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GROUNDWATER CONTAMINATION IS A RURAL PROBLEM

by John Hostetler

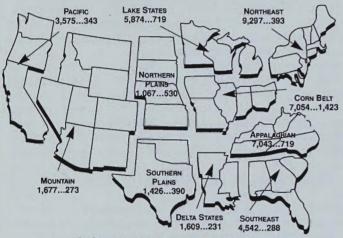
Farmers are not the only ones who have problems with contaminated water. Nearly 38 million nonfarm people also depend on private wells.

Groundwater contamination from nonpoint sources has been linked to farm production practices, but the perception is that only farm people suffer the consequences. While contamination is a growing problem for farm water supplies, nutrient and pesticide contaminated

groundwater potentially affects over seven times as many rural-nonfarm people as farmers. Consequently, farmers and other rural residents alike have a stake in groundwater safety.

Nearly all families and rural residents depend on well water for domestic purposes. In 1985, over 43 million rural people (18 percent of the total U.S. population) lacked access to a public water supply and depended on private wells. Of these

RURAL PEOPLE DEPEND ON PRIVATE WELLS



43,164 RURAL PEOPLE WITH OWN WATER SUPPLY
(INCLUDING FARM PEOPLE)...[1ST FIGURE]
5,309 FARM PEOPLE WITH OWN WATER SUPPLY...[2ND FIGURE]
Numbers are in thousands, for 1985.

43 million people, only 5.3 million (about 12 percent) actually lived on farms. Thus, nearly 38 million rural-nonfarm residents also share in the fate of the aquifers. In the centerfold article, Lee and Nielsen estimate that there are over 19 million people who rely on private wells in the counties with potentially contaminated groundwater.

The greatest concentrations of farm families and other rural people who depend upon their own water supplies reside in the farm production regions along the East Coast, the Lake States, and the Corn Belt. As Lee and Nielsen's map shows, these areas generally share a strong potential for groundwater contamination because of farm chemical use rates, soils, climate, and geology, among other factors.

State health requirements and EPA drinking water standards provide a high level of protection to public water supplies. Public systems easily bear the expense of periodic testing and purchase of treatment features to remove most pesticides and

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other organic and inorganic contaminants. Some rural residents may be able to test their wells. However, the vast majority may be unwilling or even unaware of the need to have a full analysis of their well water for a broad range of pesticides and other contaminants. Such a test potentially costs several hundred dollars and is only good for the time of the test and the location of the test site.

Thus, tests are needed to ascertain the purity of water supplies for millions of rural residents dependent upon private wells.

WILL THE REAL U.S. ECONOMY PLEASE STAND UP

by A. Desmond O'Rourke

Books, articles and speeches decrying the decline of the U.S. economy have become a growth industry in the 1980s. Clearly, in any economy there will be many cases where accomplishments

The U.S. economy has done very well when compared to the performance of other economies, including Japan's.

fall short of expectations. In any international comparison, there will be some measures which will reflect unfavorably. For some, the rise of Japan is seen as synonymous with the decline of the United States.

Data derived from the World Bank Atlas give a rather different picture from that now widespread in the national media. For example, in the 10 years, 1977 to 1986, reported world GNP rose from \$7.8 trillion to slightly over \$12 trillion. In the same period, U.S. GNP rose from \$1.9 trillion to \$4.2 trillion, a much faster rate than total world GNP. The U.S. share of world GNP rose from 24.4 percent in 1977 to 35.2 percent in 1986.

There are, of course, major problems in comparing world GNP figures over time because of changes in monetary values, exchange rates, structural shifts, coverage of countries, etc. While the strength of the evidence suggests that the U.S. has grown relative to all other economies, what has been its experience relative to the EC-12, Japan, and Canada—the other major free-market economies? These countries have excellent statistical services, heavy volumes of trade (so that exchange rates can be reasonably valued) and comparable sources of economic activity.

These four mega-economies accounted for almost 60 percent of world GNP in 1977 and 75 percent in 1986. Of their combined GNP, the U.S. accounted for 41.1 percent in 1977 and 46.7 percent in 1986. Japan's share rose from 16.0 percent to 17.2 percent. Canada's share slipped slightly from 4.2 percent to 4.0 percent, and the EC-12 share fell from 38.8 percent to 32.1 percent. Even though Japan's share grew, the U.S. share grew more rapidly. The decline of the dollar relative to the yen in 1987 may tilt that comparison more in Japan's favor. However, at the time of writing (July 1988) the dollar-yen relationship seems to be reversing once again.

Over the last decade, the U.S. economy in relative terms has done very well. Hypotheses based on other assumptions about reality may be erroneous. Two other questions more pertinent for economists might be:

- Why has the EC-12 been losing ground?
- Why has the share of the poorer nations shrunk so dramatically?

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