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Economic Growth Is Key to Environmental Quality

by Steve Hayward

Summary

Many people believe that environmental protection and economic growth are incompatible goals, but research suggests otherwise. Decades of government data that show dramatic environmental improvements in Michigan and the United States support the idea that economic growth is actually the best guarantor of a safe and clean environment.

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One of America's most enduring popular legends is that the environment is deteriorating and that economic growth is largely responsible. The facts suggest otherwise.

Reliable data on air and water quality and other environmental factors in both Michigan and the nation show that conditions have improved substantially—and are likely to continue improving as long as economic growth and the technology it brings are permitted to work.

The U.S. Environmental Protection Agency reveals that nationwide levels of all six pollutants thought to adversely affect outdoor air quality have declined significantly since the 1970s. Between 1976 and 1997, ambient levels of ozone—the major contributor to urban smog—decreased 30.9 percent. Sulfur dioxide levels—the primary component of acid rain—decreased 66.7 percent, while nitrogen oxides decreased 37.9 percent, carbon monoxide decreased 66.4 percent, and lead decreased a dramatic 97.3 percent. Particulate matter, commonly known as dust and soot, decreased 25.5 percent since 1988, the first year for which particulate data are available. Most Michigan cities rate below national averages for air pollutants.

U.S. Ambient Air Pollution Has Decreased, 1976-1997	
Sulfur Oxides	-66.7%
Nitrogen Oxides	-37.9%
Ozone	-30.9%
Carbon Monoxide	-66.4%
Particulates*	-25.5%
Lead	-97.3%
* The figure for particulates represents data from 1988-1997.	
Source: U.S. Environmental Protection Agency	

Research suggests that as the economy grows, so does our ability to control air and other pollution and protect resources.

National water quality shows similar improvements. Thanks largely to high-tech wastewater treatment facilities, discharge of toxic organics has declined 99 percent and toxic metals by 98 percent since 1970. In recent years, 93 percent of the rivers, streams, and lakes assessed by the state of Michigan were found to be "fully supporting," which means they are safe for swimming and fishing.

Over the past 30 years, there has been a dramatic decline in toxic chemicals found in herring gull eggs in the Great Lakes habitat. Michigan has far surpassed its original goal of having at least 200 pairs of nesting eagles within its borders by the year 2000. Indeed,

the environmental challenge facing the Lakes today no longer comes mainly from industrial pollution or toxics, but from natural threats like non-native "exotic" species crowding out the habitats of indigenous species.

Forests are making a comeback as well. They now cover nearly 30 percent of the nation's total land area, and have remained stable for most of the past century. Each year since 1950, the United States has planted more trees than it harvested. There is about three times more forestland in North America today than there was in 1920. Roughly 44 percent of the state of Michigan is covered in forest, while only 10 percent of the state's land area is considered "developed."

Work remains to be done in brownfield redevelopment, underground storage tank removal, scrap tire reduction, riverbed sediment cleanup, and other areas. But the unmistakable conclusion is that environmentally, Michigan and the nation are better off today than they were even 10 years ago.

A superficial view would give all the credit for these impressive gains to government regulations. A longer-term look, however, reveals a more complicated picture. While regulations undoubtedly play a role, research suggests that the "wealth effect" of a growing economy is the key to an improved environment. As the economy grows, so does our ability to control pollution and protect resources. Growth is the main reason, for example, why air quality was improving rapidly before passage of the federal Clean Air Act.

Economic growth also means improved technology and, therefore, more efficient uses of raw materials and natural resources. Data suggest that economic growth has helped drive many environmental improvements over the past 30 years. To support a million and a half horse-drawn vehicles less than a hundred years ago, the amount of land used for growing feedstock peaked at an astonishing 93 million acres, an area roughly equivalent to all U.S. cities and suburbs today. The average horse annually consumed about five tons of feed and produced 12,000 pounds of manure and 400 gallons of urine, much of which fell on city streets. Today, that waste problem is nonexistent and the car, truck, and tractor have saved about 90 million acres of land from having to be used to grow food for horses.

One shouldn't have to visit poor, underdeveloped, and environmentally degraded Bangladesh to see a cause-and-effect relationship between poverty and pollution on the one hand, and economic growth and a clean environment on the other. Economic progress helps produce environmental progress, a lesson policy-makers in Lansing and Washington should recognize and understand.

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(Steve Hayward is co-author of "Environmental Quality 2000," a joint report of the Pacific Research Institute in San Francisco and the Mackinac Center for Public Policy in Midland, Mich. More information on the environment is available at www.mackinac.org. Permission to reprint in whole or in part is hereby granted, provided the author and his affiliation are cited.)

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