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## Interview: Michael Sobol

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# Water Infrastructure: \$1 Trillion Need in U.S.

*Michael Sobol is a Board Member of the Metropolitan Sewer District of Asheville/Buncombe County, North Carolina, and a national activist for drinking water and wastewater infrastructure. He was interviewed on Dec. 6, 2002 by Marcia Merry Baker.*

**EIR:** Treating drinking water and wastewater are obviously critical parts of our national infrastructure. Last August, the General Accounting Office estimated that we should be spending \$1 trillion over the next 20 years, for refurbishing and upgrading our water and waste treatment systems. But in recent decades, and now especially, major projects have been deferred. The funding issue is presented as insoluble.

You've had over seven years service on the Metropolitan Sewer Board in North Carolina, and you have a national overview of the infrastructure crisis.

**Sobol:** Let me give you a broad statement, from the conferences I've been to, and the engineers I've talked to across the nation. That estimate that was given by the GAO was pretty close. Our folks have pretty much come up with a similar estimate—anywhere between \$750 billion to \$1 trillion. And that addresses not only wastewater, but also drinking water. That's to repair the infrastructure.

So many of the lines that were built—they were made out of terra cotta pipes, or they were made out of Orangeburg pipes—they've been leaking, and they've simply been deteriorating because of the chemicals that have gotten into the lines from different industries, so the infrastructure itself has been breaking down. And a lot of the money that was to be used for that has gone for the expansion of new lines—to handle new developments.

Just to get it more locally, and to give you an idea of how much money is being spent: Four years ago, we saw a study that the County of Mecklenberg, which is where Charlotte, North Carolina is, had more bonded debt than even the state of North Carolina did!

Now, not all this bonded debt was associated with wastewater and sewer lines, and water lines. But a good amount of it was. It just shows you, to put in new lines, for new construction—because that's a very rapidly growing area down there—the amount of money that had to be borrowed to create this infrastructure is enormous. And yet, at the same time, very little of it has gone toward replacement of the old, existing lines.

Now, to get a little closer to home: In Asheville, North Carolina—and we are in Buncombe County, with approximately 200,000-225,000 people, and Asheville is approximately 70,000—the wastewater system, the Metropolitan Sewer District, of which I am on the Board, covers most of the county and all of the city. We had a comprehensive plan that went ahead; we hired an engineering firm to come in, and it took them about a year and a half to give us a master plan of what it would take to go ahead and bring our system—all the lines that we have—up to grade, so that we would not have what we call SSOs, sanitation sewer overflows (basically, manholes overflowing). And we are looking at in the neighborhood of \$250-300 million. So, Asheville being just one of many cities across the state, you can see that that figure is enormous.

**EIR:** You've had a chance to review the idea of what Lyndon LaRouche is calling a "Super TVA" approach for national infrastructure, for Federal funding, as opposed to searching for monies from localities and states in terms of bonded debt, under the current emergency circumstances. What is your thinking?

**Sobol:** Even before I even read anything from Lyndon LaRouche, I made several statements to our Board several years ago, and basically told them, that the rate at which we are moving, that is, the amount of money that we are borrowing—and we can still borrow many more millions because our district has a good credit line—but even if we continue to borrow the money, and the bondholders will go ahead and sell bonds for us, the ratepayers will not withstand the rates that are going to have to be raised to pay back these bonds. So even if we go ahead, and we do the best we can—and at the present time, we are spending millions each year to address this—but I said four years ago, there is a point where this Board member is just going to say, "Enough." Unless we get some relief from the Federal government, we can't go ahead and tackle this problem ourselves, and put this on the backs of the ratepayers.

**EIR:** So you were warning of this in 1998. What about the engineers and officials from other municipalities? Say, small, old towns in the Rust Belt, or the big cities of the East with old systems, like Philadelphia?

**Sobol:** Not only are they in extreme situations, but because of the fact that it is an extreme situation, it is one that—their boards, not being negligent, but simply just putting it off, didn't address a lot of issues that we did here in Buncombe County. We started this rehab program back in the early '90s. So we were kind of ahead of the curve. Not to place too many slaps on our backs here, but we have been addressing this, and we have had the state of North Carolina come to us, and review our master plan as kind of a template for the rest of the state. Because we are that far ahead of what's going on—not only in the state of North Carolina, but in the Southeast.



*Filtering media of a 15-year-old sewage treatment plant in Virginia. Vast amounts of U.S. water treatment and runoff infrastructure is four to ten times that age, and breaking down; our national water-treatment “debt” is near \$1 trillion in replacement costs.*

And yet, with us being ahead like that, *we still are facing the same problem: We don’t have enough money to do it.*

**EIR:** Your situation has some interesting particulars.

**Sobol:** We have here the largest home in America, the Vanderbilt home. And of course, then, when the Vanderbilts came down here, obviously, there were lots of other people—not quite in his league—that came with him. So there was a tremendous boom in the mountains of North Carolina, around Asheville, in the late ’teens and, of course, in the Roaring Twenties. We—meaning Buncombe County and the City of Asheville—put in lots and lots of miles of sewer lines to try to accommodate this anticipated growth.

And of course, unfortunately, the Great Depression came. And then, the powers that be in Buncombe County, and the City of Asheville, chose not to default on those bonds, and continued to pay those bonds, until they were completely satisfied in the mid-fifties. Now, whereas that was an honorable thing for us to do, and it was the correct thing for us to do, the flip side of that was, is that no money went to infrastructure repair. None!

So whereas, as with your own car, or your house, if you don’t do minimum repairs and maintenance—like the old Fram Filter commercial: “Pay me now; or pay me later.” And now we’re having to pay later. And having to pay a higher price, than had we gone in and done the repairs as we needed. But we didn’t have the money, because that money had to go to retire the bond indebtedness.

**EIR:** So even though your situation in and around Asheville, is not from around 1810 or 1850 or something, as in the sys-

tems in the older Eastern larger cities, you still have a particular situation in which you didn’t carry out the refurbishing you should have in recent decades.

**Sobol:** Correct.

**EIR:** How about your rates now?

**Sobol:** They’re at the top of the state.

**EIR:** What do residents pay?

**Sobol:** Average resident in Buncombe County/Asheville—a regular small family—would pay, probably, for water and sewer combined, around \$40-45 a month. Not a family of 4 or 6; but only 2 or 3.

**EIR:** Whereas in others part of the country, they might be paying half that, say \$20?

**Sobol:** Yes.

**EIR:** So your Vanderbilt tale further spotlights the plight of even older, more extensive water systems. They are in deep trouble.

**Sobol:** Correct. We need help from the Federal government. That’s basically the bottom line; it’s short and it’s simple.

**EIR:** You have tried working on Washington.

**Sobol:** We’re hoping to get some kind of a trust fund going. But look at the Administration: They’re now dismantling the Super Fund trust. . . . So the tone of the day is, let’s get rid of some of these trust funds—and yet, here we’re trying to come and set up another one.

**EIR:** So you’re talking about what kind of funding mechanism to have?

**Sobol:** Yes. A 20-year format that could try to address this \$1 trillion. We’re trying to figure out how to do it. The idea is in its infancy. We went to Congress last year, to try to get some money. And this money we tried to get—there were bills both on the House side and on the Senate side—was just for loans. What they call revolving state funds, RSFs. But the problem there is: That’s what it is—it’s a loan! It’s not a grant. So it still means you have to pay it back, even though you have a reduced interest rate. But you still have to pay it back. What are you going to pay it back with?

Of course, they didn’t even pass *that*. . . . But even then, it was only \$10 or \$15 billion, so it was just a drop in the bucket.

**EIR:** So it’s the same as the transportation sector—passenger rail, and all the rest. No funds, and a crisis all the way around.

**Sobol:** Oh, yes. We know it’s a long, uphill battle. But it’s

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just one of the things we're committed to do, to try to push this forward. And try to come up with a good game plan on how to sell it, and try to sell it on a grassroots basis.

**EIR:** If we had the funding to rev up and start tomorrow, what's involved? What are the technologies?

**Sobol:** Technology has improved. But let me back up and say one thing. Keep in mind, that talking about wastewater excites no one. But everyone needs to keep in mind, that they're talking about what is one of the largest contributing factors to the good health of the world—especially in the United States of America—is our sewer systems. All the antibiotics, all the other good strides in medicine, take a second seat to what having treated wastewater has helped prevent, in the case of so many different diseases.

We need to continue that. We need to continue to be able to keep the wastewater in the pipes. The pipes we have in the ground are simply deteriorating. There is lots of new technology that is coming along. Fortunately, it's not moving at the rapid speed that computers are, because we do have to deal with the ground.

But one of the things, is lining of the pipes. The price of that has come down tremendously. This technology originated over in Europe. And basically, the reason that it did, is because they had to have some way to re-line, or to deal with broken-down sewers underneath these old buildings—cathedrals, you know. You're not going to tear down a 1,000-year-old cathedral to replace a sewer line. So they came up with this technology. And yes, it is coming down, on a linear-foot basis, each year.

Unfortunately, it still costs a lot of money. Still, the cheapest way to deal with sewer lines is what we call "dig and replace." You have to go in and dig them up, and simply replace it. However, if you are in an open field, that is true; but when you get downtown, and you have to deal with all the utilities, and you have to tear up streets, you have other buildings; that is where the advantage of the lining—what we call slip lining—comes into effect.

**EIR:** Could you describe it for the layman?

**Sobol:** It's like putting in a wet sock—it looks like a sock. You pull this wet sock through this sewer line. First of all, you have to go through there and clean it out, and make

sure all the rocks are out of the way, and all the debris. You pull this wet sock, that has chemicals on it, and then once it gets to one end—and you usually do about 400 feet at a time—then you plug up both ends. You pump steam into it, and it blows it out, like a balloon. And it pushes it up against the side of the existing line on the inside. Then the hardeners in there, set after a period of time—about 30 or 40 minutes, something like that. Then the whole inside of this pipe now has this plastic lining in it, that will last many, many more years than concrete pipes ever thought about.

**EIR:** So it extends the engineering life.

**Sobol:** Exactly. . . .

But not only that, we have ways of putting people to work.

**EIR:** If the Federal intervention started, the funding, and the contracts were going out, what would happen? Give us an idea of job creation.

**Sobol:** It's not as broad as it would be under programs that were set up back in the Depression . . . because it is a little more skill-specific. However, you still do need lots of laborers, in just, simply, all the aspects of digging a trench, putting in pipes, moving gravel. You've got truck-drivers. You've got welders. You've got machine-operators. And of course, even though that's not the majority of any economy, that is the beginning of the multiplier. And that is where the real effect would come from, is the multiplier effect of these dollars, as they are recycled back through the economy.

**EIR:** What about the engineering skills, especially in some of the larger cities, where they have complex systems, and have deferred upgrades? Would it set up a big demand for youth training?

**Sobol:** It certainly would. As a matter of fact, right now, the engineering profession is a lot like the teaching profession. Both of those fields are looking for good folks. But we are going to be needing more and more engineers for just the wastewater and drinking water side of the equation, than we have right now. All the engineers—mechanical engineers, electrical engineers—all phases of engineering would be greatly affected by what we need to complete these projects.