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# Climate Change in the Great American Desert

BY TYLER WATTS

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President Obama's science adviser, Dr. John Holdren, a Harvard physicist and persistent global-warming alarmist, made the news recently with a stunning and bold idea on how to halt the imminent danger posed by global warming—sorry, global climate change. Holdren has discussed the feasibility of geo-engineering, a deliberate attempt at manmade climate change to counteract dreaded global warming. He says that although geoengineering may be farfetched, it might become necessary as a last-ditch attempt to save the planet, especially if greenhouse-gas emissions are not cut soon enough or deeply enough.

Global-warming skeptics like to point out the vanity of the idea that human activity can actually change the climate of the planet. If there is a significant change in average temperatures, skeptics argue, it comes from massive and unstoppable natural forces, not human activity. Skeptics also like to point out the inconsistency of climate-change fear-mongers, particularly the widespread fear of global cooling as recently as the late 1970s.

Green activists and global-warming skeptics alike might be surprised to learn that the idea of manmade climate change has been around in the United States since the middle of the nineteenth century. Much like today, this early wave of climate-change fever was vouched for by many prominent scientists and publications, and had many adherents among the general public. Instead of alarm and distress about the danger of

climate change, though, in the later 1800s there was excitement and anticipation about what it portended for American agriculture. Although the two episodes differ in this important aspect—whether climate change was to be viewed as a bane or a boon—there is undoubtedly much to learn by examining the nature of nineteenth-century climate-change thinking and its impact on the U.S. economy.

The theories back then held that the high-plains region of the western United States was undergoing a secular increase in rainfall, changing from a semiarid to a humid climate. These theories turned out to be dead wrong and several prominent scientists dismissed them from the beginning. But that did not stop hundreds of thousands of people from making life-altering decisions and undertaking big investments based largely on the mistaken belief that human activity was changing the climate for the better.

The westward drive of American settlers during the 1800s was stunning in its scale, scope, and speed. Within a hundred years adventurous entrepreneurs and hardy pioneers, with some help from the U.S. military, had wrested control of the western frontier and turned it into a well-organized extension of the United States. Settlement proceeded apace, despite the fact that vast swaths of this land had, early in the century, been deemed barren and unfit for agricul-

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ture. Major Stephen H. Long, commissioned to explore and map the far western frontier, famously labeled the high plains—extending from roughly the 100th meridian (marking the eastern third of Kansas today) to the base of the Rocky Mountains—the “Great American Desert” in 1823.

Yet the agricultural frontier was approaching the high plains by the 1860s. The 1862 enactment of the Homestead Act, which offered 160 acres to anyone who would farm the land for five years and build a house, encouraged further settlement. Homesteading drew hundreds of thousands of settlers to this “free” land after the Civil War. Although Frederick Jackson Turner declared the frontier closed in 1890, homesteading continued up to the 1920s. Eventually 270 million acres of public domain were claimed.

### Homesteading and Climate Change

As many astute commentators of the day noticed, and as thousands of ill-fated “sodbusters” would find out the hard way, 160 acres was far too small a plot of land for a farm to be sustainable and economically viable over the long-term on the high plains. The climate there is officially labeled semiarid, receiving far less rainfall on average than the midwestern states that most of the homesteaders came from. The rain that does come is highly variable. Some years are so wet that corn and wheat crops exceed midwestern yields, but randomly interspersed with these good years are droughts so severe that nothing at all can be grown. Despite this climatic challenge, and observations and reports detailing the difficulty of traditional agricultural methods and crop selections, homesteaders poured onto the high plains confident in the prospects of dryland farming.

The first wave of homesteaders to hit the high plains of western Nebraska and Kansas in the 1870s had lucked out, arriving during an extremely wet phase in the natural climate cycle. The farms did well initially,

which prompted further waves of migration. But rather than discount the good years as extraordinary based on the long-term climate experience (going back at least 50 years to Major Long’s expedition and the accumulated knowledge of Plains Indians), settlers were beguiled by the idea of climate change, represented by the common nostrum that “rain follows the plow.” This doctrine held that human activity—in this case, cultivation of large tracts—would lead to a positive climate change in the form of increased rainfall. Economists Gary Libecap and Zeynep Hansen have noted:

[O]n the Kansas frontier, homesteaders relied upon predictions of climate change and increased rainfall due

to cultivation. Webb [a Great Plains historian] labeled the notion that precipitation would rise with settlement as a “false hypothesis” that grew out of the intense desire of farmers for more rain. But rainfall initially was high as agriculture moved into the region, and observers lacked any compelling reason to deny its possible link to settlement.

In 1938 Frederic Clements, writing in *Scientific Monthly*, likewise reported the allure of climate-change theories:

With memories of grasshopper years in mind, pioneer and newcomer alike felt that drought and hard times had passed for good and that the future held nothing but timely rains and bountiful crops. This feeling was capitalized by those with lands to sell

or commonwealths to build, and in good faith even men of science gave their support to the myth that the climate had permanently changed for the better as a result of settlement and cultivation.

Theories of increased rainfall attributed its possible causes to all sorts of human activity, from plowing of the soil, to irrigating it, to the planting of trees. Henry Nash Smith, founder of American Studies as an academic discipline, discussed one such theory as advocated by Ferdinand Hayden, a well-known geologist and western explorer:

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[I]n 1867 [Hayden] triumphantly advanced a proposal which he believed would increase precipitation on the Plains permanently. Hayden's scheme was simple: the planting of trees along the eastern edge of the treeless Plains. He believed he had seen experimental proof that trees would thrive there without artificial watering, and that in this fashion "forests may be restored to these almost treeless prairies in a comparatively short period of time." Forests would bring rain: "The settlement of the country and the increase of the timber," asserted Hayden, "has already changed for the better the climate of that portion of Nebraska lying along the Missouri, so that within the last twelve or fourteen years the rain has gradually increased in quantity and is more equally distributed through the year. I am confident this change will continue to extend across the dry belt to the foot of the Rocky Mountains as the settlements extend and the forest-trees are planted in proper quantities."

### Climate-Change Theories Published

Leading to their credibility, official government reports and major scientific journals published climate-change theories like Hayden's. As Smith further pointed out,

[D]uring the decade 1865–1875 the idea of a permanent increase in rainfall gained much wider currency and was treated with respect by scientists of unquestioned professional standing. A communication setting forth theories of this type was, for example, accepted by Joseph Henry for publication in the Reports of the Smithsonian Institution; and similar ideas were discussed favorably at a meeting of the American Association for the Advancement of Science.

All the "rain follows the plow" believers were eventually disappointed by the cycles of severe drought normal for semiarid zones. But the early climate-change optimism, combined with terribly inadequate government land policies, set the stage for tremendous malinvestment, economic waste, and often a tragic and

painful dislocation of population. In the journal *Agricultural History* (1977) Gilbert Fite gave details of the dislocations prompted by an 1890s drought:

Thousands of broke and starving settlers fled the region. Between 1890 and 1900 the population of western Kansas and Nebraska dropped sharply. There were 15,284 less people in the counties west of the 100th meridian in Nebraska in 1900 than a decade earlier and 6,018 fewer farms. Sixteen of South Dakota's counties, mostly between the James and Missouri Rivers, lost population in that discouraging decade. Depopulation in the countryside also brought decline in the towns and villages and punctured the speculative plans of promoters and town-site boosters.

Clements likewise noted the massive depopulation brought on by the drought and the shaking of climate-change views: "Such beliefs [rain follows the plow] were disturbed by the drought of 1889 and shattered for a generation by that of 1893–95, when the exodus from the parched regions sent a half million settlers across the Missouri River and back to their homes in the East."

Similar waves of farm failure and farmer flight recurred after a region-wide drought in the early 1920s. Libecap and Hansen have noted that

in eastern Montana, for instance, one-fifth of the homestead farms failed in the early 1920s, with 60,000 farmers packing up and leaving. Henry Smith reported contemporary observations of the economic hardship:

The seasoned plainsman, General William B. Hazen, asserted in 1875 that "dreadful suffering and almost starvation" had resulted from agricultural occupation of inadequately watered areas in Kansas under the influence of "the very popular theory" that the rainfall was undergoing a permanent increase. Fifteen years later the distinguished British geologist John W. Gregory, who had been conducting a study of artesian wells in the

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Dakotas for the United States Department of Agriculture, wrote in the *Century* magazine that large portions of the Plains had been thrice occupied by overconfident settlers and then abandoned because of drought. And as late as 1901 Willard D. Johnson of the United States Geological Survey pointed to the “vexing problem” created by “fruitless and demoralizing movements of population” into subhumid portions of the Plains under the mistaken belief that “a radical change of climate” was taking place.

The net result of a well-intentioned though terribly misguided government land policy, combined with a pseudo-scientific popular belief in climate change, was wasteful malinvestment in high plains farming on a grand scale. The 160-acre plots allowed by the original Homestead Act turned out to be far too small to support a dryland farm family over the long haul. Although the homestead size was doubled in 1909, 320-acre plots still proved inadequate; by the early 1980s, when most of the failed and marginal farmers had long since fled, average farm sizes had reached into the 1,200–2,500 acre range, according to Libecap and Hansen. Widely held and supposedly “scientific” ideas of climate change magnified the eventual problems. Indeed, the idea of a permanent increase in rainfall in the Great American

Desert, though patently absurd from our vantage point, was nothing but a confirmation-biased rationalization of existing government policy and popular ideas about American development.

I don’t have the scientific knowledge or training to cast an authoritative judgment on the possibility of manmade global warming nor the efficacy of geo-engineering. What I do know, however, is that most grandiose schemes to drastically remake the world, whether based on science or morality, have been tried before in some form or another and found wanting, sometimes with utterly disastrous consequences. More than a century ago, people were fooled by an unlucky coincidence of bad science and good weather into thinking that man could change earth’s climate. Today, we are again facing a string of weird weather coupled with highly dubious science proclaiming that man has it in his power to change—in our case, to wreck—the climate of the planet. Will we learn a lesson in patient skepticism in the face of “scientific” alarmists, or let them in their hubris lead us down a path of improvident and ultimately wasteful investments? I’m skeptical, not just about the very idea of manmade climate change, but also that we’ll be able to take the alarmist-crusaders’ calls for action with the grain of salt they deserve. **FEE**

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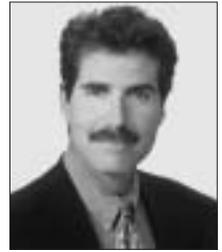
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# Big Business Goes Big for Healthcare Reform

BY JOHN STOSSEL



“**W**hat disturbs Americans of all ideological persuasions is the fear that almost everything, not just government, is fixed or manipulated by some powerful hidden hand,” Frank Rich wrote in the *New York Times* a few months ago.

That manipulation should disturb us. But contrary to Rich, it is not the work of “corporatists” who have sprung up to attack Progressive reforms proposed by Obama and the Democratic majority. Manipulation is what we got many years ago when we traded a more or less free market for the “Progressive” interventionist state. When government is big, the well-connected always have an advantage over the rest of us in influencing public policy.

Observe: Although President Obama and big-government activists demonize health-insurance companies, the companies “are still mostly on board with the president’s effort to overhaul the U.S. health-care system,” the *Wall Street Journal* reports.

And even though the activists criticize Big Pharma, “The drug industry has already contributed millions of dollars to advertising campaigns for the healthcare overhaul through advocacy groups like Healthy Economies Now and Families USA. It has spent about \$1 million on similar advertisements under its own name,” the *Times* reports.

## Big Business, Big Pharma, and Big Insurance

**B**ig Pharma and Big Insurance want Obama-style healthcare reform?

It’s not so hard to understand. “The drug makers stand to gain millions of new customers,” the *Times* said. And from the *Journal*: “If health legislation succeeds, the [insurance] industry would likely get a fresh batch of new customers. In particular, many young and

healthy people who currently forgo coverage would be forced to sign up.” No wonder insurers are willing to stop “discriminating” against sick people. (Forget that the essence of insurance is discrimination according to risk.)

Not that Big Pharma and Big Insurance like every detail of the Democratic plan. Drug companies don’t want Medicare negotiating drug prices—for good reason. If it forces drug prices down, research and development will be discouraged. (Depending on whom you believe, Obama may or may not have agreed with the drug companies on this point.)

As for the insurance companies, they worry—legitimately—that a government insurance company—the so-called public option—would drive them out of business. This isn’t alarmism. It’s economics. The public option would have no bottom line to worry about and therefore could engage in “predatory pricing” against the private insurers.

But despite these differences, the biggest companies in these two industries are on board with “reform.”

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## Horwitz’s First Law In Action

**I**t illustrates economist Steven Horwitz’s First Law of Political Economy: “No one hates capitalism more than capitalists.” In this case, big business wants to shape—and profit from—what inevitably will be an interventionist healthcare “reform.” Can you think of the last time a major business supported a truly free market in anything?

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*John Stossel hosts Stossel on Fox Business Network and is the author of Myths, Lies, and Downright Stupidity: Get Out the Shovel—Why Everything You Know is Wrong. Copyright 2009 by JFS Productions, Inc. Distributed by Creators Syndicate, Inc.*