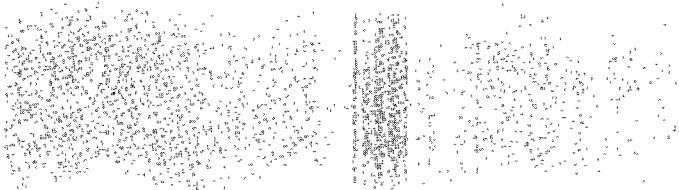
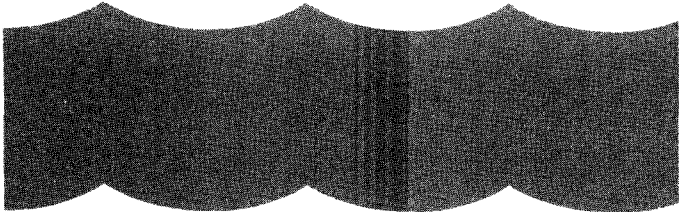


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# Where Do We Go from Here? The Challenge of Water Quality Management for Elected Officials



Environmental Protection Agency  
Region V, Library  
230 South Dearborn Street  
Chicago, Illinois 60604

—Devise the management program in each area which will be carried out under local or State control.

This last point incorporates the fundamental philosophy which has guided the development of the national water quality management program under Section 208. In effect, the program in each area will function as a local or State political process. This means that it is your program and the decisions that are made can be yours.

This pamphlet discusses some of the more important aspects of water quality management planning and specifically considers the kinds of information you, as an elected official, should know to effectively participate in this critical undertaking.

### **Some Well Publicized Examples of Water Quality Deterioration**

Several highly visible examples of the increasing degradation of this Nation's water quality have emerged in disturbing forms during the past decade. We ignore these early warning signs of a national water crisis at our own peril.

Some of these problems have come to the public's attention in dramatic and well-publicized fashion. Groundwater resources on Long Island and in the San Antonio, Texas area are being tapped at such a rapid rate that the water resources are not being replenished. Other areas are experiencing similar problems. The questionable status of community drinking water supplies is becoming an issue of strong concern to officials and the public. Chemicals whose names we didn't know a few years ago pose potential threats to public health and recreational interests from the Great Lakes to the lower Mississippi River. These developments were highlighted recently by the dumping of large quantities of the chemical Kepone in Virginia's James River, a disaster which threatens the public health and the rich fishing and shellfishing of the Chesapeake Bay.

## **Water Quality Problems Closer to Home**

Your water quality problems may be less spectacular but just as real. The most common are probably polluted and clogged streams and waterways hindered by weeds, algae, and sediments. Beaches in your area may be closed, septic tanks leaking, or there may be increasing threats of local flooding. Fish kills and sharp declines in wildlife population along lakes, rivers, and streams are additional indicators that something is wrong.

We are all familiar with the kinds of pollution that come directly out of pipes from local factories or from municipal waste treatment plants. Some sewage systems and industries are inadequately treating wastes. In other cases, industries are not adequately pretreating wastes discharged into municipal systems. Inadequate treatment and accidental spills can result in significantly poorer water quality for an entire community.

These, however, are only part of the problem. A great number of pollutants also flow into America's lakes, rivers and streams directly off the land. Some of the major sources of water pollution are:

### **Flooding**

Uncontrolled growth resulting in development of floodplains and wetlands causes pollution. The natural filtration and absorption qualities of these lands are lost with development impervious to water.

### **Septic Tanks**

Improperly located, installed, or operated septic tanks can pollute ground or surface water. Those located close to shorelines can add inadequately treated human waste to the water if they malfunction, posing a threat to public health and welfare. The visible manifestation of such pollution is algae and dead fish.



## **Agricultural Runoff**

This includes fertilizers, pesticides, herbicides, and animal wastes from feedlots and pastures. Sediment from croplands is an additional problem. These contribute significantly to polluted and clogged streams and their nutrients stimulate the growth of weeds and algae.

## **Construction Sites**

Construction practices in residential, commercial, highway, and other forms of development, which strip soil-holding vegetation, promote erosion and cause sediment to enter waterways. Sites that are completely cleared all at once, instead of gradually prepared, generate the worst runoff.

## **Hydrographic Modification**

Activities which change the character of a stream—building reservoirs, dams, and other construction which channelize the water body directly—contribute to siltation. They can also cause increased flooding in unprotected downstream locations.

## **Forestry/Silviculture**

Improper timber harvesting practices can result in a heavy contribution of sediment from the forest floor into nearby waterways. Major problems may arise due to poorly located and maintained logging roads.

## **Development in Aquifer Recharge Areas**

These are areas where rainwater replenishes existing groundwater supplies. Improper development here can not only hinder the flow of replenishing rainwater but can also contaminate the water that gets back into the recharging system.

## **Development in Wetlands**

Wetlands are particularly vulnerable. The consequences of destroying wetlands range from the flooding of homes and other development constructed in these areas, to the elimination of fish and wildlife, and to new sources of pollution which readily seep into adjacent waterways.

## **Urban Storm Runoff**

Your participation is especially needed in runoff control because many of the preventive measures will require action by municipalities. Street litter, oil, grease, and spilled gasoline from roads, parking lots, and gasoline stations and uncontrolled construction activities all contribute to urban pollution. Salt and sand used to eliminate the hazards of ice and snow pose special problems during winter periods. Animal

droppings pose a health hazard as well as a pollution source. Urban runoff contributes to deteriorating water quality because of the large areas of impervious surfaces in most metropolitan areas and storm sewers that discharge rainwater to streams during storms. These surfaces prevent contaminants from being absorbed into the soil where some filtering would take place.

### **Waste Storage Sites**

The most common of these are solid waste sites (including landfills and dumps), chemical or petroleum storage areas, and waste facilities associated with mining operations. If poorly designed and operated, these facilities can contaminate both surface and underground water supplies with toxic chemicals or bacteria.



### **Local Government and Water Quality Management**

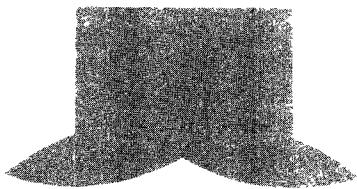
Section 208 of the Federal Water Pollution Control Act Amendments provides a means for elected officials to get a handle on these problems and others. Water quality management programs are underway all over the country. Either a State or regional agency has been given the task of preparing an initial plan to solve your water pollution problems. The process does not

require that all pollution be controlled to the same extent at the same time. The most important problems are dealt with first.

These 208 agencies normally have two to three years to prepare a water quality management plan. At the end of that time, agencies responsible for carrying through the recommended solutions will be designated by the Governor. The agencies designated will be those with the best capabilities to carry out specific parts of the plan. As an elected official, you will have special knowledge about which agencies have those capabilities. Agencies at either the State or local levels can be named. Decisions about management agencies will be made by the Governor, but your recommendations will be important.

### **The Big Question—Costs**

Many implementation measures will involve the expenditure of both private and public funds. Hard as it is to issue bonds or raise taxes to pay for clean water, higher costs will accrue if the management program fails to meet its responsibilities. If the water is not cleaned up, a community could suffer curtailment of economic growth and development. Recreational opportunities could be missed. Health problems could occur. Conversely, cleaning up the water



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can provide economic incentives to industry. Citizens will be more likely to support increased spending if recreation or open space opportunities are included in the package. It has also been shown that water pollution control does provide jobs.

## **Public Involvement in the Management Program**

The authors of the 1972 Clean Water Act recognized clearly the self-defeating nature of developing water quality management programs without the involvement of the public and a community's political leadership. They therefore included strong provisions for public participation in the legislation.

As an elected official, you are in a unique position to lead and direct this effort. The various constituencies and interest groups in your community will have a closer collective working relationship with you personally than with each other. This puts you in the "catbird seat" for channeling the diverse concerns and interests which will emerge. Policy advisory boards, made up in part of elected officials, are already advising State and local 208 Agencies. As an elected official, you can encourage these boards to take an active role in water quality management.

Water quality management is more than a set of technical or scientific studies or planning documents. Community priorities and values must be considered as well. A 208 agency cannot and should not make all the decisions without you, the general public, and the specific constituencies that you deal with on a daily basis.

## **Blending Problems, Issues, and Constituencies: Asking the Right Questions**

It is difficult to make generalizations about the impact the program will have in your area, but many variations are possible. Land use policies and programs, for example, may undergo local review to make certain that they aren't currently contributing to water quality problems and won't do so in the future.

What you can do immediately is to make certain that the several constituencies affected by the program, and you as their elected official, begin to ask the right kinds of questions of your water quality management agency. For example,

- Have all sources of pollution been identified?
- Are effective strategies being developed to curtail or modify their adverse environmental impact?
- Have affected interest groups been involved in developing control programs?
- Are means available to alleviate the economic impact of the required control measures?

Are any of the following problems associated with water pollution visible in your community?

- Have community outdoor recreational opportunities (fishing, boating, swimming)



been curtailed or eliminated because of water pollution?

- Have recreational enterprises or commercial fishing declined and has this had a significant impact on unemployment?
- Is the quality of your area's waterways, and other environmental considerations, reflected in the image that outsiders have of your community?

Are affected city and county governments taking the following steps to reduce pollution resulting from runoff?

- Are programs being initiated to curtail runoff caused by an increase in paved surfaces?
- Are streets being cleaned regularly to remove large quantities of chemicals, debris and organic materials which run off in the first flush after a storm?
- Are steps being taken to prevent the overuse of road salt or sand during winter snow periods?
- Are programs being developed to reduce soil erosion during construction, or during agricultural and forestry operations?

## **Conclusion: The Decisions Can Be Yours**

The water quality management program in your area or State is not a guarantee that your constituencies will see their waterways cleaned up overnight. In several areas, it will take years to accomplish this objective as the sheer number of obstacles to be overcome would indicate. What the management approach to solving water quality problems does offer, however, is a structure and a set of public strategies that are comprehensive enough to deal with the several sources of environmental degradation that pollute your waterways. No simple or superficial approach will work.

The water quality management programs must be developed and carried to completion if your waterways are not to deteriorate further, let alone improve. The program won't work unless all segments of the public, including its elected officials, become involved in the process.