

No More Floods! Build the Missouri River Development Project

by Anthony DeFranco

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The Upper Mississippi-Missouri flood of Summer 1993 was an enormous tragedy. Rising to record levels, the two rivers claimed 50 lives, damaged or destroyed 100,000 homes, inundated 15,600 square miles—an area the size of Switzerland—and damaged or ruined 8 million acres of farmland. Nine states were declared Federal Disaster Areas. The total dollar loss was put at \$20 billion, but there is no cost-accounting the millions of manhours spent sandbagging and rescuing people and livestock, or the suffering inflicted.

The great flood of 1993 never should have happened. Nearly 50 years ago, plans to tame the Missouri were completed by the U.S. Army Corps of Engineers: the Pick-Sloan Missouri Basin Project. By 1993, the upper Missouri flood control was in place; but rains struck the unprotected lower section of the river, causing the worst flood in history.

For a total investment of \$6 billion, flood protection could have been built for the entire lower Missouri. In the great flood of 1993, the damage done along the Missouri River and its tributaries was \$10 billion. The Federal government has spent or allocated \$6 billion in flood relief for the Mississippi-Missouri. This does not count the billions lost in state, local, and Federal tax revenues.



Gen. Lewis A. Pick and William Glenn Sloan

Among all of America's great rivers, only the Upper Mississippi and the Missouri remain to be harnessed. The great flood of 1993 should have triggered immediate demands to complete the Pick-Sloan Missouri Basin Project. It didn't. Just the opposite occurred.

Congress is now contemplating spending billions to "buy out" those living near the Missouri River, abandoning this land, and

letting the river run wild. Let Great Gaia, "Mother Earth," repossess her lands, cry the press, the media, and environmentalists, with echoes in the halls of Congress. People? Croplands? Navigation? Recreation? Hydroelectric power production? Protection of the cities? Safe drinking water? These are not in Gaia's lexicon.

Completion of the Missouri River Basin Project is now doubly urgent. Not only must we protect the cities, towns, farms, and people of the river basin, but we must prepare to build our way out of an economic collapse. The moment the financial system snaps, America must be ready to re-employ its workforce rebuilding roads, bridges, urban water and sewage systems, rail transport—and building America's unfinished river projects.

The Pick-Sloan Plan, named for its engineers, is high on the list of those urgent projects. When completed, it will irrigate over 5 million acres, provide 6.1 million kilowatts (kw) of electrical power

(enough for a city of 6 million), protect 1,500,000 acres of prime farmland and cities on the river with 1,500 miles of levees, save 9,000 acres of topsoil from being washed away every year, and provide navigation as far north as Williston, North Dakota. And the Missouri, “Big Muddy” as the Indians called it, will never flood again.

Tackling the Big Muddy

It must have been a source of amazement to many in 1993 that the entire Mississippi Valley was not devastated clear down to New Orleans. The record volume of water flows on the Upper Mississippi and the Missouri all poured down the Lower Mississippi. Yet almost no flooding occurred south of Cairo, Illinois, the junction of the Ohio River. The reason was the Flood Control Act of 1928.

In 1927, one of the nation’s greatest floods occurred on the lower Mississippi. Some 300,000 died, 700,000 were left homeless, 36,000 square miles were inundated (an area the size of Hungary). Instead of claiming that this great flood was a once-in-a-100-year or once-in-a-500-year occurrence to be passively tolerated, Congress voted to build a flood-control system that would hold against a flood one and half times greater. Water flows greater than 1927 occurred in 1937, 1950, 1973, and 1983, with little damage.

The disastrous \$20 billion Ohio River flood of 1936 was met with the Flood Control Acts of 1936 and 1938, and the nation’s wildest river, the Tennessee, was tamed and harnessed by the Tennessee Valley Authority in the same period.

Although the Missouri’s average flow is only about 50 million acre-feet (over 2 trillion cubic feet of water—about equal to the Tennessee), the nation’s longest river had discouraged many engineers in the past. The muddiest of all rivers, it was prone to many channel changes, chutes, sandbars, and wild, unpredictable meanders, with a flood plain from 1.5 to 17 miles wide. The reliable depth of “Big Muddy” was only 30 inches, but it

The Grand Design for the Missouri River Valley consisted of 147 multipurpose dams and reservoirs, 5 million acres of irrigation, 38 hydropower plants, and from St.

Louis to Sioux City, Iowa, a nine-foot deep, 300-foot wide channel for navigation, and 1,500 miles of continuous levees. . . .



Bureau of Reclamation/Lyle C. Axthelm

The Boysen Dam, about 19 miles south of Thermopolis, Wyoming, completed in 1952 as a unit in the Pick-Sloan Missouri Basin Program.

regularly flooded twice a year, in Spring from the ice thaw, and in Summer from the mountain snow

thaw and downstream rains.

The incentive to the nation to tame this river was great: The Missouri River Basin is very large and very rich. It drains one-sixth of the total land mass of the United States, or 530,000 square miles. That area is four times the size of Germany, and six times the size of England, Wales, Scotland, and Northern Ireland combined.

This huge basin contains 25% of the nation’s cropland—113 million acres, on which grows half of the nation’s flax, and one-third of America’s wheat, oats, barley, and corn. Here, a quarter of the nation’s livestock is raised.

The first move to control Big Muddy came in the whirlwind of President Franklin Roosevelt’s first “Hundred Days,” during the Spring of 1933. An appropriation was made to build the Fort Peck Dam in northeastern Montana, to ease the Spring and Summer floods and make the lower Missouri navigable. The first of a chain of six upstream dams, Fort Peck is 250 feet high and 4 miles long, storing 19.4 million acre-feet (6.4 trillion gallons) of water. It remains today the world’s largest earthen dam.

The highly destructive floods of 1942-43 proved

that Fort Peck alone could not control the river. On May 13, 1943 the House Flood Control Committee authorized the Army Corps of Engineers to devise a plan for Missouri flood control. That job fell to Col. Lewis Andrew Pick, division engineer of the Army Corps for the western Missouri Basin.

Colonel Pick was a great builder in the American System tradition. A 1914 graduate of Virginia Polytechnic Institute, he first became a railway and municipal engineer, and after 1921 devoted his life to the U.S. military.

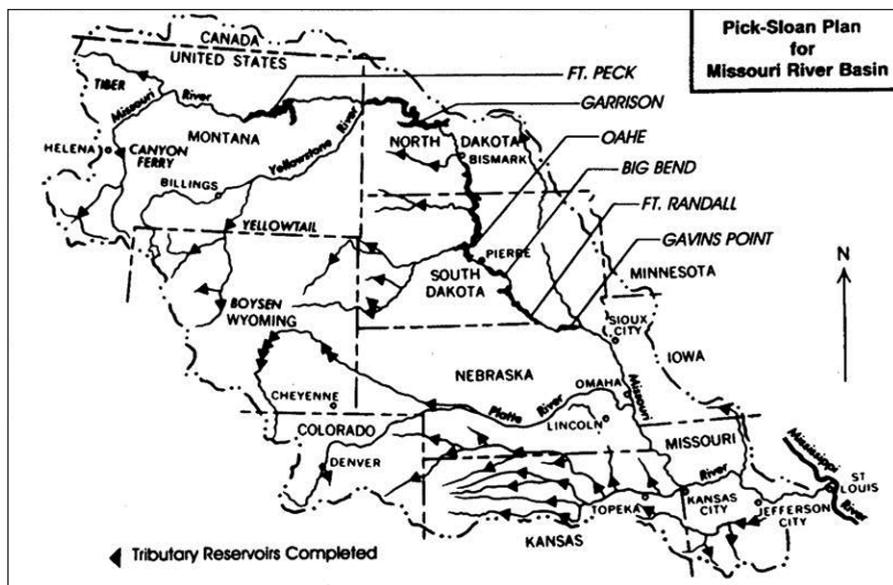
In May 1943, at the height of World War II, Pick may have realized that his stateside days were numbered. He drafted a succinct 13-page report on the Missouri Basin and laid it before Congress within three months. Meanwhile, Pick began an organizing tour of the Missouri Basin, visiting every state, every major city and many small towns, presenting his plan at rallies and meetings of officials and citizens.

Weeks after presenting his plan to Congress, Pick was assigned to the China-Burma-India Theater, where he proved himself one of the greatest military engineers of the century. Pick was assigned to build the Ledo Road, a crucial supply link to the Burma Road. The story is told that Pick reviewed the engineers' surveys and scrapped them. The plans were fine, he said, but they would take too long. Pick successfully directed the construction himself, as he said, "by God and by guess."

Pick's brilliant counterpart in what later became the Pick-Sloan Plan was William Glenn Sloan, in 1943, the Assistant Engineer at the Billings, Montana office of the Bureau of Reclamation. Also a man of American System vision, Sloan's focus was more on irrigation and farming than flood control and navigation. There was some conflict between the two aims since the more water used for irrigation, the less water would be available to maintain channel depth for navigation.

As Congress moved to consider the plans, a third element was added. David Lilienthal, the head of the Tennessee Valley Authority, had the support of President Roosevelt and some powerful Eastern bankers to

Pick-Sloan Plan for the Missouri River Basin



put a private authority in charge of the project. The engineering designs were the same, but under the Missouri Valley Authority (MVA) plan, the Eastern financiers would retain the profits on projects that were largely government-built; and the authority, a private corporation, would have greater power in the basin than any level of government, including the Federal government. The fear that the MVA, with interstate powers, would usurp control from elected representatives loomed large in the minds of many Westerners.

As Congressional deliberation approached in the Summer of 1944, the proponents of both the Pick and Sloan plans decided on a "shotgun wedding" in order to pre-empt a Missouri Valley Authority. The plan was signed into law on Dec. 22, 1944, as the major part of the Omnibus Flood Control Act of 1944.

The Pick-Sloan Plan

The world had never seen a project of such magnitude. The Grand Design for the Missouri River Valley consisted of building 147 multipurpose dams and reservoirs, 5 million acres of irrigation (the size of Massachusetts), 38 hydropower plants generating 2,000 megawatts (later upped to 6,100 megawatts), and from St. Louis to Sioux City, Iowa, a 9-foot deep, 300-foot wide channel for navigation, and 1,500 miles of continuous levees that would contain any possible flood, with special flood walls for populated areas. Total cost was estimated at \$8.5 billion, or approximately \$100

billion 1994 dollars.

The core of the Pick-Sloan Plan was six large dams on the Missouri River itself, combining flood control, irrigation, hydropower, sediment collection, fish and wildlife protection, and recreation. “A muddy stream would be transformed into a chain of blue lakes” across Montana and the Dakotas, was the vision of Colonel Pick. That vision, today complete, was to store 76 million acre feet of water, equal to one and half times the total yearly river flow. Some 17 million acre-feet of storage was allocated to control the floods from spring thaw and summer mountain snow-melt.

While Americans, especially Westerners, were enthusiastic about Pick-Sloan and other major infrastructure projects, very powerful elements opposed the plan. The Rockefellers didn’t like it at all. Instead of creating the conditions for 600,000 more Americans to farm and run businesses in the Missouri Basin, the Rockefellers wanted to *move 900,000 people out of the Basin*.

This proposal to return the basin to a primitive state by removing one-third of the population, came from the Rockefellers’ Social Science Research Council (SSRC). With SSRC funding in 1936, the Industrial Research Department of the Wharton School of Finance published a report claiming that “on irrigation projects the income is insufficient to permit the farmer without capital to assume the financial obligations which go with the land.”

The report assumed that the grain cartel would keep the farm prices at rock bottom, that all farmers were penniless or unable to borrow, and that we ought to let “the deer and the antelope play.” In the 1950s, this became the dogma of “cost-benefit analysis,” leading into the 1960s cult of environmentalism.

Prof. Carter Goodrich of Columbia University in New York, leader of the pack of eight economists who wrote this “study,” was a ferocious advocate of global population reduction. He was a leader of the Malthusian Population Association of America, a member of the League of Nations Commission on Demographic Problems, and a consultant to the U.S. Resettlement Administration in 1936. Goodrich then joined the science committee of the National Resources Commis-

Missouri River Basin



Army Corps of Engineers

sion, later transformed into the Rockefeller National Resources Defense Council, which sought to derail the Pick-Sloan Plan.

History of the Project

In 1945, the week that Japan surrendered, representatives of the Army Corps of Engineers, the Interior Department’s Bureau of Land Reclamation, the Agriculture Department, and the governors of 10 states, formed the Missouri Basin Inter-Agency Committee (MBIAC). This committee was to make decisions on the scheduling, financing, and other specifics of the Pick-Sloan Plan, as well as on projects already under way.

The MBIAC drew up six-year plans for projects, with expected costs and expenditures, which were revised and updated annually. It met once a year, with public participation in each of the nine major states of the basin. Colonel Pick chaired the meetings in 1946-49, succeeded by Sloan, who chaired them through June 1950.

Once the MBIAC had a hands-on grasp of the potentials of the basin, they realized that they had laid the basis for a transformation of a huge expanse of arid semi-wasteland into highly useful farm, grazing, and forest land. In 1949, they put forward the Young Plan, the world’s largest land-management program.

The Young Plan was conceived to complement the Bureau of Reclamation’s irrigation and power supply,

Lower Missouri River near Lupus, Mo.



USGS

The Pick-Sloan Plan envisioned planting trees on 5 million acres, an area as large as Massachusetts; 2.5 million acres of shelter belt trees to prevent wind erosion and seed loss; and 2 million miles of terraces to prevent topsoil erosion of agricultural fields.

and the Corps of Engineers' flood control, becoming a third major component of the Pick-Sloan Plan. The Young projects included seeding grass and legumes on 20 million acres (twice the size of Denmark); providing cover crops to protect 13 million acres then barren; construction of half a million stock ponds, 30,000 springs and seeps, 78,000 wells, 5,000 miles of minor floodways, 12,000 miles of small stream channel improvement, and 70,000 miles of diversionary ditches and dikes, as well as swamp drainage.

Most extraordinary were the plans to plant trees on 5 million acres (an area as large as Massachusetts) to stabilize the soil and retain water; plant 2.5 million acres of shelter belt trees to prevent wind erosion and seed loss; and build 2 million miles of terraces to prevent topsoil erosion of agricultural fields.

William Sloan estimated that 53,000 new farms would arise, and that for every new farm resident, two people would be needed in the towns to supply goods and services. That would create 14,000 new businesses and a total new population of over 600,000. New wealth generated would be \$600,000,000 yearly (\$6 billion in 1993 dollars). Sloan envisioned this new wave of settlement as merely the initial basis for the growth of cities and industrial centers.

Predictably, there came a counterattack against the Young Plan by the Rockefeller faction—a gang of front-

men for a less visible Anglo-Venetian oligarchy opposed to the American System. Rather than attack the plan itself, which was so obviously beneficial, they geared up two time-tested shibboleths, “Stop Big Government” and “Cut the Budget.”

In 1947, the Army had lost cabinet status in the creation of the unified armed forces under the Pentagon. This began the transformation of the armed services from a republican citizens' army dedicated to the defense of the United States and its interests into the Anglo-Venetian-United Nations “rapid strike force” it is becoming today. With this change, the Army Corps of Engineers came under intense fire for its non-military, “civilian” operations—particularly its protection of America's rivers and river basins.

In 1949, the old Rockefeller-sponsored Bureau of the Budget, which had waged war on all major Federal internal improvements but was largely ignored by Congress, got a new lease on life through the recommendations of the Hoover Commission on Government Reorganization. Hoover was none other than Herbert Hoover, the Rothschild mining-shares swindler, who was President from 1928 to 1932. The brains behind the commission was its executive director, Arthur Maass, a Harvard professor, former employee of the Bureau of the Budget, and staff member of the Rockefeller National Resources Task Force.

In the final draft of the Hoover Commission report, Maass called for stringent “cost-benefit” standards for all water projects. Maass also wrote a vicious attack on the work of the Army Corps of Engineers, titled *Muddy Waters: The Army Engineers and the Nation's Rivers*.

A major controversy arose after a 1951 flood devastated the Kansas City area. The Army Corps wanted to build the Tuttle Creek Reservoir to hold back the flood waters of the Kansas River. The proposal was reviled in a major *Reader's Digest* article rallying its readers to “wage the fight to keep the American way of life from being swallowed up by Big Government,” and preserve “fundamental American values” against the “rapidly enlarging corporate state.” The article provoked local opposition to the reservoir, and stampeded Congress

FIGURE 1
Damage from Missouri River Floods
 (includes damages on tributaries)

Year	Dollar damage (1993 million\$)
1942	\$ 1,420
1943	890
1944	990
1947	1,200
1951	4,520
1952	3,540
1973	530
1986	535
1993	10,000
Total loss 1942-93	\$ 23,625
Estimated loss (if Pick Sloan is not completed)	
1994-2042	\$ 21,180
GRAND TOTAL	\$ 44,805

If Pick-Sloan is not completed, economic losses will total nearly \$45 billion by 2042. This table shows merely the losses that can be averted, not the positive value of navigational, hydropower, land reclamation, and other benefits resulting from Pick-Sloan.

FIGURE 2
Projects for Immediate Implementation

Project	Project Breakdown	Flood Storage (acre feet)	Dollar Cost (1994 million\$)	5-Yr jobs
Grand River	7 dams/reservoirs	3,369,000	\$850 million*	2,125
	1 power plant			
	105 miles channel			
Gasconade	175 miles levee	1,000,000	\$300	740
	2 dams			
Osage	2 power plants	340,000	\$590	1,470
	2 dams			
Fishing	5 power plants	180,000	\$150	375
	171 miles navigation			
	2 dams			
Platte	50 miles channel	none	\$ 40	100
Chariton	40 miles channel	none	\$ 30	75
Meramec	5 dams	1,150,000	\$850	2,125
	40 miles channel			
TOTALS	18 dams	6,040,000	\$2.81 billion	7,010

*levee only, power cost not included

The total cost to harness the Missouri tributaries and the Meramec River is \$2.81 billion. Add \$3.35 billion for mainstream levees and the Missouri will never flood again. These plans have already been prepared. The Meramec, which flows into the Mississippi, is added here since it is contiguous to the Missouri watershed.

FIGURE 3
Projects to Finish the Missouri Valley Basin

Major construction	Cost (1994 billion\$)	Man Years*	5-yr jobs
Hydro power			
Completed: 2.5 mn kw			
Planned (1950): 6.1 mn kw			
To be built: 3.6 mn kw	2.52	31,500	6,300
Irrigation			
Completed: 450,000 acres			
Planned (1950): 5,000,000 acres			
To be built: 4,550,000 acres	22.75	284,000	56,900
Navigation			
Completed: 750 miles			
Planned: 1,600 mi			
To be built: 850 mi	2.52	31,300	6,250
Levees			
Completed: 150 miles**			
Planned: 1,675 miles			
To be built: 1,525 miles	3.35	41,900	8,380
Non-levee flood control (Missouri only)***			
Dams, reservoirs, channelization	2.81	36,100	85,050
GRAND TOTAL	\$33.95	424,800	162,880

*Jobs are estimated by assuming wages are half the cost of construction and the average cost per worker per year is \$40,000.

**Existing levies will be raised from 14 to 22 feet; new levies are 22 feet.

***Includes the Meramec River, since it is contiguous to the Missouri watershed area.

For about \$40 billion (including urban flood walls and other improvements, not counted above), the entire Pick-Sloan Plan can be completed.

FIGURE 4
Irrigation Development Under the Pick-Sloan Missouri Basin Plan

State	Acres Planned	Developed	Percentage
Montana	967,130	45,582	4.7
Wyoming	281,560	71,773	25.5
N. Dakota	1,266,440	10,344	0.8
S. Dakota	961,210	71,929	7.5
Colorado	101,280	0	0
Nebraska	989,445	199,930	20.2
Kansas	193,335	65,798	34.0
TOTAL	4,760,400	465,356	9.8

Crops from irrigated land are three times that of dry-land yields. Irrigation is one part of the solution to the world's hunger.

into an investigation by the Special Subcommittee on Civil Works. Only Colonel Pick's brilliant point-by-point refutation of the budget-cutters saved the project.

In this environment, President Truman used an old Executive Order, EO 9384, to declare that states must pay 50% of the cost on all new flood-control construction, and that each component of a project, separated from the whole, must be subject to narrowly defined "cost-benefit analysis."

The “bottom line” of this policy was: no more project authorizations.

Then America entered its “lost years” under Eisenhower, whose economic policy was guided by Treasury Secretary Charles “Bird Dog” Wilson, a former chairman of General Motors, and William McChesney Martin, chairman of the Federal Reserve Board. Wilson labelled any government projects “socialistic,” while McChesney Martin’s monetarist tight-credit mania ensured the severe 1957-58 Eisenhower Recession.

In this sanctimonious atmosphere of tight budgets, the Eisenhower Administration created the theory of “non-structural alternatives to flood control.” Army Engineers funding took a drastic dive.

The American System

If the leaders who built our nation during the 19th Century had succumbed to the post-World War II dogma that “government should be run like a business,” this country would not have been built, nor would many of us be here today.

The formula of running a country like a business comes from the method by which the Venetian-controlled British East India Company ruled the British Empire. For the East India Company and its Bank of England, the “state” was merely a tax collection instrument to provide liquidity for the financial schemes of the company. The “state” would enforce the imperial ventures of the company with a tax-funded military. That was “good business.”

The American System statesmen, including most of our Founding Fathers, saw the government’s function as promoting internal improvements to develop the wealth of the nation, rather than acting like a private business or serving the interests of a private group. American System nation-builders like Abraham Lincoln were great fighters for internal improvements such as roads, railroads, canals, and waterways.

Lincoln, in his years in the Illinois State Legislature, had persuaded that body to appropriate millions for the Michigan and Illinois Canal and the “Northern Cross” railroad system. Lincoln knew that the value of farmland depended on the farmers selling their product, which in turn depended on water or rail transportation.

Did the Michigan and Illinois Canal, which linked the Great Lakes into the Mississippi River, ever pay the State of Illinois back its full cost? Did the Northern Cross “pay”? Neither one did, but those two essential

transport routes created the city of Chicago, and opened up the greatest agricultural basin in the world.

Was it worth it? From a “cost-benefit” standpoint, from the standpoint of government being a “business,” not at all. But these internal improvements, fought for by our American System statesmen, made America the greatest industrial and agricultural power in the world. The population of Illinois has increased 20-fold since Lincoln’s day, and now lives at a far higher standard of living than a century and a half ago.

In 1847, when President Polk vetoed a rivers and harbors appropriation on the grounds that it would use Federal tax funds to build them, but the benefits would be local, Congressman Abraham Lincoln rose to eloquently rebut the President:

“Now for the second position of the message, namely, that burdens of improvements would be *general*, while their benefits would be *local* and *partial*, involving an obnoxious inequality. That there is some degree of truth in this position I shall not deny. No commercial object of Government patronage can be so exclusively *general*, as not to be of some peculiar local advantage; but, on the other hand, nothing is so *local* as not to be of some general advantage. . . .

“The driving a pirate from the track of commerce on the broad ocean, and the removing a snag from its more narrow path in the Mississippi River cannot, I think, be distinguished in principle. Each is done to save life and property, and for nothing else. The Navy, then is the most general in its benefits of all this class of objects; and yet even the Navy is of some peculiar advantage to Charleston, Baltimore, Philadelphia, New York, and Boston, beyond what it is to the interior towns of Illinois. The next most general object I can think of, would be improvements on the Mississippi River and its tributaries. . . .

“But the converse is also true. Nothing is so *local* as not to be of some *general* benefit. Take, for instance, the Illinois and Michigan Canal. Considered apart from its effects, it is perfectly local. Every inch of it is within the State of Illinois. That canal was first opened for business last April. In a very few days, we were all gratified to learn, among other things, that sugar had been carried from New Orleans, through the canal, to Buffalo in New York. This sugar took this route, doubtless, because it was cheaper than the old route.

“Supposing the benefit in the reduction in the cost of carriage to be shared between seller and buyer, the

Were federally funded regional infrastructure projects worth it? From the standpoint of government being a “business,” no. But these internal improvements made America the greatest industrial and agricultural power in the world.



The Oahe Powerhouse, a hydroelectric plant at the Oahe Dam, near Pierre, S.D.

result is, that the New Orleans merchant sold his sugar a little *dearer*, and the people of Buffalo sweetened their coffee a little *cheaper* than before: a benefit resulting *from* the canal, not to Illinois where the canal *is*, but to Louisiana and New York, where it is *not*. . . . [This] shows that the *benefits* of an improvement are by no means confined to the particular locality of the improvement itself. . . .” (emphasis in original).

JFK and Great Projects

When, on Aug. 17, 1962, the 35th President of the United States, John Fitzgerald Kennedy stood atop the Oahe Dam to dedicate it to the nation, he must have felt some personal satisfaction. Kennedy, who had been chosen by the oligarchic Eastern establishment to usher in the “Small Is Beautiful Post-Industrial Society,” turned out to be of the opposite disposition. He rather liked to build things—big things.

Dedicating Oahe, the largest rolled earth dam in the world, Kennedy told a crowd of 10,000: “This dam provides a striking illustration of how a free society can make the most of its God-given resources.” In 1962, Kennedy himself organized the 25th anniversary cele-



President John F. Kennedy at the dedication of the Oahe Dam, August 1962. Bureau of Reclamation

brations of the Tennessee Valley Authority.

Typifying his enthusiasm for great projects, JFK told students at Rice University in September 1962: “But if I were to say, my fellow citizens, that we shall send to the Moon, 240,000 miles away from the control station in Houston, a giant rocket more than 300 feet tall, the length of this football field, made of new alloys, some of which have not yet been invented . . . carrying all the equipment needed for propulsion, guidance, control, communications, food and survival, on an untried mission, to an unknown celestial body, and

then return it safely to Earth, re-entering the atmosphere at speeds over 25,000 miles an hour, causing heat about half that of the Sun, almost as hot as it is here today, and do all this, and do it right, and do it first before the decade is out, then we must be bold.”

When Kennedy took office in 1961, the nation underwent the “second dip” of the Eisenhower Recession. Moving quickly on the economic front, Kennedy passed a very effective investment tax credit for industrial expansion, and opened up numerous stalled public works projects, including the 448-mile Arkansas River Navigation Project, which provided flood control and navigation as far west as Tulsa, Oklahoma.

Kennedy was denounced by the entrenched budget cutters when his public works and tax credits threw the 1962 budget \$7 billion in the red.

The Kennedy Administration’s river and water development policy was expressed in Senate Document 97, passed in May 1962. This American System-style policy statement held “that the objectives of water and related land resources planning were economic development, preservation of natural resources, and the well-being of the people.”

The document set project planning on the basis of the Kennedy Administration’s target of a 4.5% yearly rate of economic growth. Therefore, *all plans were to be considered without restrictions based on reimbursement or cost-sharing policies.*

Abolition of reimbursement and cost-sharing, as Pick and Sloan insisted, is essential to any great project. Oahe Dam in South Dakota cost \$400 million to construct, but South Dakota’s total state revenue for that year (1962) was only \$50 million. South Dakota could not possibly have contributed anything significant to the cost of the Oahe Dam; North Dakota or Montana, whose total revenues were only slightly higher, could never have seen the dams go up in their states. Only the national government could fund such large projects, from which the entire nation would benefit.

Senate Document 97 further established 100 years as the useful life of a project; set price levels used in planning on the exchange value expected when the



The Bureau of Reclamation’s Yellowtail Dam across Bighorn Canyon in southeastern Montana. This is the largest concrete dam in the Missouri River System.

costs would be incurred and when the benefits would be accrued; and set the discount rate at 3.5% for Federal credit extended to implement projects.

When a project’s benefits are estimated in terms of the growth of the national economy, rather than “cost-benefit” fiscal return, the true value of a project can be measured. The Kennedy space program, which cost the government many tens of billions, returned \$14 to the national economy for every Federal dollar spent. Such an investment “pays back” the government indirectly in larger tax revenues generated, rather than directly from proceeds of a project.

One of Kennedy’s strong Congressional collaborators was Missouri Rep. Clarence Cannon, a Democrat, who served as chairman of the House Appropriations Committee from 1941 until his death in 1964. Cannon was a major supporter of the TVA, rural electrification, Adm. Hyman Rickover’s Nuclear Navy, and Kennedy’s space program.

Coming from Missouri’s 9th C.D., which is bounded by both the Mississippi and Missouri rivers, Cannon stood firmly with the President on water projects funding. A major dam west of Hannibal was named in his honor.

Missouri’s Senator during the passage of the Pick-Sloan Plan in 1944 was Bennett Clark, the son of former House Speaker Champ Clark. Bennett Clark was so favorable to inland water projects that he was once accused of being “an agent of the Army Corps.”

The McNamara Debacle

Kennedy-Johnson Defense Secretary Robert Strange McNamara, apart from his addiction to the quaint habit of baying at the Moon while stark naked, was a “bottom-line” cultist. The “bottom line” meant whatever short-term profits can be snatched after all possible cost corners have been cut. McNamara’s obsessive “bean counting” later became his Vietnam “body counting,” and the “bottom line” cult converted America, the industrial envy of the world, into a speculative bubble with feet of rust.

The dogma was called “Planning-Programming-Budgeting System Analysis.” Each part of any project was separated from the whole and subject to the greatest cost-cutting. It was this bean counting that McNamara imposed on the Army Corps of Engineers.

Only months after the murder of JFK, Army Secretary Cyrus Vance (recently distinguished as one of the butchers of Croatia and Bosnia), commissioned a study attacking the Army Corps for having too many engineers and too few economists.

That same year, 1964, President Johnson, always fearful of becoming the recipient of a few well-aimed bullets, shifted the U.S. budget targets from domestic economic growth to changing the landscape in Vietnam. Congress agreed to decommission all water-related projects not yet started.

In 1968, the Environmental Protection Act stipulated that all Federal actions required an “environmental impact statement.” Five years later, the odds for building any project, public or private, were again greatly lowered by the lunatic Endangered Species Act, which gave preference to Great Gaia’s mollusks and mosquitos over any construction for the benefit of human beings.

By 1970, the budget-cutting ecology Furies had gnawed America’s future internal improvements spending to the bone. Pick-Sloan was put on stand-still. The massive irrigation plans championed by William Sloan, and the Pick-Sloan levees and dams on the lower Missouri were *less than 10% complete*. The Young Plan to foliate the High Plains was never begun. In 1970, Congress authorized the last new Federal water project.

The momentum of the 1944 Flood Control Act, given brief new impetus by Kennedy’s 1,000 days, had resulted in completion of the six major upstream dams. They were Fort Peck (19.4 million acre-feet of water storage); Garrison Dam and Sakakawea Reservoir between Bismarck and Minot, North Dakota (25 million

acre-feet); Oahe Dam near Pierre, South Dakota (24 million acre-feet); Fort Randall (6 million acre-feet); Gavins Point Dam (0.5 million acre-feet) and Big Bend Dam, 40 miles south of Pierre, South Dakota designed to produce electrical power.

The nine-foot deep, 300-foot wide navigation channel was extended 735 miles northwest to Sioux City, Iowa, by 1981. Many smaller dams, channelization and other flood control projects on the upper Missouri’s tributaries were also completed.

In 1977, Jimmy Carter used his Executive Office to give remaining water projects the “capital chop.” The old Bureau of the Budget had been replaced by an aggressive Office of Management and the Budget in 1970; it deemed water spending “highly discretionary.” Carter exercised his discretion to make sure that water improvements were the first to go.

Carter relied on a 1975 Ford Administration Executive Order mandating the Army Corps of Engineers to study three alternative ways to solve water problems: “structural,” meaning construction; “environmental,” meaning allowing “wetlands” to soak up flood waters; and “non-structural,” meaning a policy of relocating highways, putting buildings on stilts, and removing the people—then letting the river flood.

Carter enforced these choices with two executive orders in 1977, the first managing flood plains, the second preserving wetlands. The following year, the Kennedy policy of full Federal funding of major projects was replaced with a mandated 25% local cost-sharing.

In the Reagan years, with the zealot David Stockman as head of the Office of Management and the Budget, and \$200-billion-a-year budget deficits created to fund the junk-bond mania, little was left for the economic development of the nation. In 1986, all the levees from Sioux City, Iowa to St. Louis were placed on “inactive status”—wiped off the books, and no longer maintained. The Great Flood of ’93 was a disaster waiting to happen.

The Great Flood of 1993

It is difficult to capture the horrors of that flood, the millions of man-hours devoured in attempts to save farms, homes, and whole communities, the agony of watching the waters rise hour by hour, and waiting to see if a levee would hold, the bankruptcy of thousands of businessmen—some were insured against property damage, but there is no insurance against loss of cus-



The Great Flood of 1993: Here, an aerial view of floodwaters from the Des Moines River in Iowa, a tributary of the Mississippi, in July 1993. A total of 435 counties in 9 states were declared for Federal disaster aid.

FEMA/Andrea Booher

tomers for three months; or the sorrow of seeing one's farm, the labor of decades or generations, disappear. Perhaps the most ghastly image was of dozens of caskets, unearthed by the flood from a village cemetery, floating down the swollen river.

But why did it happen? Some 60% of the Pick-Sloan Plan had been completed. The great dams and reservoirs were in place. Why didn't they hold back the flood waters?

In normal times, 55% of all water enters the Big Muddy south of the Missouri state line at Nebraska City, Nebraska, far south of the great dams in Montana and the Dakotas. In 1993, not only did a higher percentage enter the river south of the great dams, but it entered in deluges.

At the peak of the rainfall, July 14, 1993, a soil moisture map taken by satellite showed southern Minnesota, Iowa, eastern South Dakota, and Nebraska almost as wet as the Great Lakes. Unhappily, western Kansas and a band through Missouri exactly parallel to the river showed similar hyper-flooded soil.

Terrible blight from the flood continues. Thousands of acres of prime farmland were permanently damaged, while a larger area will be unusable this year and perhaps for years to come. The flooding river had dumped great amounts of silt and sand on the bottomlands, while scouring huge craters and ravines in the fields. When

the waters drained, the craters were filled with rotting fish and uprooted trees. The flood drowned the crops and trees, and killed the organic life in the soil, leaving large tracts as lifeless as a lunar landscape.

For an outlay of \$6.2 billion to complete the levees and tributary dams and channelization on the lower Missouri River, all this could have been prevented.

Devotees of the Great Gaia, Mother Earth, took solace from the flood. This was the living Mother Earth coming back to take what was hers. Her great elemental force was reasserted over the puny powers of mere mortals, and those mortals were punished for transgressing her will.

At the height of the flood, July 18, 1993, the druids at *The St. Louis Post-Dispatch* editorialized: "Will millions of people who live near the Mississippi and Missouri rivers continue futile attempts to tame the water? Or will they seek a more harmonious, balanced existence that is better for both nature and human beings in the long run?... Will they rebuild every levee that this flood has breached... or will the Army Corps of Engineers, local leaders and politicians show a new respect for the river and accept that flooding is a necessary part of the renewal of these areas? After all, flooding cleanses the watershed and restores the agricultural lands by depositing rich top soil.

"What about paying homeowners, business and de-

velopers who have built buildings on flood plains?... Will these people realize that flooding is a natural part of a riparian ecology and that they must pull back from the rivers, leaving flood plains undeveloped to act as sponges that soak up the excess water?"

Futile attempts to tame the water? When President John F. Kennedy organized the 25th anniversary of the Tennessee Valley Authority in 1962, there hadn't been a flood on that tempestuous river in 25 years. Nor has a flood occurred in the subsequent 32 years.

Since completion of the Ohio River flood-control project authorized after the 1936 flood was completed, no major flood has been seen on that river.

The Lower Mississippi has not flooded since the completion of the flood-control measures authorized by Congress in 1927, despite the avalanche of water poured into it by the Upper Mississippi-Missouri in 1993.

Most of the important rivers in the United States have already been successfully "tamed." The only two major flood-control projects left incomplete are the Upper Mississippi and the Missouri, the rivers that flooded in 1993.

It may be impossible to stop a hurricane or an earthquake, but floods can be controlled. Heavy rains cannot be stopped, but we humans can determine where that water goes. The total Federal outlay for flood control in the United States over the past century, a mere \$25 billion, today protects property worth more than ten times that amount, in which millions live and produce many billions worth of crops, manufactured goods, and other essentials of life.

Should Americans "withdraw" from the flood plain? Should we withdraw from the paths of hurricanes, tornadoes, earthquakes, hailstorms? Perhaps we should give no further assistance to victims of natural disasters, since it was their fault for choosing to live in harm's way?

These Gaia-loving environmentalists, who seek to "withdraw" hundreds of thousands of people from the most productive lands in the Midwest—are they not the very same ones who rage against removing residents from "ancestral homes" or "Indian sacred ground" when a reservoir, road, or airport is to be built?

We are told to show "new respect for the river" by allowing it to "renew" itself with every flood, out of respect for the elemental forces of Great Gaia.

Should we show a new respect for cholera by allowing it to spread among humans? Should we show a new respect for lightning by taking down lightning rods and

letting it destroy structures?

Allow "wetlands" and flood plains to act like a "sponge" for floods? It is easy to picture water dropping on sand and disappearing. But if that sand is in a swamp, will the water be absorbed? Wetlands do not absorb water, because they are already saturated, and flood plain land soaks up little water because the water table is very near the surface.

Nor does extensive flooding significantly lower the flood crests. Despite numerous levee breaks in 1993, which flooded an area the size of Switzerland, 90% of the flood waters stayed in the channel. When a major levee broke in the 1993 Upper Mississippi flood, inundating an area of 15,000 acres, the river dipped less than a foot and returned to even higher levels less than two days later.

The reason is simple: The volume of water flowing down the river is enormously greater than that which floods surrounding land. The only relief from high water is to allow it to flow. Thus, channelization and levees are vitally necessary.

Who Is Gaia?

The finest irony is the argument that allowing the river to flood "renews" the wetland habitats of various flora and fauna like the Interior Least Tern and the Piping Plover (they're birds). Floods destroy wetlands. According to Missouri State conservation officials, 15-25% of Missouri's wetlands were destroyed in the 1993 flood.

Floods are as beneficial to frogs and fish as a forest fire is to Smokey the Bear. The 1993 flood killed great numbers of animals, fish, and floodplain vegetation, including whole stands of bottomland nut trees. The first levee the Army Corps of Engineers chose to rebuild on the Upper Mississippi will protect a wildlife refuge destroyed by the 1993 high waters.

If wetlands are wiped out by floods, why are the Gaia Greenies so anxious to allow the river to flood? They want to return the rivers to their "natural" state, so that Mother Earth can reign free of "interference" from man. Therefore, they want to move the human "occupiers" (as they are called by the present-day Army Corps of Engineers) out of the flood plain, shut down economic activity, and eventually halt river transportation.

This is not the outlook of modern, Western society. It is the modern revival of the ancient pagan cult which worshipped Mother Earth, the goddess Gaia. The modern Gaia cult has been pushed to the foreground in

the past decade, through such features as the Public Broadcasting System's NOVA series, "Goddess of the Earth," glittery books like *Gaia: An Atlas of Planetary Management* appearing on college reading lists, hundreds of press articles, pop magazine and *National Geographic* full-color spreads, and plenty of TV and radio hype.

Great Gaia was given a 15-page glossy spread in the *Encyclopedia Britannica Yearbook of Science and the Future* entitled, "Gaia: A Goddess of the Earth?" There exists a Gaia Foundation, which spawned the Forest People's Support Group and Education of the Awakening Earth. Directors of the Gaia Foundation are closely connected to the British royal family, particularly Prince Charles, and to New Age movement circles like the Lucis Trust.

Gaia's chief spokesman since the early 1960s, British ecologist James Lovelock, explains: "Gaia is to all intents and purposes immortal. She has lived three and a half thousand million years, which is longer than quite a few stars have lived. . . . She is the source of life everlasting. She is certainly a virgin; there is no need to reproduce if you are immortal. She certainly is the mother of us all, even Jesus. . . ."

Because Gaia is "ruthless in her destruction of those who transgress," if humans stand in the way, "we shall be eliminated with as little pity as would be shown by the micro-brain of an intercontinental ballistic missile in full flight to its target." (Better stop "occupying" Gaia's floodplains, you mortals!)

The Commonwealth Institute of London wrote the following hymn for its annual Christmas festival:

"Gaia is the one who gives us birth. She's the air, she's the sea, she's Mother Earth. She's the creatures that crawl and swim and fly. She's the growing grass, she's you and I."

Instead of urgent demands to complete the Pick-Sloan Missouri Basin Project, the 1993 flood brought a great rush to do Gaia's bidding. Along with the *St. Louis Post-Dispatch*, Gaia's pied piper in Missouri was Sen. John Danforth, the grain cartel heir.

At the height of the flood, in July 1993, Danforth demanded new Federal funding for buyout programs to "encourage people to move out of the flood plain." He also insisted that flood insurance should be made both scarce and expensive to prod people to leave their homes, farms, and businesses.

Federal flood insurance was itself a sick jest. By 1987, Congress was forced to bail out the insurance

fund for \$1.2 billion, only to find it bankrupt again by March 1993 in the aftermath of a major Eastern Seaboard storm. How many billions the 1993 Summer floods cost the insurance fund is unknown, but the policies outstanding add up to \$210 billion.

It is obviously cheaper to build the flood control systems—not to mention the benefits of hydropower, recreation, and preventing enormous misery to hundreds of thousands of flood victims—than to issue insurance, but Gaia seems to prefer that humans suffer for "occupying" her floodplain.

The next Gaia disciple was Congressman Harold Volkmer, who inherited the river-bound 9th C.D., the earlier bailiwick of Champ Clark and Clarence Cannon. Considered a conservative glad-hand, but no mover and shaker, Volkmer suddenly got Gaia spirit and went hell-bent to get a buyout bill passed. With the help of House Majority Leader Richard Gephardt, his Congressional neighbor in Missouri, the bill sailed onto the President's desk within five months.

The fluid druids at the *Post-Dispatch* gave unctuous praise: "The popular buyout bill has made Volkmer—an often crusty critic of environmentalists in the past—the temporary darling of some environmental groups. 'You have to give Harold Volkmer credit—he kept at this and helped get it through,' said David R. Conrad of the National Wildlife Federation."

The bill steals money from flood victim relief to pay the costs of the buyout. The Federal Emergency Management Agency doles out the lump sums to states to buy out properties that are then demolished. Nothing can be built on the land again, which is held by the local government "in perpetuity." The deputy director of the Missouri State Emergency Management Agency has claimed that this was the largest Federal buyout program ever.

By the Spring of 1994, the once-valiant Army Corps of Engineers had "gone Gaia." Brig. Gen. Gerald Galloway of the Army Corps, and head of the President's Interagency Floodplain Management Task Force, drafted a proposal to overturn America's two-century commitment to internal improvements, and give America's rivers to the environmentalists.

Every Gaia incantation was repeated in Galloway's draft: "Floods are natural repetitive phenomena"; "The loss of wetlands and upland cover and modification of the landscape throughout the basin . . . dramatically increased runoff"; "Human activity throughout the basin has caused significant loss of habitat and ecosystem di-



National Weather Service

The results of the failure to follow through on the Pick-Sloan Missouri River Development Plan can be seen in today catastrophic flooding of the River. This photo is from May 2011.

versity”; “Levees can cause problems ... by backing water up on other levees or lowlands.”

Galloway’s agenda:

- Give “full consideration” to “permanent evacuation of flood prone areas.”
- Periodically review all “completed projects” to see if they reflect “current national, social, and environmental goals.” (Dismantle existing dams and other construction on environmentalist grounds.)
- Reduce disaster relief to those who didn’t buy insurance, then, increase the price of insurance, and add a surcharge after every flood claim.
- Enforce local and state cost sharing (to knock out all remaining projects), then make the states—in consultation with the Indian tribal governments—responsible for watershed management. (The states cannot fund the projects, and environmentalist-manipulated tribal governments block them.)

Anxious to proceed at once, the Army Corps announced May 9 that it would alter the Missouri’s flow to simulate the Spring floods that occurred before the six great upstream dams were built. By adding a 20,000 cubic feet per second flow to the river in the spring, the fall navigation season would be cut by a month for lack of water.

The Corps said it was taking this measure to pre-

serve “environmental resources,” including “Historic Properties; Riparian Habitat; Cold Reservoir Fish Reproduction; Cold River Fish Habitat; Warm River Fish Habitat; Wetland Habitat; Interior Least Tern and Piping Plover [bird] Habitat; and Physical Habitat for Native River Fish.”

Missouri’s junior senator and former governor, Christopher Bond, issued a stinging rebuke to the Corps the next day:

“[T]he Corps’ alternative is based on fantasy, not on the laws governing the river. The Corps has no statutory right to put navigation and recreation on the same level of consideration. The statute governing river priorities, ‘The Flood Control Act of 1944,’ places a higher priority on flood control and navigation than on fishing, bathing or boating....

“Second, the nation has invested billions of dollars in engineering and construction to gain control of the Missouri River and alter its natural flow. The Corps built dams and constructed levees to protect people from flooding, facilitate river navigation and generate electric power. The Corps now wants to use these billion-dollar structures to simulate the river’s natural flow that we were originally trying to change....

“Third, the Corps wants to cut a month off the river navigation season, which will devastate transportation on the Missouri River. The Corps’ alternative will put barge operators out of business and ruin river transportation. The economic damage in Missouri will be lost jobs, increased transportation costs and higher prices for consumers when they buy food and other products.”

Let’s Build

Let us put Gaia back in her cave. Let us invite the environmentalists and their Congressional, corporate, media, and journalist supporters to become “nature-friendly” in the nearest “wetland” for the next decade or so. It’s time to build.

Let us complete the Pick-Sloan Plan:

- 1,500 miles of levees from Sioux City Iowa to St. Louis, Missouri. These levees 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.

The cost: an estimated \$3.35 billion—half the total Federal outlay for flood relief in 1993.

Jobs created: an estimated 8,380 for five years.

- The non-levee flood control dams, reservoirs, and channelization on Missouri rivers. This includes, 18 dams, 8 power plants, 235 miles of channeling, and 175 miles of levees on the Grand, Gasconade, Osage, Fishing, Platte, Chariton, and Meramec Rivers.

The cost: including the Meramec River projects, \$2.81 billion, less than half the Federal 1993 flood relief costs.

Jobs created: 7,220 jobs lasting five years.

- Moving upstream, let us complete Pick Sloan—especially the 4.5 million acres of irrigation to expand food production in a hungry world.

- Expand the Missouri River navigation channel another 850 miles from Sioux City to Williston, North Dakota, at the new 12-foot depth, as proposed by Colonel Pick.

- With Pick-Sloan underway, let's get the Young Plan moving. That will cover the high plains with vegetation and trees, and, as William Sloan envisioned, lay the basis for new cities.

NAWAPA

A nation that has regained the “Let’s get it done!” American Spirit will look beyond the Missouri Basin to the greatest “Great Project” of all: the North American Water and Power Alliance (NAWAPA).¹ On the drawing boards since the 1960s, NAWAPA would create a whole new river, the size of the Missouri, flowing down the spine of the Rocky Mountains from Alaska and Canada. With tunnels under the Continental Divide, this new river can feed the Missouri and Colorado systems, and deliver water to California, the Southwest, and even northern Mexico. Thousands of jobs, over several decades, would be created to implement it.

It’s time to organize the American population to get these projects built. The night of depression is deepening; the financial storm is about to break. The Missouri Basin Project, and hundreds of other improvements throughout the land will be the way we build ourselves back to prosperity.

1. For more on NAWAPA, see <http://larouchepac.com/infrastructure>