

largely because of very limited study of the possibility, whether that has any physical potential. I have not any idea. But I do want to point out that the successful experiences up to the present moment—and they have only been a matter of a few years—of interrupting the aging process has been by interception and by literal physical removal from the area.

In Lake Erie, of course, you are dealing with rather heroic sets of problems. You have the Detroit River coming in which from my own estimate of several years of inquiry is the natural route whereby your treated effluents are bound to continue. Our estimate for 1990 is about 6 million people in the Detroit metropolitan area. And then of course you have the accretions on the lake itself from both sides of the international boundary.

So this kind of a look needs to be taken, not again as a suggestion that you stop improving the quality of the discharges into the lake, but that simultaneously you stop, look, and listen as to your further inquiries and decisions.

Mr. MOSHER. Are you suggesting that we might just take all of this waste, route it around Lake Erie, and put in Lake Ontario?

Mr. CONABLE. No, thank you.

Dr. WOLMAN. You see, what I am saying is that a physical effort of that nature has no counterpart for the moment. It was possible for the sewage and industrial wastes of the Zurich area to be bypassed. Now, of course, it creates a different kind of situation below.

I separated, you may remember, the lakes from the estuaries, for the simple reason that the lakes demonstrate curious biological behaviors. They have the misfortune of not being in tremendous motion. They have some considerable depth, all of them including Erie. You have new water added in very large amounts, but you do not have the kind of continuous flow, even where we run into the tidal situations in the estuaries.

Mr. MOSHER. This would mean, then, that the cycle of changing depths that seems to appear in Lake Erie depends on the amount of water in the lake.

Dr. WOLMAN. Yes.

Mr. MOSHER. It would have a great impact on this situation?

Dr. WOLMAN. Indeed.

Mr. MOSHER. The more water the less—

Mr. CONABLE. The less aging.

Mr. MOSHER. The less aging.

Dr. WOLMAN. And you may have greater "sweeping," if I may use the term.

Mr. MOSHER. Yes.

Dr. WOLMAN. Now the problem of course as you know arises on Lake Michigan, particularly on which the Corps of Engineers at the moment is authorized to engage in detailed studies: You want two things on the lakes and they are two different and perhaps competing things depending on what your hydrologic cycles are. When you are in the dry cycle you want more water.

We have just gone through that in the Great Lakes, all of them, and everybody pleads for doing something upstream where you could release more water.