

for one purpose and result in a whole generation of things that cause results later.

I am interested in the chairman's use of the word "effluent" because it is the problem of affluence and effluence that causes these troubles.

Somebody tried to explain to me the possible difference between reverse osmosis and retro osmosis. If you would like to take a chance at that sometime, I would like to see it in the record.

We are getting into a field where it is entirely new language, which is what I am pointing out.

Dr. WEINBERGER. A personal note. I certainly appreciate the opportunity of being here. I must say it is always a very stimulating experience, and I mean it very sincerely.

Mr. DADDARIO. We will not trouble you further this morning, Dr. Weinberger, but I do think we can proceed later and perhaps get some of these statements into the record.

We, therefore, will continue with Dr. Pecora.

STATEMENT OF DR. W. T. PECORA, DIRECTOR, GEOLOGICAL SURVEY, DEPARTMENT OF THE INTERIOR; ACCOMPANIED BY FRANK CLARKE, ASSISTANT DIRECTOR FOR ENGINEERING

Dr. PECORA. Mr. Chairman, as Director of the U.S. Geological Survey, I appear before you merely to emphasize the fact that ours is an old-line agency that has been gathering, acquiring information and data for almost 90 years and making it available to all users, planners, and managers of our earth's resources.

Among the resources, of course, water is our principal concern. With the permission of the Chair, may I introduce into the record my prepared statement and then use some highlights from it with the thought of saving time that is available for this session.

In the process of acquiring information and data for general use, one needs to have a whole series of continuing recording stations and in this direction we have somewhat in the order of 8,000 recording stations for quality and quantity of surface waters, and something like 15,000 observation wells for the ground water.

Mr. DADDARIO. Dr. Pecora, we can assume that we have many of our streams properly monitored? What do these figures in fact mean?

Because we have so many, it sounds as though we are doing a good monitoring job. Are we or aren't we?

Dr. PECORA. Let me evaluate that for the committee. With the background information acquired over several decades we have an excellent record in many places throughout the country of the variation and the norm that are to be expected in certain streams. We are nowhere near a satisfactory status. We are planning additional monitoring stations because of the changes that are taking place through population explosion in many areas of the country.

One must always think in terms of a frame of reference. For example, we have instituted a program of benchmark stations in areas that are almost completely free from human effects to determine the change in time at such stations, this serves as a frame of reference. In areas of urban expansion or in the stress areas, in suburbia or rurbia, our aim is to develop a background frame of data so the changes in time