

Point 3. In watersheds that contain acid water, some areas of surface mining do not produce acid and can be isolated, and this was the point I was just mentioning about regulation.

The fourth point regards "flushouts" and here we have actually very little information. We have a lot of generalizations but we have very little specific information. Our study in western Indiana shows that a flushout, by the way, is due to a sudden surge of runoff caused by a real intense storm or possibly due to the inadvertent dumping of a reservoir or something like that. A flushout can flush into the streams the acid-forming, iron-bearing—if you want to consider color—materials that are collected on the banks or on the flood plain since the last storm. It can also do it by agitating the acid-forming and iron-bearing materials that have settled out on the streambed during the sustained periods of low flow and thus the acidity and iron content of a stream can be increased by the introduction of nonacid and noniron waters long before the acid waters and the iron contributions from known sources could reach this point of sampling.

Well, these aforementioned illustrations have discussed only the hydrologic facets of surface mining but, nevertheless, they are basic to other reclamation facets. Furthermore, they are examples of need for additional research to provide new answers to old questions that have been incorrectly answered in the past, and to reinforce other answers that have been standing on rather shaky ground.

This, after all, is the purpose of all research, to provide new knowledge, as you know, and in the Busseron Creek watershed of western Indiana we have a marvelous natural laboratory for continued research and demonstration of surface-mining reclamation.

Many other universities are studying additional phases of reclamation. We heard some of this yesterday from Mr. Leirfallom from Minnesota, about the work that his State agency is sponsoring, and from Mr. Eckles, I believe in Colorado. His work is being sponsored at Colorado State University.

These other universities are studying the botanical effects of reforestation. They are investigating the biological effects of the surface mining process such as wildlife, and here, by the way, I would like to recall a statement that Senator Nelson made a couple of days ago when he was talking about the fact that 34 percent of the land reclaimed is a misleading figure, that half of the reclamation is natural.

Then he went on to say it is a green lie. It has crabgrass and quackgrass and so forth, and then he made the statement that I want to take issue with.

He said survival of wildlife is not provided for. Only sparrows and rodents inhabit that country. I am afraid that Senator Nelson hasn't visited much of the strip mining area that I have seen because this is a wildlife habitat. We have deer. We have all sorts of small animals and birds, and these are areas where people are going to attempt to build summer cottages for recreational purposes.

So here again, I think is a generalization that seems to creep into the statements that appear in the press and many people read, but if we analyze them closely we can find different interpretations and exceptions to them.

In addition to the biological effects, some people are studying the physical rehabilitation of the cast-overburden areas, other people are