BIRPhysical Economy

To Go Ahead, Look Back to When New Jersey 'Worked'

by Marcia Merry Baker

EIR Economics Editor Marcia Merry Baker gave this power-point address to New Jersey Gubernatorial candidate Diane Sare's campaign kickoff event on Jan. 5, 2013. Videos of the event are posted on <u>YouTube</u>.

I'm very glad to be here in the storm zone—in more ways than one, to think of the immediate task—because we want to be building right away—here, and with the other tasks in our nation and the world. Because Hurricane Sandy and other problems we have in the physical geography of our nation and the world, come on top of 50, 60, 70 years of casino economics.

I'd like to start by asking you to look back to a time and place—I'm going to take the benchmark of the Second World War, in other words, the middle of the 20th Century—and I want us to look to the future, as patriots and committed people were doing at the time. Because it's not as though evil was vanquished then we're talking about the 1940s—but there was less money-madness, there was less Greenie madness around.

And so, what I'd like to do, is take inventory of the tasks of how people then, who were committed and decent, thought of the future, 50 to 60 years ahead.

Now, in order to do that, we should keep in mind that the resource base is man-made. We have some gifts, we have benefits. So, we'll see the map of our continent now (**Figure 1**), and what I'd like to do, is look at what the challenges were at the time. You can



In her presentation to the Sare campaign event, Marcia Merry Baker shows that the devastation wrought by Superstorm Sandy need not have happened, as could be seen in the counter-examples of Rotterdam, St. Petersburg, and even New Orleans, among others, where protective measures were adopted. Here, she holds up a report from the Atomic Energy Commission.

see this well enough, this is not a complicated thing, but I want to take the kind of resource-base in terms of land, water, and, we presume, power and navigation go along with it. Think of the time when, after the Second World War, people were prepared to roll up their sleeves. We had been conducting tremendous industrial and agriculture production in this nation and continent to conduct the war.

FIGURE 1 North America



So there were a lot of things that needed to be done. What were they? Let's take four areas.

Water: Planning for the Future

One thing, on this continent, I know you must be familiar with, first-hand or otherwise: This area, the U.S. Southwest, is extremely dry, and for centuries has been called the Great American Desert, down into Mexico, and basically, this entire multi-state area. The runoff that exists there—because there's very little rain yearly on average—there was only the Colorado runoff, the rivers in California, and down here, the Rio Grande/ Rio Bravo River. And Franklin Roosevelt and people before him and continuing, had organized the Colorado River to use every drop. So, it was known by those out here, and anyone thinking, that we'd better think ahead: The Colorado River isn't that big in its flow; we're going to have to plan for the future. And that's when, in the '50s, the chief of hydrology of the State of California imagined: Let's go to where the water is plentiful, that flows into the Arctic, or that flows out through Alaska and the Yukon, and let's bring it southward, collected up here, and then bring it through British Columbia, let's bring it into Idaho, and Montana, and southward.

As you know, later, this became the North American Water and Power Alliance [NAWAPA],¹ but it was considered a major job for the continent, number one.

Number two, we had different problems in the '40s and '50s. We already were familiar with the great drainage system that is composed of many of these rivers: the Missouri, the Mississippi, the great Ohio River that rises in the tributaries in western Pennsylvania, West Virginia, and Maryland and goes this way they had already been worked on. The Ohio River had locks and dams— Number 1 is at Pittsburgh. But the problem with this area, is that you either have too much water flowing, as with the big floods in 2011; or you have too little water flowing, as we do now in 2012,

down the Mississippi. So, there was a whole agenda of more work to be done on what's called the Upper Mississippi—more impoundments, more dams, more ability to regulate the flow so you had a regular flow—not too much or too little. That's number two.

And by the way, work had already been done to put underground piping through much of Illinois, much of Iowa, to handle the drainage when you had a lot of water, but there was much more to be done.

Now, three and four, are simply the following: By the mid-20th Century, you had a water-supply problem, not just in the desert, but saltwater intrusion on coast-

^{1.} For more on the NAWAPA proposal, see http://larouchepac.com/ infrastructure.

lines. After all, Florida is a peninsula; after all, Long Island is an island; and you had places elsewhere on the East Coast, people had been living there for hundreds of years: St. Augustine, Fla.—people have been there for 500 years! And fortunately, many wells were dug the saltwater intrusion from the sea into Florida wells, into Long Island, into elsewhere, was a third area of problem.

And finally, you have where we are today, a seacoast state: The many wonderful seacoast settlements that go back hundreds of years, were there, because of the benefits of being on the shore, frequently the benefit of being at the mouth of a river—the Hudson or the Passaic. The problem is, it was great when the sea was calm, but otherwise, you get what we experi-

enced here. And periodically, over the decades, there have been these kinds of storms.

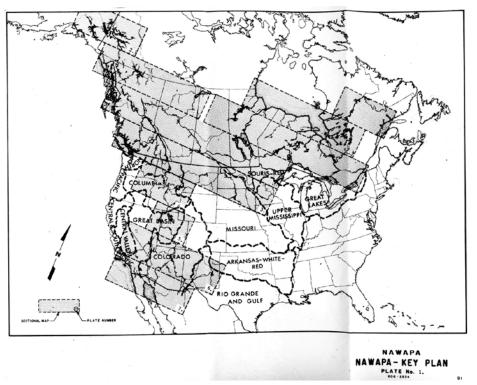
The Birth of NAWAPA

So, to summarize, just taking these four areas: What was on the agenda in the 1950s of the percent of people, whether they were trained or not, who were looking ahead to the future, 60 years from then, was, in the 1960s, what's called the North American Water and Power Alliance, and I think you're familiar with that here. If not, we certainly can do something about that, because the LaRouche Political Action Committee, Diane Sare, and others, have put it back on the agenda of this nation and the world, and in Washington.

The idea to build this was then activated, and I brought an artifact: I've kept an original copy from the 1960s, when the Select Committee in Congress published all the maps—we're talking about 1964—all the maps, all of the references. And I can tell you, when we go to visit some of the Congressional offices, they want to see, "Where's my state?"

So this was a priority at that time, and it was getting tremendous media coverage and tremendous interest.

Secondly, as I mentioned, the lack of water. The



A map of the NAWAPA plan from the original 1966 report of the House Committee on Public Works, Special Subcommittee on Western Water Development.

Army Corps of Engineers, after finishing the war effort, turned to civil works and developed comprehensive plans to build more water-management control systems in the Upper Missouri and the Dakotas. In fact, in 1963, President Kennedy dedicated one of these dams in South Dakota, the Oahe Dam. So this was underway to control the swings between the flood and the drought in what water you had in our great runoff system in our continent.

And number three, the question of water supply: Florida, the coastal areas, Hampton Roads, Va., not to mention Long Island. The Atomic Energy Commission had been set up, and it had the task of not just developing tremendous, safe nuclear power systems, as in New England and elsewhere, but in applying [nuclear power] in all kinds of ways: medical ways, explosives for a better Panama Canal, and in particular, for desalination. Mexico and the United States were collaborating for nuclear power desalination on the Pacific Coast, the Gulf of Mexico, and the East Coast.

I brought another book, from 1964: It's *Major Activities of the Atomic Energy Programs*. If you look in the index under "desalination," they summarize all the projects! Because this was just the state of affairs at the time. You can also see the nuclear power explosives; and they say, "Here's where our pilot projects are, this is what we're doing."

Finally, you had the seacoast questions, in particular New Orleans, a great part of which is below sea level. So it doesn't take a lot of motivation to work on that, but during the war it wasn't developed, but it was on the agenda after the war.

Let's talk about the urgency of the seacoasts: In 1960, Hurricane Donna hit every state up and down the East Coast. Some people here may remember that. There were 365 dead here, terrible loss of life. But remember, in 1938 was the Great New England Hurricane, and that left 800 dead, mostly in Rhode Island. And there were whole islands—I think Napatee Island had 40 houses—the whole place just, in effect, disappeared. Areas of New Jersey just disappeared.

So, in response, certain kinds of development plans were worked out. Let's look at three of them in New England, between 1938 and 1960, in three coastal states.

In Providence, R.I., there were barriers built to protect the inland areas against the storm surge. This is the Fox Point Barrier in the bay at Providence (**Figure 2**); it was started in 1960 and finished in '66. It's about 3,000 feet long and has worked fine, many times since.

Next, in New Bedford, Mass., this is a longer barrier (**Figure 3**). It has a huge stone structure, still to this day, the largest stone structure on the East Coast, built by the Army Corps of Engineers. There's a gate in between there, which can close in 12 minutes. That Providence one can close in a half-hour.

The next one is an aerial shot (**Figure 4**)—isn't that a nice barrier? That's the hurricane barrier at Stamford, Conn., also built in the 1960s.

So you see, there was response. I showed you the artifacts of the intention 60 years ago, and some of the physical construction.

The International Picture

Let's look at the situation internationally. There's a reason why the Netherlands stands out—it means "low lands." The reason I want to go there, is its relation to the North Sea. It's nothing like the Atlantic Ocean, but certain things come together, certain annual tides, high winds, and you can get a tremendous sea surge; and this includes Scotland, eastern England, Norway, Belgium, Holland, and this happens periodically. It even goes all the way east toward Russia, what used to be Leningrad (St. Petersburg).

FIGURE 2 Fox Point Barrier and Gates, Providence, R.I.



Source: Malcolm Bowman

FIGURE 3

New Bedford, Mass. Hurricane Protection Barrier



Source: U.S. Army Corps of Engineers

FIGURE 4 **Hurricane Barrier, Stamford, Conn.**



Source: U.S. Army Corps of Engineers

I want to show you what happened in the storm that hit in 1953, which was so bad, in Holland it's called "The Great Storm," and it's still commemorated on Feb. 1, because Holland lost 1,850; there were 300 or 400 deaths, maybe more, in east England. This thing just inundated the place. This map (**Figure 5**), there you see the North Sea, and this is basically the delta, these complicated inlet areas; over here the Rhine River, and related runoff; the Maas, and others, going into the North Sea.

Over the centuries, the Dutch have been famous for reclaiming land. You can see it in Rembrandt etchings, beautiful landscapes of a high berm, surrounding a dry lake called a polder. And so there was a patchwork of protection; but when the 1953 Great Storm hit, it was all washed away. So what was decided was to form the delta works, shown in this map here, "Deltawerken." (You can look at deltawerken.com.) And an entire coherent system was decided. The principle involved was, instead of trying to protect inland areas with little dry lakes, with berms and levees, and stick your finger in the dike, instead, the decision was made to go out to the perimeter, and see what kind of protective barriers you need to build. Because if you build at the perimeter, then you don't have to have all these inner ones, Delta Works Plan, North Sea, Netherlands

FIGURE 5



because they'll be flooded anyway.

Because 1958 and 1997, the whole thing was built, and many of the internal lower dikes, levees, and systems could be removed, and you would have more land for tulips or industry, or whatever you wanted to do.

On closer study, you can see the names of some of the things that could be removed, because the perimeter protection was built out here towards the sea, allowing you to remove some internal levees (**Figure 6**). The next one, you see Rotterdam, one of the world's leading ports (**Figure 7**). Here is a beautiful set of radial pivoting gates, which are open and the barge is going right between FIGURE 6 Perimeter Protection, Netherlands

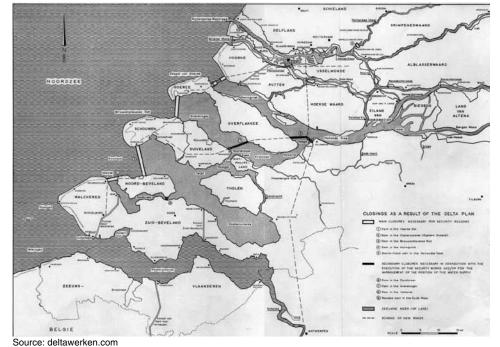


FIGURE 7 Maeslant Barrier Gates Open, Near Rotterdam, Netherlands



Source: deltawerken.com

them. They have many other kinds of gates, gates that drop, rocker gates—you can have different kinds.

This is a tremendously successful system. We're going to gather some of the relevant specifics, how long this barrier is and so forth, and make it available soon to Diane Sare's campaign, so it can be posted everywhere and circulated. This has to be on the agenda.

Before we leave the North Sea, it's worthwhile to go east, towards Russia, and you'll see St. Petersburg is also low—it's called the Venice of the North, because it's built on the marshes of the Neva River, and it was really built up in the 1700s. And it gets slammed.

Here is this barrier under construction in 1978 (**Figure 8**), and finished around 2009-2010. They built miles and miles—it could be a 10-mile-long barrier, with these kinds of gates. These are rocker gates, which allow the shipping into St. Petersburg and out into the Gulf of Finland. It too took 35 or more years, and various Western construction companies helped finish it.

The next one shows, even in the Thames, to protect London from these ferocious surges, they put in this system, which was finished in the late 1980s (**Figure 9**). It goes all across the Thames, downriver of London. Here is a diagram of how it works: These are rocker arms, and in between these rocker arms are kind of half-barrels, and you can put them up and keep the sea out, and the rest of the time, they're flat, under the water.

The next one is a photo of the real thing (Figure

FIGURE 8 St. Petersburg, Russia Flood Protection Barrier, Gates Open



Source: www.halcrow.com

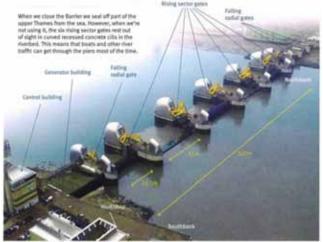
10). The gates and this barrage can blockade the entire Thames River. Another thing like this is being completed in Venice, in the Adriatic, which is not like the Atlantic or the North Sea, but they get a combination of rainfall and heightened water level, so they have a kind of gate flap. It's underwater, lying flat, and then it's pushed up with a strut, and that will work, there, where it's not deep sea, like the Atlantic Ocean up here.

Many places in the world *do not* have these: You read what happens in Indonesia, what happens in Ban-gladesh, but this shows the reality of what's built and what works.

Now, let's look at a place that has a different set of problems than Hoboken or Staten Island: Tokyo, with 12.5 million people. This is an underground holding tank (**Figure 11**), because, after all, the archipelago of Japan has mountains underwater, and if you get rainfall in a deluge coming down on top of you, at the same time you get a tsunami, or just a surge, where do you put the water?

So, they have built the biggest set of underground holding tanks in the world, what they popularly call the "Underground Temple." It's gigantic, on the perimeter of Tokyo, the "Metropolitan Area Outer Underground Discharge Channel." But basically, they have a big collection for the sea coming in, the deluge coming off the slopes toward the city, and it's all collected in these gigantic, gigantic holding tanks; and then they have gigantic pumps to pump it out when it's safe to do so, and they know where they want to pump it.

FIGURE 9 Thames River Barrier, London (diagram)



Source: UK Environment Agency

FIGURE 10 Thames River Barrier, London



Source: Creative Commons

This is normal engineering reality that was built over the last 40 or 50 years, despite the antagonistic environment to this. That took about 14 years to build, and they have a lifespan, but it's intended.

North America: Great Projects Thwarted

So, what's happened in North America? We probably wouldn't have to be here, if everything had been built. We'd be saying good-bye to friends going to the Moon!

I want to say something about the time period in which this tremendous shift was foisted on our country, when we were susceptible to it, and the projects already defined in the 1940s and '50s that were completely thwarted. Because, remember, when President Kennedy was killed in 1963, he was for looking ahead 50 years and building necessary projects, and going to the Moon. You had echelons of scientists and engineers at the Atomic Energy Commission, and elsewhere, but they were thwarted.

And what happened is, you had the Vietnam War, and around that late '60s-early '70s period, you had the ferocious intervention of Earth Day: Don't mess with Mother Nature, *do not* go into the environment and build defenses, and increase your water supply, moving water to where you need it, prevent it from going where you don't need it, as with sea surges.

You had the National Environmental Protect Act passed. When it comes to the North American Water and Power Alliance, you had a real stinker from Washington State named Henry Jackson, popularly, Sen.

"Scoop" Jackson, who was in the Senate a long time, and he was directly run like a puppet out of London, to pass a law in the late '60s; they organized in the Senate against the North American Water and Power Alliance by saying, "There shall be no moving of water from one basin to another basin." You can't move Missouri River Basin water down to Texas if you needed to. You certainly cannot move water from the Mackenzie or Alaska basins up north, down to the Columbia or Snake River basins. It was said, there shall be no more regional studies, nothing should go on. This is bad, and I just want to assert that.

But I want to point out one thing. I remember that '60s period very well, what was promoted. By the way, Al Gore was still a young man, he was only born in 1948; so even before

we had Al Gore... You know, Al Gore says, if you breathe and emit carbon dioxide, you're polluting the Earth. Before that, they said the biggest problem with water was pollution, not insufficiency, not floods, not sea surges. Books poured forth in the early '60s from the Conservation Foundation, which predates the World Wildlife Fund. It goes back to the old Belgian King Leopold/Nazi conservation foundations of Europe. And it said, point-source pollution is terrible (like factories in New Jersey are point-source polluters). But non-pointsource polluters are bad, like dairy cows in New York State, or hogs in Iowa, all of this is pollution!

Humanity's activities pollute, so that was part of the

FIGURE 11 Metropolitan Area Outer Underground Discharge Channel ('Underground Temple'), Tokyo



Source: Creative Commons

origin of the Greenies. The Greenies aren't our discussion here. But what happened is, you didn't have the North American Water and Power Alliance; you didn't have the rehabilitation or building of dams in the Missouri and Ohio and Mississippi systems. And some of those, like Lock and Dam #1 on the Ohio—it's about 80-90 years old! It is tissue paper! It is ready to fall in! In fact, here is what happened last year in Illinois [shows video]: This is not a storm, not a surge, it's a lock and dam, the Lockport Wall. That's a lock wall near the lock in Illinois, look at it! 280 feet collapsing into the water. This happened southwest of Chicago, in an area where the Army Corps of Engineers for 20 years was begging to have money to effect repairs!

And finally, on the seacoast, there is one exception, which is very important, about New Orleans after Katrina. But other than that, other than those three major barriers we looked at in New England, north of here, New Orleans was not built up over this time period; other places that needed that kind of protection were not built up.

Money Bubbles

Now, what did happen? Money bubbles: 1971, the same time period in which Earth Day and the National Environmental Protection Act were foisted on the country, the dollar was taken off any regular relationship with other currencies. Fixed currency rates were eliminated, money values had to float, and the markets will determine what's a worthy investment in physical infrastructure or not.

And one ironic aspect about the last 40 years, is that the land and water use patterns became so subservient to this money-thinking, such as real estate values, that the seashore, waterfront property, seacoast property, became the hot thing for the mortgages, both commercial and residential. And in fact, the insurance went hand-in-hand with the real estate speculation: If you wanted to retire and build a cottage on the seashore that you knew was going to get slammed, some insurance company might not sell you house insurance. But along came AIG and Hartford and Travellers, and organized the Federal government to subsidize them giving you an insurance policy, so they weren't going to lose anything. So what if your house got swept away, and

you were left penniless?

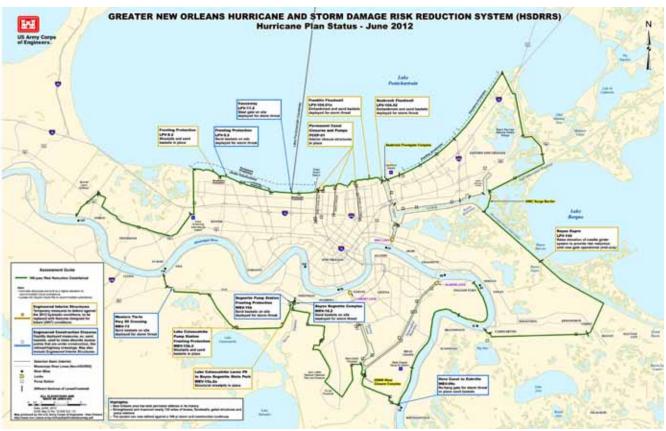
This was done in a major way all around the country. Last year, in South Dakota, along the Missouri River, was a ritzy, gated golf community. Well, the Missouri came down and just swept it down to St. Louis somewhere, and that was the end of that. And the government had to pay the insurers to insure those ritzy houses, when zoning shouldn't have allowed them to be built in the first place. We should have ball parks, and gardens, and botanical parks, and then people can live where it's safe.

So, that's why the first tranche of any so-called relief for Hurricane Sandy, \$9 billion, was approved in Washington yesterday morning, to help pay for the national flood insurance subsidy. Now, everyone who needs insurance, fine, I want them to get it, but the system is terrible.

The Post-Katrina Counter-Example

In that context, let's consider one thing that goes against this entire trend: In 2005, reality struck, with Hurricane Katrina. New Orleans was slammed. There was a singular success there, that we need to know about, because it certainly isn't being publicized; and that is, within 13 days—not 68 days or whatever it's been now since Hurricane Sandy—there was a reflex reaction towards the American System, of Republicans,

FIGURE 12 Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS), June 2012



Source: U.S. Army Corps of Engineers

Democrats, whatever, in Washington, and they passed authorization for relief, including by the Army Corps of Engineers, to go and look at Holland, go look at St. Petersburg, and build something in New Orleans that works, since our city went under water.

And in fact, partly that was the moment of shame for George W. Bush and FEMA head "Brownie," so in great national chagrin, this was passed. In 2006-2007, rush studies were done, in which the entire system was decided on, as it reads at the top, "Greater New Orleans Hurricane and Storm Damage Risk Reduction System" (**Figure 12**). This was put out this year, but *most of this is done!* This is finished!

Let me point out a couple of things about it: New Orleans is an east-west kind of city, so it's called the Crescent City. The Mississippi is coming down here, the Gulf of Mexico is both in the east and the south; and a great deal of the city is below sea level. In Holland, with about 16-17 million people, 9 million of them live below sea level, so there was a great unity of thought that we should have protection there. It's hard to be on the other side.

And in New Orleans, there was a unity of thought that there was a way to protect it; and what was thought about was, instead of having the patchwork that they had had, of this neighborhood levee, that neighborhood levee, all of which got flooded—besides the fact they weren't strong enough, they hadn't been rehabbed what they decided is, "We'll strengthen the perimeter." It isn't like one continuous wall, but there are *very high*, strengthened levees in critical places. Over here is Lake Borgne and here's the Gulf of Mexico. Usually the winds come in here to Lake Borgne, and up here is Lake Ponchartrain.

I want to show you a funnel (far right/east side of **Figure 13**): Imagine this is the Y of a funnel. Right here is where the water came rushing in, and *totally sub-merged* the Ninth Ward and all that. This is a funnel. So, do you see this little piece? This is a barrier, called the Lake Borgne Surge Barrier—do you see that little

FIGURE 13 Lake Borgne Inner Harbor Navigation Canal Surge Barrier (IHNC)



Source: U.S. Army Corps of Engineers

north-south-running piece? That has been built. That was finished on June 11. That was tremendous, because you're building in sediment of Mississippi mud that goes back centuries! You're having to solve problems of how you put pylons down in this silt, and what's

going to happen? How do you get concrete to dry underwater? How do you control it all, how do you do it fast?

So here's two things: They decided to put that in, and that prevents all of this huge funnel, funnelling everything out here, from the Gulf of Mexico, right into the city. Then, there were other parts built up here, and over here in the west. Just briefly—you have a different problem where the Mississippi comes down, and if you have a lot of water, you need pumps, to put the water where it won't hurt anyone—the biggest pump installation in the entire world, not in Holland, not in Asia, is now built, just in the last year.

So now, let's look a little more at this prevention of the funnel effect, in this picture (**Figure 14**). Here it is! It was finished last year. It's only two miles long, but it had tremendous challenges. There are two or three sets of locks, one of which you can see in use there. This shows one of the gates, where you see those columns, 1,200 of those. Then the top was put on, they were fairly modular. You can see, it's a drop-down lift gate, it goes up and down.

The next slide shows a different kind of gate at

FIGURE 14 Lake Borgne Surge Barrier



Source: U.S. Army Corps of Engineers

FIGURE 15 Seabrook Gates (under construction)



Source: U.S. Army Corps of Engineers

Seabrook Gates (**Figure 15**), still under construction, but pretty much finished now; this is a kind of radial gate; you see it can swing out, and also there's what might be a lift gate, so you can go through there; most of the time not in use.

Here's the pumping station, the biggest in the world (**Figure 16**). Here's the diagram of how it works (**Figure 17**). There's a barrier connected with it that has gates. The water comes in, then there's the turbo action to lift it, and it can shove it out in propeller fashion at incredible speed.

In August, Hurricane Isaac hit the Gulf of Mexico the mayor, head of the Army Corps of Engineers, everyone went out there, and had a big ceremony (completely

blacked out of the media), and it worked perfectly. New Orleans was kept perfectly safe. It did fine.

This was about \$15 billion, only twice the insurance top-off thing passed yesterday, and the entire system has been built. And it was





initiated under the Bush Administration after the shame of Katrina; and Congress passed this, it was signed. And then, in the beginning of the Obama Administration, the Army Corps of Engineers and New Orleans used the money in the Stimulus Act to finish it. That's how they found a way, and they did it. Of course, everything else around the country was pretty well stiffed. But it's a proof of principle.

Unleashing Ingenuity

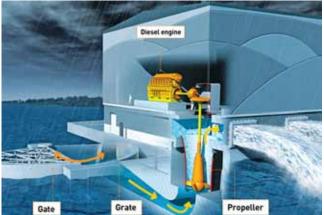
Now the same kind of scale of thinking is what we need here, and that's what we'll wind up with. Because we have to do the North American Water and Power Alliance, so we don't have the West dry up, and no food, *and* for recreating our nation. We need the defenses here in New York and New Jersey,

we need those inland waterway regulatory systems.

So we have an apparent conundrum. We don't have the means to produce all that steel, all that equipment, all of that aggregate and cement, to do the projects. But on the other hand, if we don't commit to doing them, we will never be able to reorganize the ability to do them!

And that's really a question of how do you resolve something—it's like a resolution of some apparent conflict in music, there is a way, it can be done. You unleash ingenuity.

FIGURE 17 Pumping Station (diagram)



Source: U.S. Army Corps of Engineers

FIGURE 18

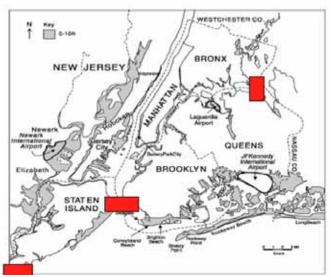
"SLOSH" ANALYSIS, 2009 New York City CRITICAL INFRASTRUCTURE IN THE 100-YEAR FLOODPLAIN	
14	- Subway Stations
18	 Rail Stations
31	 Bridges and Tunnels
105	 Miles of Major Roads
2	- Airports
25	- Ferry Landings
6	- Fire Stations
45	- Public Schools
1	- Hospital
10	- Nursing Homes
10	- Power Plants
1	- Sewage Treatment Plant

Adapted from: Storm Surge Barriers to Protect New York City, 2013, N.Y. Office of Emergency Management, 2009.

In 1995, they developed what they called "Slosh" to analyze what places in New York City, New Jersey, and elsewhere would be under water in the case of a century flood (**Figure 18**). And, for example, this is New York City and New Jersey (**Figure 19**). In 1995-1999, they knew 14 subway stations would go in a surge; they knew 18 rail stations, such as Hoboken; they knew what would happen to the tunnels and the bridges being potentially hit. The critical miles of roadways, two airports, ferry landings, six fire stations, public and private schools, more than one hospital, 10

nursing homes, 10 power plants, a sewage treatment plant. And the City of New York *knew* which public housing complexes were in the flood-plain and would have flooding. So we knew that, and this *wasn't* acted on; this was 1995-2009, and we knew what ought to be acted on—we saw what happened here on Oct. 29.

But in any case, in 2009, a seminar was held, and Diane Sare and the campaign has a new book that just came out a month ago, *Storm Surge Barriers To Protect New York City Against the Deluge*, and it includes New Jersey, and it's by the American Society of Civil Engineers. And it gives the proceedings of the papers presented to that seminar in March 2009, of people who came from St. FIGURE 19 Perimeter Defenses, New York City-New Jersey Seacoast



Source: V. Gornitz, NASA

Petersburg, Russia; Holland; and the United States, especially the State University of New York at Stony Brook, to discuss what we're going to do.

Now, they have three proposals on that perimeter principle, and we'll now look at the overview (**Figure 20**). One thing is obvious: you have the Verrazano Narrows where the bridge is—put a barrier there. Here, into New Jersey on Arthur Kill, between Staten Island and

Verrazano Narrows Barrier (artist's rendering)



Source: Arcadis

FIGURE 20

FIGURE 21 Verrazano Narrows Barrier Swing Gates (artist's rendering)

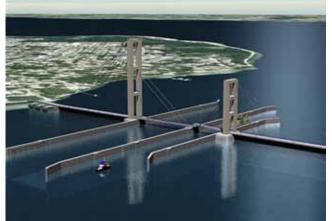


ource: Arcadis

New Jersey, where you have the other bridge beside Goethals-put a barrier there. Up here, you have a problem that's not a river, but the Long Island Sound can funnel in, so put a barrier on the East River, like this inner side of Throgs Neck. And they all discussed the substratum of the dirt, what did the whole thing look like, what are the problems, and so on.

Now, let's look at their designs: This is an artist's rendering (Figure 21); these are the radial gates like in

FIGURE 22 Arthur Kill Barrier (artist's rendering)



Source: CDM Smith, Inc., Lawrence Murphy

Holland and St. Petersburg; here's the Verrazano Narrows Bridge, and right next to it, you'd have a barrier and you'd be able to protect the harbor from the sea surge. Here's another view of it, closer up. And you could shut those, the way you've seen them shut near Rotterdam, when you have to do it. These are the engineers; Arcadis worked on Rotterdam and also New Orleans.

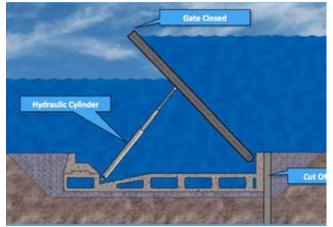
Next, this is for Arthur Kill (Figure 22), between New Jersey and Staten Island. Some of these have tunnels involved, bridges involved-they have many designs for it.

And the third one, on the East River (Figure 23)—they proposed to use the kind of

thing here that they're doing for Venice. This is the barrier gate, when it's closed; this is coming in from Long Island Sound, and over here is to protect the city, and a cylinder comes up and keeps up that barrier, and otherwise, the gate lies flat on the bottom. That's the idea for the East River.

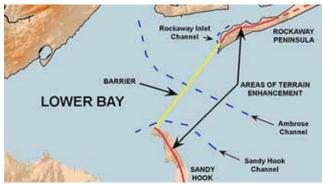
Finally, we have the grand idea from the company called Halcrow Ch2m Hill; they say, don't just do the

FIGURE 23 East River Barrier (diagram)



Source: Parsons Brinckerhoff

FIGURE 24 N.Y./N.J. Outer Harbor Gateway



Congress, H.R. 129, and that means the credits can be organized, and we can go ahead. And what's associated with it—there was a National Credit Bank discussed, I understand, in the late '70s, which the LaRouche Political Action Committee is going to talk more about and update, and some of the New Jersey Congressmen were involved. Congressman Charlie Rangel from New York City, was a young Congressman then, and he still says, have the CCC. He had a universal service bill in 2011. What's needed for site preparation, debris cleanup, and mobilization is implied in what's seen in these slides here.

Thank you.

Source: U.S. Geological Survey; Halcrow

Verrazano Narrows and Arthur Kill, go out farther, build five miles at least, between the Rockaways and Sandy Hook here (**Figure 24**). And there's a way to do it: You can build a barrier, you can still protect your shipping lane in the Ambrose Channel; you can have your Sandy Hook Channel, and that company is ready to talk turkey. They met in 2009, and that would be an outer barrier in this way.

So the same principle here, is, protect the perimeter. Now, that doesn't protect the barrier islands that go from New Jersey all the way down to Georgia. That you can figure out, if you don't have a money/ Greenie orientation; you can figure out how to use your funds for the benefit and safety of every state concerned, instead of for the insurance-financial-City of London rip-off.

So that's what you want to do.

Let's go to the next slide. We're going back to the 1,200 pylons being put down, under construction, into Lake Borgne, New Orleans, to protect from that funnel effect, and done for two years (**Figure 25**). Unbelievable! There they are again. What this implies, is *we can* unleash the ingenuity and solve the problems, as long as we have the intent, and it's associated with literally going to the Moon, as well as improving the conditions on the planet.

We already have the first plank, Glass-Steagall has already been introduced to

FIGURE 25 New Orleans Lake Borgne Pylons (under construction)



Source: U.S. Army Corps of Engineers