



Michigan COMMENTARY

Science Provides the Cornerstone for A State Environmental Agenda

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Public Sector Consultants was contracted by the Michigan Department of Natural Resources to conduct a relative risk analysis project for the state. The results of that project are nearly complete, and a report is scheduled for release in June. The report will explain how the project identified and ranked the state's most pressing environmental concerns. This Commentary explains the project and focuses on the importance of public involvement in setting the agenda for addressing environmental problems.

Only two short decades ago, at the time of the first Earth Day, Americans easily recognized the myriad environmental problems we created. Rivers were catching on fire, the air was an acrid brown haze, and bald eagles were threatened with extinction. If the unobservant were unable to see these problems, we had authors such as Rachel Carson prodding our collective conscience.

For the most part, the "easy" environmental problems have been solved. We have stopped spreading DDT on farmers' fields, the air is cleaner, and we are more careful about the chemicals we feed into our streams. Today, we are faced with a host of new problems—ones that are far less obvious but nonetheless deadly. Because these problems are less obvious, and there is considerable scientific debate about the existence and magnitude of some of them, it is more difficult to build a consensus for action. At a time when we need decisive leadership, our bureaucracies are bombarded by contentious special interests.

Fortunately, the situation is not as dire as it may appear. Necessity has spawned a process to enable decision makers to gain scientific information about environmental issues. More important, the process also provides guidance in resolving these difficult issues. This process is called relative risk analysis and involves an unusual blend of science and public participation. In this process, science is the cornerstone upon which, with public input, sound public policy can be developed.

Relative risk analysis has been used by the U.S. Environmental Protection Agency (EPA) at the national and regional levels, and Michigan is the first large, industrial state to use it. The Michigan project, which was funded by the EPA and administered by the Michigan Department of Natural Resources, is nearly complete and a final report will be released soon. The report will identify 24 of the state's most pressing issues and rank them according to the severity of risks they pose to the environment, human health, and the quality of life. The project enjoyed the early interest and endorsement of key state officials and, if the results are accepted, could form the basis for the state's environmental agenda.

It is not surprising that government officials turn to science for information about these complex environmental issues. It is important to remember, however, that science is uncertain and dynamic and often does not consider human factors. Questions give rise to new questions, and "proof" is often drawn from inexact experiments. When Copernicus turned the universe around by theorizing that the earth revolved around the sun, he demonstrated that science cannot be accepted as the absolute and unquestioned source of

truth. Nonetheless, science is our best source of ecological and human health knowledge. While we must recognize that science cannot make difficult decisions for us, it is the basic building block upon which solid environmental public policy can be built.

Albert Einstein, Sir Frances Bacon, and Plato all recognized the importance of public involvement in science. They believed science too uncertain, and important, to be left to a scientific "priesthood." That is why the Michigan Relative Risk Analysis Project (RRAP) blended the best scientific expertise available with public participation.

The RRAP used committees of scientists, state agency representatives, and citizens to identify and rank the environmental issues. Four public hearings were conducted throughout the state to obtain public opinion and advice about the project and issues. Certain issues that were not perceived as the most serious by the Scientist Committee were of particular importance to citizens because of the way those issues affected aesthetics, recreation, or perceived personal safety.

This blend of perspectives has resulted in a comprehensive examination of Michigan's most pressing environmental concerns. Although the final report will include a ranking, the committees noted that none of the issues is unimportant. The rankings also illustrate the importance of maintaining certain programs that have worked well to reduce environmental problems, such as point-source discharges (pollution whose source is identifiable). Perhaps most important, the rankings also show areas where human and financial resources must be directed to address problems.

The importance of the RRAP is the reasoned direction it provides for environmental protection. With the results, the state's limited human and financial resources can be directed more effectively. Responding to environmental problems, however, is only part of an environmental agenda. The agenda must also include a vision of what Michigan's environmental quality can and should be. Such a vision is especially important to Michigan because of the quantity and quality of natural resources and growing reliance on resource-based tourism.

The RRAP provides a "snapshot" of the dynamic Michigan environment. With this information, goals can be set for Michigan's environmental quality in the 21st century. This may mean fundamental changes in the way state government perceives and administers environmental protection initiatives. It could mean more cooperative efforts among the Great Lakes states and the federal government. It could even mean a reordering of long-standing priorities.

The RRAP will provide a foundation for this type of vision. Just as important will be leadership and the courage to make difficult decisions that will ensure environmental quality for generations.

To receive a copy of the final RRAP report, which is scheduled to be available in June, contact the Michigan Department of Natural Resources, Office of Policy and Program Development, P.O. Box 30028, Lansing, MI 48909.

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