



*Rochester Committee
for Scientific Information
Rochester, NY*

*RCSI Bulletin 62
Controversy About the Value of Our Pure Waters Program*

*By: Herman Forest, Roger Christensen, & George Berg
December 1969*

62 W

62

Controversy About the Value of our Pure Waters Program
by

Herman Forest, Roger Christensen and George Berg

Background

New York State's program for the abatement of water pollution was criticized recently by scientists, and the managers of the program met with their scientific advisory committee to ask whether the critics were right. The meeting took place on November 21, 1969 at the invitation of Health Commissioner Ingraham. Also present were Mr. Metzler, Assistant Commissioner for Environmental Health, other executives of the New York State Department of Health, and the scientific advisory committee, including Dr. Forest of the R.C.S.I. The following questions were considered.

1. Is New York State's sewage control program a waste of money?

This claim was reportedly made by Dr. Commoner, in a talk before the American Chemical Society in New York. Dr. Commoner is a leader in the scientists' fight for cleaning up our environment, and his criticism of a pollution control program was taken very seriously.

The advisory committee answered that:

- a) No. The money now being spent is not wasted. On the contrary, it is buying much needed hardware in the form of sewer pipes and waste treatment plants.
- b) But, yes. Facilities and above all, treatment methods, will have to be improved beyond present plans, or the investment will fail. Specifically, plant nutrient from sewage cannot be allowed to fertilize weeds in lakes, and this process can only be controlled by an unusually thorough tertiary treatment of wastes in lake watersheds.

Dr. Commoner was interviewed on December 14 by Dr. George Berg of the R.C.S.I. Dr. Commoner explained that he criticized the backward state of our technology for cleaning up pollution, and not the efforts we are making to build needed equipment. He said, in effect, that if we expect to control environmental pollution by using today's technology, then we are wasting our money.

The R.C.S.I. notes that the plans of Monroe County's Pure Waters Authority provide for improvements in technology. The proposed regional sewage treatment plants already include equipment for the removal of phosphate, and have a modular design which allows other tertiary treatment processes to be added as needed.

2. Is it useless to remove phosphate from sewage effluents?

A Northwestern University scientist wrote to the Commissioner that phosphorus is not the element that limits growth of aquatic plants, and that efforts to remove phosphate are useless. He found that carbonates (such as limestone) are the limiting factor.

The advisory committee replied that New York State made a good choice in deciding to remove phosphate as a first step in tertiary sewage treatment. The scientist at Northwestern set up his experiments under conditions that did not have much in common with the problems of lakes. For example, he used sewage ponds heavily loaded with all mineral nutrients. Carbonates would not be limiting in a fresh-water lake.

3. Should moderate pollution be allowed in some public waters?

The advisory committee said no. Water pollution may be tolerated as a practical necessity, but it ought not be permitted as a policy. We need to return water to the environment as clean as it was when taken out. This policy of removal of pollution at the source is the only safe policy. Relying on the environment to clean up after us only promotes human laxness and invites an eventual breakdown of the environment's complicated cleaning machinery.

4. Should unwanted growth be removed by poison?

The Health Department gets suggestions to manage the environment with chemical poisons. For example, why not poison all the unwanted kinds of fish in Lake Erie, and restock with sporting varieties?

The advisory committee answered that such programs are an invitation to further disasters. Today, people farm only small areas of the earth. At the present state of technology, farming has already disrupted and overloaded some aspects of the environment. We are certainly not able to "farm" whole lakes without harm. Natural communities are still the only reliable regulators of large environments. To spread poison on a lake is to simplify the natural community and destroy its regulating powers. Our task is rather to keep poisons and pollutants out, and to let natural populations rebuild a complicated and stable web of life; our course, to minimize man's effect on nature.

Post Script

This is offered as a personal impression rather than an objective report of questions and answers. The Health Department's executive group were serious about their task of pollution abatement, with no hint of compromise with expediency. They were particularly alert and interested when we were most emphatic in support of abatement measures beyond present plans. Surely, I felt, these men will push pollution abatement with their full capacity. H.S.F.