



MOTHER EARTH NEWS

Local Self-Reliance for Cities

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By the MOTHER EARTH NEWS Editors



We believe that city dwellers and country folks alike can profit from the Institute for Local Self-Reliance's admirable efforts.
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Local Self-Reliance for cities helps urban residents through the use of low-technology, decentralist tools and concepts.

Local Self-Reliance for Cities

The Institute for Local Self-Reliance works to help urban residents gain greater control over their lives through the use of low-technology, decentralist tools and concepts. Because we believe that city dwellers and country folks alike can profit from the institute's admirable efforts, we've made this "what's happening where" report by the ILSR staffers one of MOTHER's regular features. If you would like to know more, you can have a free catalog of ILSR's selection of books and pamphlets by sending the institute a self-addressed, stamped envelope . . . or become an associate member for a tax-deductible \$35 per year (\$50 for institutions) and receive both periodic reports on the institute's work and a 20% discount on all the group's publications. Write to ILSR, Dept. TMEN, Washington, D. C.

America's cities are aging ungracefully. For example, more than 50% of Boston's water supply is lost through leaky pipes . . . two out of every five bridges in urban centers across the nation are in need of major rehabilitation . . . and the poor quality of our cities' streets has become a major financial drain on metropolitan taxpayers.

Furthermore, a growing number of cities have exhausted their environmental capacity to handle the billions of pounds of waste they pour into the air, soil, and water. Sewage treatment systems are seriously overloaded (in fact, hundreds of homeowners in St. Paul find their basements flooded with raw sewage after every hard rainfall), and landfills are loaded to capacity. Why, one enterprising metropolis even tried to send its garbage by railroad to a rural town in Ohio and its sewage by barge to Haiti! Both of these projects were stopped, however, when the communities on the receiving end discovered the plan and howled in protest.

And while the costs of waste disposal and general urban maintenance increase, cities find their traditional sources of funds drying up. Cutbacks in aid from Washington, tax revolts at home, and an increasing reluctance, on the part of Wall Street, to lend money to urban communities all complicate the life of big- and small-city mayors alike.

Necessity *is* called the mother of invention, though, and the reduced level of outside support *has* forced metropolitan managers to look more to their own resources. Employing political authority, ingenuity, and modern science, some cities are beginning to become more independent.

A new ILSR book, *Self-Reliant Cities*, describes the direction many urban areas are taking. In some cases, water departments are producing power. La Habra, California, for instance, has installed a small electric turbine inside its water pipes that generates sufficient power to supply more than 100 homes. That investment will pay for itself in less than three years.

Other cities are harvesting fuel from their dumps, where decaying garbage generates millions of cubic feet of methane gas. New York is one of these . . . for a royalty, it allows its local gas utility to drill in a large city landfill and retrieve enough gas to heat tens of thousands of homes.

The rapidly rising prices of natural gas under deregulation have also served to make, *smaller* gas deposits economically attractive. A few municipalities—including Youngstown, Ohio—are leasing subsoil mineral rights to private companies and taking a portion of the profits. Other localities are going after the fuel themselves. One such neighborhood—the Harbor School District in Erie, Pennsylvania—drilled two successful wells between 1978 and 1980. The school district then modified its 34 vehicles—including 25 school buses—to run on compressed natural gas.

Some urban areas are converting their *sewage* systems into gas wells and fertilizer plants, as well. Fort Collins, Colorado, a growing city of 80,000 located on the Front Range of the Rockies, captures the methane generated by its sewage plant and uses it to fuel municipal emergency vehicles. Each vehicle has a dual-fuel capacity so that—at the flip of a switch—it can operate on gasoline *or* methane.

The new trend toward urban innovativeness is not restricted to the public sector, either. Private businesses are at least equal partners in many cases. Imaginative housing developers, for instance, have shown city officials new cost-effective ways to design their public works. Michael Corbett—developer of the 70-acre, 200-unit Village Homes subdivision in Davis, California—is one such pioneer. To reduce automobile traffic, Corbett made each street in the complex narrow—only half the conventional 45-foot width—and designed them all to end in cul-de-sacs. Moreover, the entire development employs a natural drainage method that allows the soil

to retain water after a storm and reduces the need for sewers and pumping stations. Blocks in surface drainage systems (which merely raise the water level instead of stopping the flow) are easily spotted and removed.

"Each winter, during our rainy Christmas season, I get a pleasant feeling of warmth and righteousness," Michael notes. "As storm drains back up and pumps fail in other parts of town, Village Homes—with its multitude of little streams and waterfalls—remains beautiful and untroubled."

The California complex isn't merely aesthetically and philosophically pleasing . . . it's economical as well. The natural drainage saves \$800 per building site, and the narrow streets reduce construction costs while keeping more land available for other purposes.

All in all, some of America's 2,000 cities are approaching the front lines of innovation. By relying on native ingenuity and modern science, more and more urban communities are fashioning resource-efficient systems that make them more self-reliant.

EDITOR'S NOTE: David Morris's book Self-Reliant Cities is available for \$8.95 plus \$1.50 shipping and handling from ILSR, Dept. TMEN, Washington, D. C.