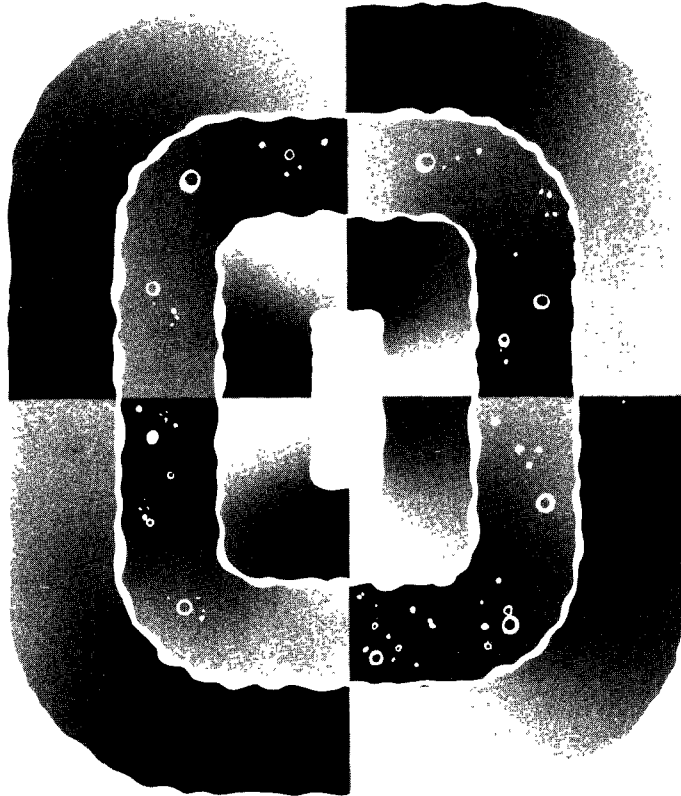




**areawide  
waste treatment  
management  
planning**



U.S. ENVIRONMENTAL PROTECTION AGENCY ■ WASHINGTON, D.C. 20460



# **areawide waste treatment management planning**

## **a new perspective on water pollution**

**W**hen Congress passed the Federal Water Pollution Control Act Amendments of 1972, it recognized that some water quality control problems in the United States are so complex or severe that they can't be solved by using technology alone.

In most cases, these problems affect urban areas in which population and industry are concentrated. Congress saw that new concepts and techniques would be needed to manage and control water quality efficiently.

For this reason, Congress incorporated the areawide waste treatment management planning process under Section 208 of the Act. The process gives the U.S. Environmental Protection Agency (EPA), the States and local governments a planning tool with great potential effectiveness in the campaign for clean water.

### **What is areawide waste treatment management planning?**

The 208 program stresses planning by local governments. Specifically, it calls upon local governments in a particular planning area to work together to find and implement solutions to their common water quality management problems. It gives local planning agencies a means of solving these problems where simply applying standard waste treatment technology might not do the job. It helps local governments find integrated solutions that deal with both environmental and developmental matters. It also calls for the selection of a special management structure to carry out the actions specified in the plan. Finally, it provides grants to help local governments cover planning costs.

## **What does areawide planning accomplish?**

The program sets up a management structure to insure that a plan, once completed, is carried out effectively. The result is a two-pronged approach to solving water quality problems—one stresses systematic planning to find workable solutions; the other stresses follow-up management to insure that those solutions are carried out properly. This reliance on management as an essential component of areawide planning applies nationwide, even though individual problems and solutions may vary from place to place.

Areawide planning brings together several aspects of water pollution control. For example, it considers the treatment of municipal and industrial wastes and the issuing of discharge permits which require industries to reduce their discharge of pollutants over a specified period. Areawide planning is also the most effective mechanism available for dealing with “non-point” sources of pollutants, which are special sources that are often difficult to pinpoint. Some examples: stormwater runoff

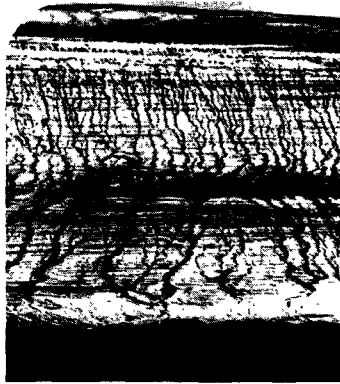
from cities and farms, erosion at construction sites and the seepage of chemicals from mines and areas that rely on septic tanks for treating wastes.

But areawide planning does more than tie together different aspects of the water program. Specifically, it provides a structure to coordinate the water program with other environmental activities such as air quality improvement and solid waste management.

And that’s not all: areawide planning looks at the issue of development in terms of its environmental implications. It enables planners to consider in environmental terms such related issues as land use and development by both the public and private sectors.

Since it studies so many diverse issues, areawide planning provides a unique opportunity—an effective way to solve our toughest water pollution problems and make real progress in the fight for clean water. In an urban area, for example, an all-inclusive plan can be put together

*erosion  
municipal waste*



*storm runoff  
industrial waste*



that covers a wide variety of problems affecting water quality. And, once the plan has been approved, State and local

governments can use it to manage the area's waters in the future as well as to solve the problems they're experiencing today.

## **How does areawide planning and management fit into the overall water pollution control program?**

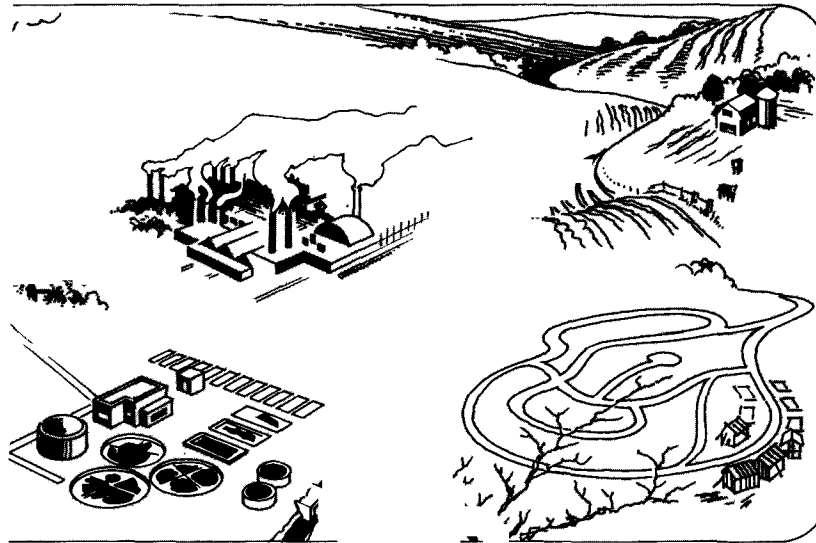
The Water Act emphasizes the importance of planning and management in achieving clean water and maintaining it once we have it. The Act establishes several distinct levels of planning; areawide planning is but one of them. Each of these has its own scope and purpose and depends upon the others for its ultimate effectiveness. Some of these planning processes are more detailed than others. Some deal with large geographical regions; others confine themselves to solving the specific problems of an individual community or group of communities.

Section 208 areawide planning and management has its own special role within this overall planning scheme. Since it complements the other planning processes established by the Act, the 208 process can be more easily understood by seeing how it relates to these other planning activities. The schematic map shows in a simplified way the typical scope of our most



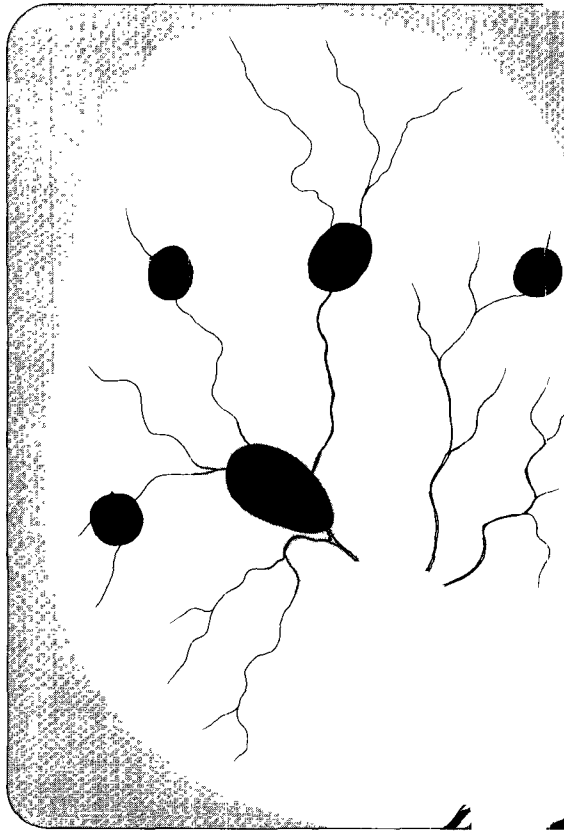
significant planning processes. In the example given, the 208 planning area represents a typical urban-industrial complex. Although there are exceptions to the relationships depicted, the map shows in general terms how the components of EPA's water planning program relate to each other.

*The areawide plan offers comprehensive solutions to many related problems affecting water pollution*



A good example of the interdependence of planning processes can be seen by comparing the 208 areawide plan with the *facilities plan* prepared under Section 201 of the Act. This 201 planning is conducted incident to building or modifying a sewage treatment plant and its related facilities, such as sewer

lines. The result is a highly detailed plan that considers a wealth of technical and environmental data. The information is used to evaluate alternative courses of action so that a community can get the most benefit from a given expenditure. In most cases, the facilities plan deals with the problems



- *Facilities plan (section 201)*
- *Areawide waste treatment management plan (section 208,*
- *River basin plans (sections 209 and 303)*
- ▲ *Sewage treatment plant*



experienced by an individual community in treating its municipal and industrial wastes. However, it can also apply to a group of communities in cases where finding common solutions is more economical or efficient.

Areawide planning expands the scope of a facilities plan. The 208 planning area can include one or more 201 facilities planning areas—in such cases, the areawide approach builds upon the contents of completed facilities plans. By dealing with such related issues as land use, development and the combined effect of all the treatment plants within its planning area, the 208 plan permits a more comprehensive view of the problem and its possible solutions.

Consider another example—the *basin plan*, prepared under Section 303. This deals with a typically large geographical area—the river basin, which is the area drained by a river and its tributaries. The basin plan assesses the extent to which a basin's waters are polluted and defines the nature and volume of pollutants that can be discharged without pushing water quality below certain minimum standards.

It also establishes priorities for the construction or modification of treatment plants that are needed throughout the basin. Since 208 areawide planning is, in most cases, concerned with a particular part of a river basin and deals with both treatment plants and water quality goals, the areawide plan must conform to the management strategy and constraints spelled out in the basin plan.

A third example is the *water resources basin plan (Level B)*, prepared under Section 209. This general plan sets forth a broad strategy for the long-term management of a river basin. Its wide scope encompasses water supply, water quality, recreation, transportation and other related fields needed to map a strategy for managing the basin's water resources. For this long-range approach to be successful, however, the 209 plan must build upon the provisions of any applicable areawide waste treatment management strategy.

## **What does the plan contain?**

Information included in an areawide waste treatment management plan identifies:

- All treatment works needed to maintain acceptable water quality over a 20-year period. The list will be revised annually to reflect changing conditions. In addition, the plan establishes priorities for building or modifying treatment plants and offers time schedules to put those priorities into effect.
- Mechanisms to coordinate all waste treatment planning activities within the area in question. This insures that all such planning contributes to an organized and integrated solution to the problem. To do this, these mechanisms regulate the location, modification or construction of all facilities within the area. They also insure that industrial wastes are properly pretreated to remove incompatible or toxic substances before they are discharged into a municipal treatment system.
- The management structure to be responsible for implementing the plan. This may range from a single agency to a number of

agencies and government organizations. It must have the legal authority to take whatever actions are necessary to carry out the plan, either directly or through contractual agreements. It will also manage all included waste treatment works and other related facilities. Inclusion of this management provision is one of the features that gives 208 planning its unique potential. Therefore, the management system identified in the plan must be specifically approved by EPA before the plan can be put into effect.

- Means of defining and dealing with “non-point” sources of pollutants. This is especially important in relation to agricultural, forestry, mining and construction activities, as well as salt water intrusion into groundwater supplies due to reductions in the flow of fresh water from any cause.
- Other information needed to carry out the plan. This includes data on financing arrangements, time requirements, the anticipated cost of implementing the plan and its probable

economic, social and environmental effects on the planning area.

- Methods to dispose of the residues and treated waste water that remain after treatment. This involves defining the problems associated with land and subsurface disposal of these wastes. Doing this insures that the many safe uses that have been found for sewage sludge and treated waste water will be given full consideration.

Collecting such diverse and detailed information will enable planners to solve a particular area's water quality control problems in a way that's socially acceptable, economically realistic and environmentally sound. Of course, the plan does more than just offer solutions; it also provides the management structure that will be needed once the plan has been approved.

## **How are 208 planning areas and agencies created?**

To start the process, EPA issued regulations to guide the States in deciding which areas are likely targets for 208 planning efforts and who should do the planning. The Act details what happens next:

- Following publication of EPA regulations, State governors decide which areas within their States should be designated for 208 planning. Although the size and characteristics of such areas will vary, the regulations say that preference should be given to areas with high concentrations of population and industry or with any other conditions that result in substantial problems in controlling water quality.

It's possible that a suitable planning area may include parts of two or more States. If this were the case, the Governors concerned would confer and decide what action should be taken. If they decided that the interstate area should be designated for 208 planning, they would continue to work together through all later stages in the planning process.

Designating an area for 208

planning isn't the only course of action open to a State Governor, however. When considering a particular area in his State, he may decide to take no action; in other words, he may elect to "stand silent." If he does this, however, the chief elected officials in the area have the option to act on their own. They can designate the area if they feel, based on the Governor's inaction, that their area is not getting the attention it deserves. This designation by local officials becomes binding once it's approved by EPA.

A third option is open to the Governor: he may specifically "non-designate" a potential planning area. This is a complicated way of saying that he chooses not to designate the area at the present time, but reserves the right to do so later. If an area has been specifically "non-designated," local officials may not proceed to designate it on their own.

These options permit the Governor to commit his planning resources to areas having the highest priority and to withhold action in less severe cases. Only if the Governor chooses to stand

silent can local jurisdictions act by themselves.

- When a Governor designates a 208 planning area, he must also designate a single agency to do the planning. This agency must include elected officials from the local governments concerned or their representatives, and must have the resources and technical ability to develop an effective plan. To insure that the agency has that capability, EPA must approve the agency's designation before planning can begin. This review and approval by EPA guarantees the effective use of Federal grants which are available to cover planning costs. A reminder: don't confuse the planning agency with the management agency or agencies. The former does the planning; the latter carries out the plan after it's been completed and approved.

A note about time requirements: the planning agency must get to work no later than one year after it's approved by EPA. From that time on, an initial plan must be completed, certified by the Governor and forwarded to EPA for approval within two years.

## Who does what?

Areawide planning is intended to involve local, regional and State officials and agencies as fully as possible. Direct Federal involvement will be held to a minimum in such matters, for they are primarily the subject of State and local concern. The following describes how local, State and Federal officials and agencies participate in 208 planning.

### The local role:

- Local elected officials advise the Governor about the designation of planning areas and agencies. In cases where the Governor stands silent, the area's chief elected officials may designate the planning area on their own. They or their representatives also serve on the planning agency itself. They play an important part, therefore, in working out solutions to water quality problems in their own areas.
- Local officials also assist in the identification of a management structure that is capable of carrying out the plan.

### The State role:

- The Governor designates planning areas within his State; he also designates each planning

agency. In addition, he must insure that public meetings or hearings are held on the issues involved in each area and agency designation. He certifies the completed plan before it is forwarded to EPA for approval and proposes a suitable management structure based upon the plan's recommendations. He also reviews and certifies the plan annually to keep it current.

- Members of State agencies may take part in the preparation of a 208 plan.
- State agencies oversee planning at the local level to make sure that it's conducted in accordance with the State's water pollution control priorities and goals.
- Once a 208 plan has been completed and approved, State agencies help to administer the plan by monitoring the progress of the management agencies.

### The Federal role:

- Before planning can start, EPA must approve the designation of each planning area and planning agency. And before a completed plan can be implemented, EPA must approve both the plan itself and the designated management structure.
- EPA, the Army Corps of

Engineers and other Federal agencies may provide technical assistance upon request of the Governor or the planning agency.

- The Federal Government makes grants available to planning agencies to offset their planning costs. For obligations made during fiscal years 1974 and 1975, this includes 100 percent of eligible costs incurred over a two-year grant period.

### **Like more information?**

EPA can provide additional reading matter on water pollution. The booklet "A Citizen's Guide to Clean Water" is a good introduction to the problem and what can be done to solve it, including citizen action. "First Things First: a Strategy Against Water Pollution" outlines the many things EPA is doing; it also shows how areawide planning ties in with the rest of EPA's water program.

If you would like these or other publications, write the Office of Public Affairs (A-107), EPA, Washington, D.C. 20460, or contact the EPA Regional Office nearest you.

### **What is the public's role in areawide planning?**

Solving an area's water quality problems necessitates making decisions on a number of related issues. These include the location of treatment plants, control of "non-point" sources, land use, development, air quality improvement and methods for disposing of solid waste. Naturally, these decisions can have a pronounced effect on how an area's residents live.

Congress recognized the potential significance of these decisions. Therefore, it held that the public should have a voice in the conduct of water planning. This policy is reflected in Section 101(e) of the Act, which states:

*Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator (of EPA) or any State under this Act shall be provided for, encouraged, and assisted by the Administrator and the States.*

The law thus requires the Federal Government and the States to

provide opportunities for the public to make a contribution to areawide planning. Since the decisions that are made during the planning process can affect everyone in a particular planning area, the public should take advantage of every opportunity to participate.

EPA's *Guidelines for Areawide Waste Treatment Management*\* describe the essentials of a public participation program for 208 planning. The *Guidelines* call on the planning agency to seek out ideas and comments from the public at each step in the planning process, beginning as soon as possible after the planning area is designated. The public can give the planning agency useful information about community attitudes toward a number of issues and alternatives and can help to define the effect these alternatives will have on the community as a whole. Public involvement would thus begin early in the planning process and then continue through the decision-making and implementation phases.

Areawide planning gives State

\*Available from the Water Planning Division (WH-454), EPA, Waterside Mall, Room 811E, Washington, D.C. 20460.

and local governments a unique opportunity to make comprehensive decisions to solve an area's water quality problems. It also gives every citizen the chance to make a personal contribution to the making of those decisions. Seen in this context, legislation and regulations, guidelines and procedures are not enough by themselves. If we are to realize the full potential of areawide planning, every citizen must participate and do his part.

November 1974

The reader is free to quote or reproduce any part of this publication without further permission.

For sale by the Superintendent of Documents,  
U.S. Government Printing Office  
Washington, D.C. 20402

**OFFICE OF PUBLIC AFFAIRS (A-107)  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460**

**POSTAGE AND FEES PAID  
ENVIRONMENTAL PROTECTION AGENCY  
EPA-335  
THIRD CLASS BULK RATE**

