the rivers were flooding, as now.

One of three such water conveyance plans for surplus Missouri flow is the Kansas Aqueduct. As proposed by the Army Corps in 1982, the Kansas Aqueduct would draw off water from the Missouri River in the northeast of the state, conveying it westward 375 miles, to the dryland farm region above the fast-diminishing Ogallala Aquifer in western Kansas, or even running the flow into Colorado. There are two other such water transfer proposals: one would draw off Missouri surplus flow at the South Dakota-Nebraska border, and run it southwesterly through the dry High Plains states. The other would draw off water from the lower Mississippi into Texas.

Beyond building these large-scale, interbasin water transfer projects, the necessary future of mankind's water supply is the management of the water cycle as such, which depends on creating new sources of freshwater through desalination, and managing the precipitation of water in the atmosphere through ionization techniques—space-age endeavors.

Benjamin Deniston of the LaRouche PAC Science Team has presented the principles involved in this outlook, and written research updates in several reports. See his "Solve the World's Water Crisis" in the EIR Special Report, *The New Silk Road Becomes the World Land-Bridge* (2014) and the April 2018 study by Deniston, "New Perspectives on the Western Water Crisis."

North American Water and Power Alliance (NAWAPA)



Sources: Parsons Company, North American Water and Power Alliance Conceptual Study, Dec. 7, 1964 Hal Cooper; Manuel Frías Alcaraz; EIR.