

# A Prototype Urban Environmental Policy Statement

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## ABSTRACT

Many communities now seek an environmental policy statement to serve as a guide for citizens as well as legislators and administrators. The motivation to gain such guides is a product of rapidly declining<sup>1</sup> quality of the urban milieu,<sup>2</sup> new perception of the problem by the masses aided by many media, mandates from the urbanizing professions<sup>3</sup> and a dawning of the potentials for really doing something about the problems.<sup>4,5</sup>

While policy statements may provide guidance and education for citizens and corporations, its mega-influence may be felt if it suffices in lieu of arduous legislative development or serves as the final criterion for environmental legislation. Such policy statements as goal concepts<sup>6</sup> can provide the basis and foundation for the urban environmental system. The following prototype of such a policy statement is presented for use and discussion.

## The Environmental Policy of \_\_\_\_\_

We, the duly elected Mayor and Council of \_\_\_\_\_,  
do hereby determine the environmental policy of the  
\_\_\_\_\_. In doing so we establish the major criteria  
by which we shall make decisions on issues and ordinances affecting the

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environment of the \_\_\_\_\_ and how we shall view the environmental implications and consequences of our other decisions. We establish this document as guide and goal, not as binding; as admonition, not ordinance. We dedicate ourselves to its purpose; advise schools to appropriately integrate the ideas contained herein within the educational program for the children of the town; encourage every institution, industry, and business within the town and nearby areas to seek its achievement in practice; ask each citizen to seek strenuously in every way possible to understand its intent, and maintain their lands and resources so the policy will be achieved; encourage citizens to elect those sensitive to the environment and the quality of life dependent upon it; and participate in the creation, maintenance, and improvement of the environment of the town so that the fullness of life, abundance of health, and long-term welfare of all the people of the town will be achieved.

This policy is directed toward the external environment, to the total experiences of those who live and visit in \_\_\_\_\_. It does not deal with the private, interior, living or working spaces of citizens. Its concern is for establishing and enhancing the quality of those experiences shared by everyone.

The environment is interactive and total. Efforts to "fix-up" one portion or aspect of the environment are usually insignificant and somewhat meaningless. The whole environment must be dealt with simultaneously, in a balanced fashion, by each person or group participating at his own level, according to his talents and resources. In addition to personal effort, team efforts and government projects are needed to achieve that which each citizen cannot achieve alone.

It shall be the policy of the town:

- a. minimize inefficiencies in use of all forms of energy,
- b. minimize waste of fuel,
- c. minimize the amount of soil removed by wind, rain, and water,
- d. minimize siltation of streams, lakes, and water courses,
- e. minimize the losses in levels of high quality ground water,
- f. minimize the amount of construction on areas of the town with geological and flooding risks,
- g. minimize the losses of trees and other plant species, landscapes, and objects collectively perceived (by Council or a special panel or jury) to be beautiful,
- h. maximize the diversity of dominant species on all land tracts or city blocks,
- i. minimize the loss of or decline in those areas or structures that have

- special historical value and interpretative worth for understanding the relationship between man and his environment,
- j. minimize the average solid wastes of citizens and to maximize the recycling of real and apparent waste,
  - k. provide public openspace within at least one half-mile of all citizens,
  - l. provide specially designed outdoor recreational areas appropriate for groups, balanced between ages, and within easy access of all citizens,
  - m. minimize the disturbance of areas with soils of high erosion potential,
  - n. minimize the septic fields or tanks on improper soils,
  - o. increase to a calculated desired level, and stabilize at that point, birds and mammal populations judged to be aesthetically and ecologically beneficial,
  - p. minimize bird and mammal populations reaching levels above which damage is usually done or disease conditions may exist,
  - q. maximize the number of land and resource decisions that retain alternatives for future action,
  - r. minimize allergen production from vegetation (e.g., ragweed pollen),
  - s. maximize water percolation into the land,
  - t. minimize evaporation from land and water surfaces,
  - u. achieve an air quality above those specified by state air quality standards or at a level equal to or improved over those conditions existing in the town in 1972,
  - v. minimize the need for and uses of pesticides in the town, particularly the long-life chlorinated-hydrocarbons,
  - w. minimize weather modification in the city,
  - x. minimize introductions of exotic birds, mammals, reptiles, fish, and amphibians into the lands and waters of the town,
  - y. minimize noise disturbances and maximize the buffering effects of environment, such as vegetation on apparent noise,
  - z. maximize the use of landscape design principles on lands throughout the town,
  - aa. minimize litter and appearances of disorder and inattention.

In order to minimize fuel consumption, air pollution, and heavy-metal pollution of the air, soil, and water; to reduce the surface area covered by roadways; to reduce the often negative visual impact of roads; and to reduce encroachment of public holdings on private lands, we adopt the

policy of developing an efficient, functional transportation system of minimal environmental impact.

Recognizing the complexities of environmental problems, the large amounts of data needed to make well-informed decisions, and the power of modern computers and associated techniques for providing better answers over the long-run than man can provide, it is the policy of the town to seek appropriate computer-based assistance in dealing with various major environmental problems.

It is impossible to achieve maximum environmental conditions for everyone. What represents high environmental quality for some citizens may be judged of only moderate quality for others. In order to achieve the proper proportionate mix of values and desires of the citizens, it will be the policy of the town to seek increased citizen participation in environmental decisions, through hearings, special voting techniques, surveys, and other improved methods.

Our policy of town growth is one of caution predicated upon the ability of the environment to adequately contain, support, and absorb the impact of a human population. Our concern is for our people, dependent upon the resources of the environment for their well being and freedom. We advocate growth only so long as the increment results in net improvement or benefits to the median number of average citizens. We are aware of and wish to discourage growth that has, in other communities, increased tax income from the newcomer, but resulted in increased tax burdens on citizens due to the interactive demands placed on transportation and other town support systems. We are aware of and seek to find the best conditions imposed by the rule: up to a critical point, the larger the city, the more it costs per citizen to provide local services, ammenities, and health. We seek inputs to enable us to avoid the point at which the next growth increment is counterproductive.

We discourage suburban dispersal due to the major adverse impact of such growth upon environmental quality through roads, sewage and septic tank systems, communication and power lines, and watershed imbalances.

Because of the changes in the environment and changes in our knowledge of and attitudes toward the environment, we desire this policy to be reviewed periodically and shall place it upon our agenda. We, therefore, append the following notation of our review and shall cause a file to be created to accommodate past policy as well as that current.

### **Discussion**

The implications of minimizing and maximizing are not self-evident. Formally, the process is one of optimization, of simultaneously solving a set of equations or functions associated with all objectives or policy

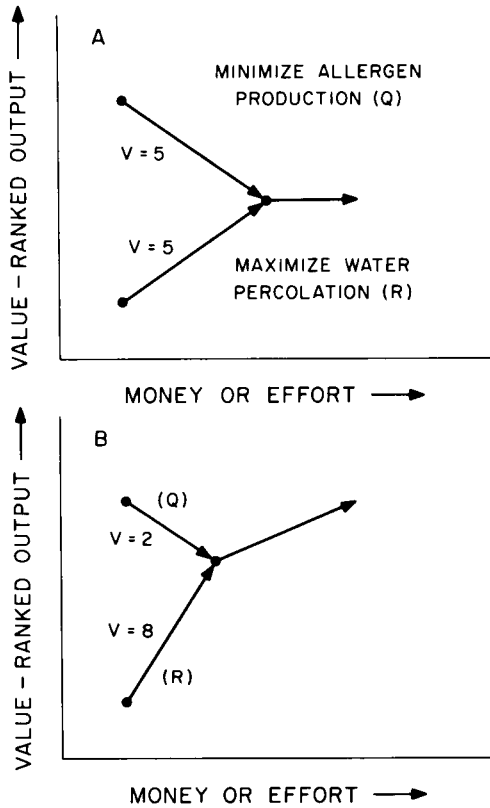


Figure 1.

components, *a* through *aa*. Each policy is satisfied, subject to all other policies.

For each community, each policy component has a different social value. The output or results of achieving each will be ranked differently among communities. At its simplest, Figure 1(A) shows the problem in simple economics, both policy components being valued equally. In Figure 1(B) when the interactive, conflicting policies have different values, the outputs will vary with allocations of urban resources over time. Not two variables, but *a* through *aa* must be handled in the modern city. This paper identifies important factors and puts them in a format potentially useful for developing detailed and sophisticated solutions. The policy clearly demonstrates the complexity of the urban environmental problem; to treat the problem as less complex than shown here is to court suboptimization.

Most individuals and community decision-makers will attempt to handle

all of the variables mentally. Others will make efforts to employ computer technology. Both will meet with varying success. The format presented, at least, allows both options.

*How* to achieve each policy is not the critical question. Ways now exist to achieve all of the objectives—from letting natural ecological succession progress unmodified to engineering high-intensity developments. The means vary widely with area, resources, manpower, and state-of-the-art in many fields. The means, in infinite combination, are largely available. Those that are not are fertile, high-priority areas for investigation and development.

All cities or towns are subsystems of larger environmental systems. A policy for one is a policy for the other; each is influenced by the other. While regional (planning districts, etc.) policy is highly desirable and, in my opinion, should follow the format and content of the proposed policy, I see no clear choice, in this year, as to which should establish policy first. There is so little policy now, conflict is unlikely. Adopting policy can be an act of leadership, for town or region. The policy process which includes:

1. discussion,
2. naming factors of importance,
3. obtaining public value ranks for each (e.g., as through voting machines, mailed questionnaires, hearings, elected juries),
4. formally adopting policy (i.e., the community decision),
5. gaining information (particularly mathematical functions of potential change over time and environmental change influenced by human decisions),
6. taking action to achieve all aspects of the policy,
7. enforcement as the act of inspection enabling incentives and rewards to be given for policy adherence (penalties, if necessary), and
8. operating on these data, equations, and best estimates, progressively over the years to maintain a healthy and viable policy, can only be good for the urban environment.

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