
The Rising Impact of Environmental Mandates on Local Government

Michael J. Pompili

Many would argue that federal regulation has led to substantial improvement in environmental quality over the last 20 years. As the President's Council on Environmental Quality stated recently, "Perhaps the greatest progress has been made in controlling air and water pollution where concentrations of many pollutants are showing measurable decline. Emissions of total suspended particulates, sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, and lead from various sources have been reduced in the past decade as a result of pollution controls. Concentrations of suspended solids, oxygen-demanding wastes, and phosphorus are declining in many waterways. There has been a marked reduction in environmental levels of DDT and other persistent organochlorine pesticides; polychlorinated biphenyls (PCBs); vinyl chloride; benzene; asbestos; and mercury, lead, and other heavy metals. Concentrations of these and other chemicals in human and wildlife tissues have also declined. Although pollutant loads are being reduced, they are being dispersed over long distances and deposited hundreds of miles away

from the source."

Further evidence of this improvement is shown in Table 1 (next page), which displays the emission trends for the six primary air pollutants regulated by the Clean Air Act of 1970.

Environmental improvement has been realized because of the shift from a manufacturing-based economy to a service-based one, technological evolution, increased resource efficiencies, advances in environmental remediation, and, to some degree, by command-and-control regulatory policy. This approach to policy specifies the type of pollution control technology and limits the pollutants discharged. In the 1970s and early 1980s, the financial impact of command-and-control policy on state and local governments and their taxpayers was minimal because state and local governments received financial assistance for compliance in the form of financial incentives or federal grants. No similar federal assistance was provided to private sector employers for their requirements.

Command-and-control environmental policy can be effective where large point sources are the major polluters. However, the net benefits of this approach are questionable, especially at the margin. Uniform command-and-control systems do not allow local communities the flexibility to

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achieve the most environmental benefits for the expenditures of their limited tax dollars.

This article explains the significant changes that have occurred in the relations among the local, state, and federal levels of government in the area of environmental regulation and analyzes the possible ramifications for local governments if this relationship continues.

Changing the Federal/Local Government Relationship

Significant changes are occurring in the relations among federal, state, and local government bodies. To understand these changes, it is important to look at the evolving regulatory and funding patterns of the federal government as they affect state and local governments.

The first major area to examine is the changing role of federalism with regard to federal preemptions of state and local laws and regulations. During the past two decades, the frequency and scope of federal preemption legislation has increased substantially. As the U.S. Advisory Commission on Intergovernmental Relations has stated, "There has been a dramatic increase in federal statutory preemption of state and local

authority during the last twenty years. The research for this report uncovered the startling fact that more than half of the 439 federal preemption statutes passed by the Congress in the 200-year history of the United States were enacted during only the last two decades." Preemption has become a central feature of our federal system. Table 2 graphically illustrates this increase in preemption statutes.

As the federal government has used preemption statutes to increase its control over state and local governments, the use of additional legislative initiatives has also been increasing drastically, especially in the area of environmental policy. The Clean Air Act of 1970 and the Federal Water Pollution Control Act Amendments of 1972 (now known as the Clean Water Act) were the first major pieces of federal environmental legislation. During the 1970s the state of Ohio had to comply with a total of 11 mandates from the federal and state governments. In a six-year period beginning in 1980, nine more toxic management mandates were imposed on local governments. Over the last four years an additional 75 toxic management mandates have been imposed on local governments, with some of these mandates being scheduled for implementation as late as the year 2015.

This process continues at a torrid pace. This is best exemplified by a review of the

Table 1

Emissions Trends 1970-1991

Pollutant	Emissions ¹		Percent Change
	1970	1991	
Particulate Matter	18.5	7.4	-60.0
Sulfur Oxides	28.3	20.7	-26.9
Nitrogen Oxides	18.5	18.8	+ 1.6
Volatile Organic Compounds	25.0	16.9	-32.4
Carbon Monoxide	101.4	62.1	-38.8
Lead	203.8	5.0	-97.5

¹ In millions of metric tons, except lead, which is in thousands of metric tons.

Table 2

FEDERAL PREEMPTION STATUTES PER DECADE
1790-1991

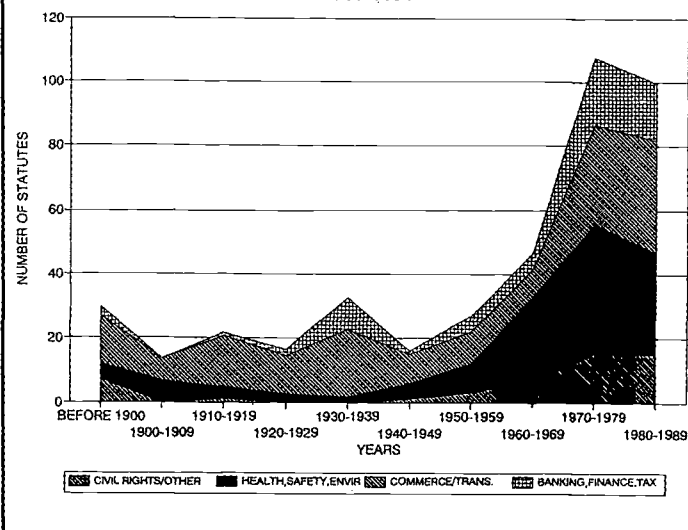


Table 3

Number of Regulatory Actions

Law	Oct. '90	Apr. '91	Oct. '91	Apr. '92	Nov. '92	Apr. '93	Oct. '93	Apr. '94	Total
FIFRA	20	19	23	23	27	29	26	28	195
TSCA	30	31	32	36	38	39	43	44	293
CWA	33	32	26	26	34	34	27	41	253
SDWA	18	22	20	15	14	14	14	16	133
RCRA	54	57	56	49	65	66	69	71	487
CERCLA	24	25	25	25	31	30	12	23	195
CAA	86	213	110	110	130	133	146	176	993
General	27	19	23	21	16	18	23	24	171
TOTALS	281	318	315	305	355	363	360	423	2,720

semi-annual regulatory agenda that is published in the *Federal Register* every April and October. Between October 1990 and April 1994, 2,720 separate regulatory actions were performed. The breakdown is shown in Table 3.

The cumulative impact of these mandates with other nonenvironmental mandates makes it virtually impossible for any community, large or small, to remain in compliance without neglecting other essential local governmental services.

As the number of federal mandates was

increasing, significant changes in federal funding were also occurring. In the early 1970s the federal government imposed environmental mandates on local communities and businesses, but it also allocated significant financial resources to local communities to assist them in achieving compliance. For example, grants were made to local communities to help with water and sewer projects. In the mid-1980s, with the ever-increasing pressures on the federal government to balance its budget, grant programs for state and local environmental efforts were reduced or eliminated.

Federal funding for sewer and water infrastructure peaked between 1977 and 1980, and has generally declined since. Furthermore, federal funding has been shifting from outright grants to loan programs that are now administered through the state. The local government share of all of these loans has increased greatly.

The Environmental Protection Agency (EPA) dramatically emphasized this point when it documented that future compliance expenditures would be sub-

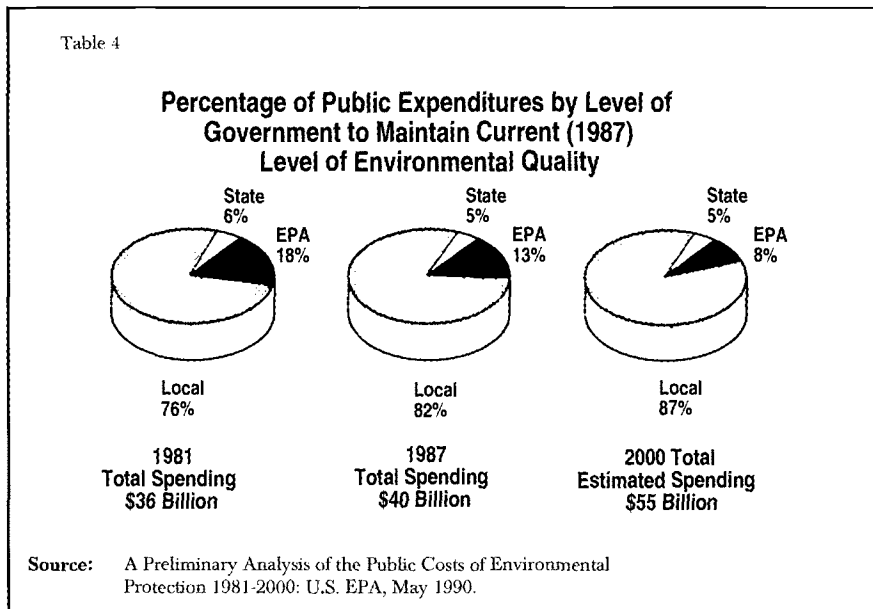


Table 5

Costs of Compliance with Environmental Mandates

City	Population	Cost
Hastings, Nebraska	22,867	Total cost = \$74.6 million Additional = \$1,865 per-year-per-household
Lewiston, Maine	39,757	Total cost = \$82.59 million
Anchorage, Alaska	240,000 (est.)	Total cost = \$429,936 million 10-year cumulative cost per household = \$4,659
Mansfield, Ohio	50,627	10-year cumulative cost per household = \$3,213 (0% growth)
Toledo, Ohio	332,943	10-year cumulative cost per household = \$2,761 (0% growth)
Columbus, Ohio	632,910	Total Cost \$1.03 billion 10-year cumulative cost per household = \$3,375 (0% growth)
Lima, Ohio	45,549	10-year cumulative cost per household = \$2,456 (0% growth)

stantial and the proposed federal funding allocated to achieve the desired result would be minimal. Table 4 shows the EPA's presentation of this information.

The combined impact of increasing federal requirements and decreasing federal support could be devastating to local communities. This "double whammy" on the taxpayer was highlighted in a recent General Accounting Office report: "In recent years, the responsibility for financing environmental projects has been shifting from federal to state and local governments. EPA projects that by the year 2000 local government costs will increase from \$19 billion a year to over \$32 billion (in 1986 dollars) in order to meet new federal standards for drinking water and wastewater treatment. Some small communities of less than 2,500 people may find these new costs especially burdensome, in part because they are less able to expand financial obligations."

In effect, the federal government has been decreasing funding in the environmental area, reallocating those resources to fulfill other objectives, and then imposing additional controls and mandated costs on state and local governments. Since this shift has resulted in a shortage of funding in the environmental area, these actions have forced state and local governments to raise taxes.

Costs to Local Communities

Despite the changing relationship among federal,

state, and local governments, the local community continues to be the main provider of environmental services. Regardless of funding, local governments are expected to deliver the services in a timely and efficient manner and still stay in compliance with all existing environmental laws and regulations. Because of these requirements, it is important for local communities to be able to

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determine their actual costs of compliance.

The city of Columbus was one of the first cities in the United States to perform a cumulative study of the costs of compliance with these new environmental mandates. Columbus discovered that it would cost over \$1 billion to comply with environmental mandates enacted as of January 1991. This 10-year cost total amounted to an increase per household of \$856 per year by the year 2000. Because of these increases there were fewer funds available for other city services. Also, city leaders had fewer options, and, there-

Table 6

Stormwater Management Costs

Control Levels	Capital Cost	Annual Operating and Maintenance Costs
Level 1: Institutional and Nonstructural Source Controls	\$147,100,000	\$1,155,000,000
Level 2: Level 1 + Increased Maintenance of Existing Stormwater Facilities	\$147,100,000	\$32,607,800,000
Level 3: Level 2 + Construction of Additional Moderate Source Controls	\$83,139,500,000	\$86,233,700,000
Level 4: Level 3 + Construction of Detention Basins or Wetlands	\$91,130,900,000	\$90,097,500,000
Level 5: Level 4 + Construction of Treatment Plants	\$406,734,900,000	\$542,036,700,000

fore, less freedom to make budgeting decisions.

Other cities throughout the country have performed their own cost studies, generally utilizing the Columbus format. Their cost estimates were different, but in all cases the costs were significant or, in some cases, even staggering, as Table 5 illustrates.

It will be virtually impossible for many local communities to comply fully with all of these mandates and continue to supply basic government services.

In addition to these city-level cost studies, other studies are being performed by a number of national organizations. Their results raise serious questions as to what the cumulative costs of compliance for local communities across the United States will be.

The Association of Metropolitan Sewer Agencies (AMSA) recently completed a survey of the municipal wastewater management needs of 108 large metropolitan areas. The results showed that municipalities would have to raise \$22.6 billion between 1990 and 1995 for mandated improvements, of which only \$1.8 billion was to be financed by federal assistance. The local bur-

den of these costs is over 90 percent of the total. Additional increases were also identified in the operation, as well as maintenance areas that are, and will be, totally funded by local governments. This same survey also identified cost-per-household totals. Where other cost study periods usually cover 10 years, the AMSA study tabulated costs for 20 years and discovered that in order to keep pace with cost requirements, the average annual household user fee will double every six years to a cost of \$1,695 per household per year by the year 2010.

The Southern California chapter of the American Public Works Association (APWA) published a study on the costs of

complying with the Clean Water Act. This study, entitled "Nationwide Costs to Implement Municipal Stormwater Best Management Practices," projected massive costs for stormwater management (stormwater management costs were not included in the AMSA study described in the prior paragraph). The costs identified by this study were even more astonishing than those in the AMSA study. The APWA study evaluated five different levels of pollutant controls that could be used by municipalities and then estimated the costs of compliance if these pollution control techniques were used nationwide. These costs and levels are shown in Table 6. These costs do not include site-specific engineering, administrative, legal, land acquisition, or permit costs. Many of these costs, especially land acquisition costs, may be substantial. These costs also do not include monitoring costs or the potential costs of liability associated with sediment contamination or future citizen suits. Neither are costs for stormwater controls for future developments, construction activities, and costs borne by the private sector for stormwater included.

A recent study by Milton Russell, E. William Colglazier and Bruce E. Tonn evaluated land remediation costs. This study provided the cost estimates shown in Table 7.

As is evident from Table 7, the cumulative impact of these costs on all areas of our economy, including local government, is truly phenom-

enal. Even if these estimates are off by 20 to 30 percent, it is hard to imagine how local governments will finance these mandates, especially when local governments' financial resources are being tightly squeezed by taxpayer resistance and other local competition for these finite resources. Because of these constraints it will be virtually impossible for many local communities to comply fully with all of these mandates and continue to supply basic government services.

Recommendations

It would be irresponsible to ignore this changing relationship between the local, state, and federal governments and the significant financial restraints being imposed on all local communities. The quicker local officials recognize the magnitude of this change and implement corrective measures, the less painful the solution will be. The timing for significant change might never be better. The rising costs of environmental compliance may force local governments to develop a new legislative process that necessitates more efficient decisions when allocating tax dollars to achieve compliance.

Congress has recently approved legislation that will restrict uncompensated mandates, unless the requirement for compensation is waived by majority vote. And even this protection could be removed by subsequent legislation.

The solution does not lie in one piece of legislation, however, nor does it require the elimination of all environmental protection. The solution should result in a "win-win" situation that allows significant flexibility for local governments and clearly defined roles for federal and state governments.

The federal government will have a very important strategic role within this new framework. It is imperative that it provide direction for identifying and correcting long-term environmental problems. The role of the federal government should include but not be limited to: funding for environmental research; the establishment of common environmental indicators; appropriate tools for measuring success and failure (not mandating specific compliance levels for all communities); providing matching funds for initiatives where significant funding is required; supplying training, educational, and technical resources to other government entities; and pro-

Table 7

Estimated Costs of U.S. Hazardous Waste Remediation From 1990 to 2020 (Best Estimate)

Remediation Program	Cost (In Billions of Dollars)		
	Less Stringent Scenario	Current Policy	More Stringent Scenario
Superfund	90	151	352
RCRA	199	234	258
Federal Facilities	110	270	430
UST	67	67	67
State and Private Programs	18	30	70
Total	484	752	1,177

viding international leadership on worldwide environmental concerns.

As the federal government provides this leadership, state and local governments will be able to do what they do best, which is to adjust their resources to address the most pressing problems within their communities. With this freedom, local communities could create a wide range of initiatives to solve various environmental problems. This practice should be strongly encouraged, rather than discouraged, as now happens with the current one-size-fits-all

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approach to regulation. Mistakes will be made, but when they are, communities must be allowed to correct those mistakes and move on.

To exemplify how this process could be implemented, it is instructive to examine the following proposal now being implemented within the city of Columbus and our surrounding communities. The Environmental Improvement Management Plan (EIMP) consists of nine steps.

Step 1 - Identify existing environmental mandates;

Step 2 - Identify the costs of complying with environmental mandates;

Step 3 - Develop a working agreement with an environmental science advisory committee;

Step 4 - Identify and prioritize local environmental concerns;

Step 5 - Rank local environmental priorities based upon costs required and benefits received;

Step 6 - Submit to state EPA and/or U.S. EPA for review and comment;

Step 7 - Gain local approval of final environmental improvement plan;

Step 8 - Final environmental improvement plan to be approved by state EPA and/or U.S. EPA; and

Step 9 - Perform evaluation and reviews to measure observance with agreed-upon environmental improvement plan.

This proposal, if allowed to be implemented at the federal level, would provide significant flexibility that could result in substantial cost savings for Columbus, while simultaneously improving the environment for our citizens.

EIMP gives our citizens the opportunity to concentrate on the environmental priorities that *they* feel are important to their well-being. This gives local officials a better opportunity to explain to the taxpayer why his tax rates need to be increased and what corresponding benefits he will receive for these increased expenditures. Without taxpayers' full participation, we can only expect hostility to other local initiatives.

Conclusion

For more than 20 years environmental quality in the U.S. has been improving significantly. These improvements have come with increasing costs that, in some cases, were justifiable. However, since the levels of improvement are now mea-

sured in parts per billion, and even parts per quadrillion, the costs are increasing at an exponential rate, with just about all of these increasing costs being borne by local communities and business interests.

It is imperative that local communities be given the opportunity to focus their limited financial resources in order to achieve the greatest environmental and other societal benefits. Local taxpayers are beginning to demand this kind of decentralization. With this changing paradigm, decisionmakers at all levels of government have to recognize that changes are occurring and adjust to the new demands being imposed. The only win-win situation that exists is to allow significant flexibility at the local level, thus maximizing the environmental benefits received for the limited financial resources that are available. Without such changes, the current environmental movement could itself be an endangered species.

Selected Readings

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