

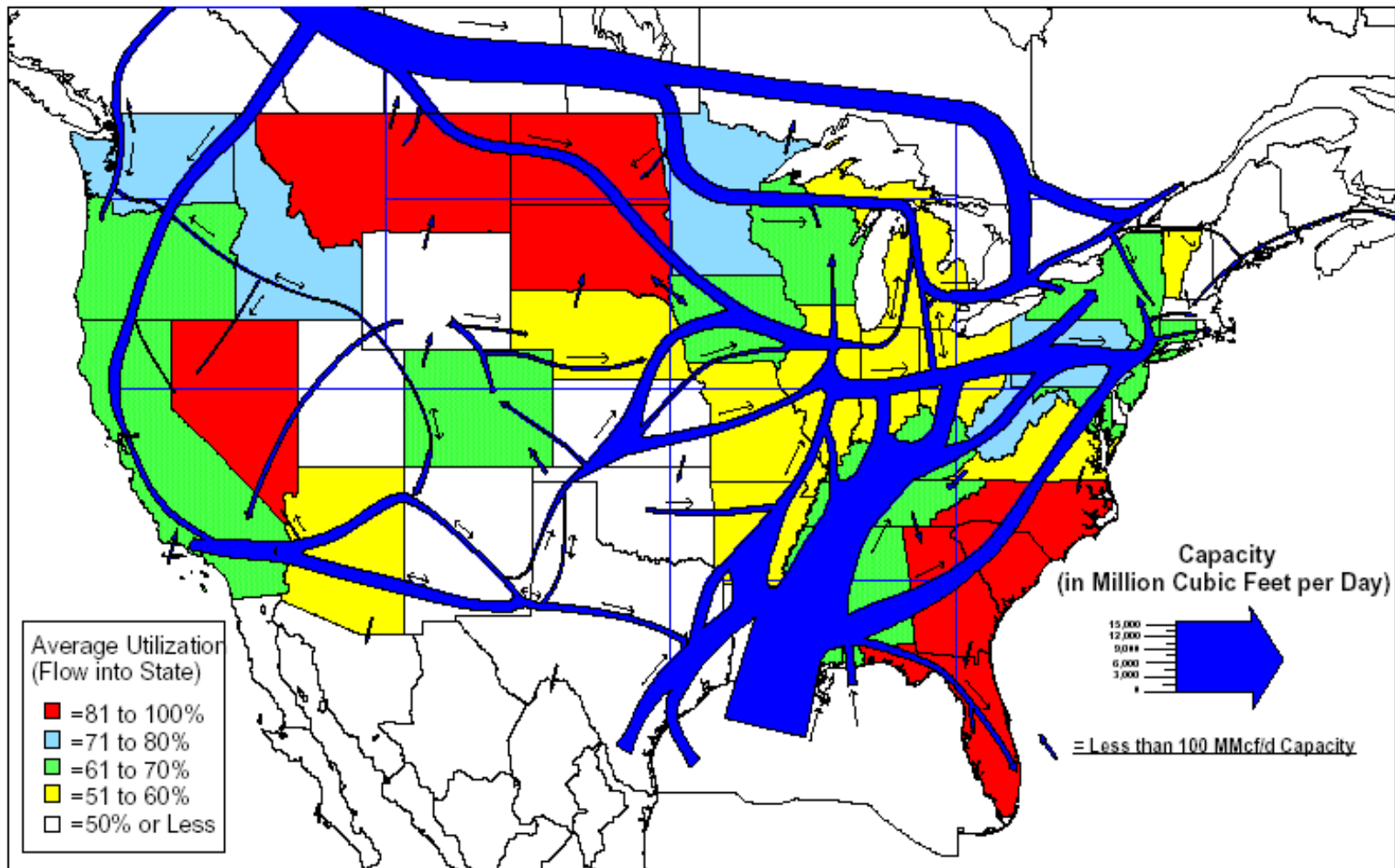
# The U.S. Natural Gas Crisis and Solutions for Santa Fe

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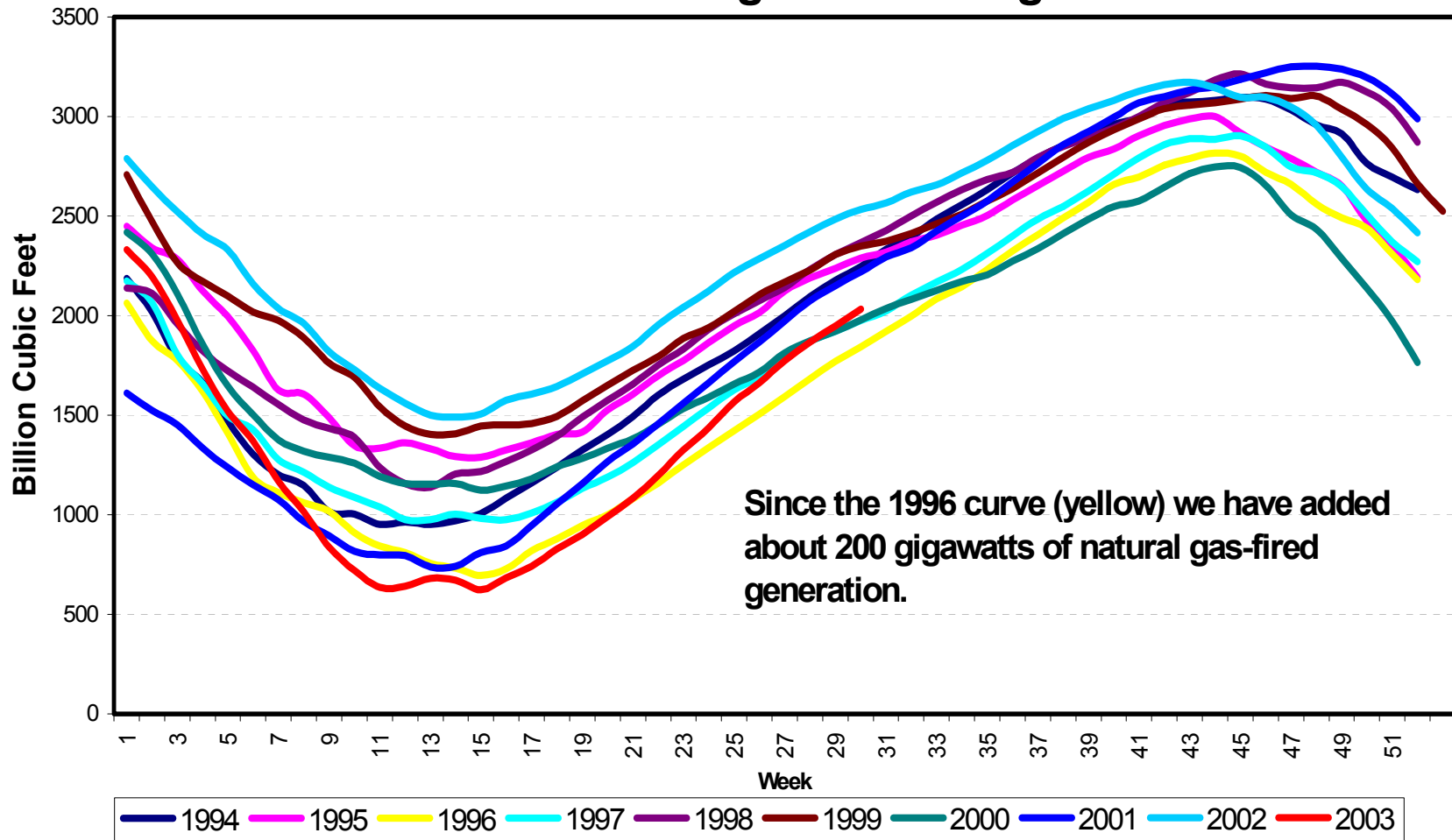
The natural gas pipeline network is like an arterial system supporting the U.S. economy. About one-third of the nation's gas supply comes from the Texas Gulf, and about 18% comes from Canada.



Source: Energy Information Administration

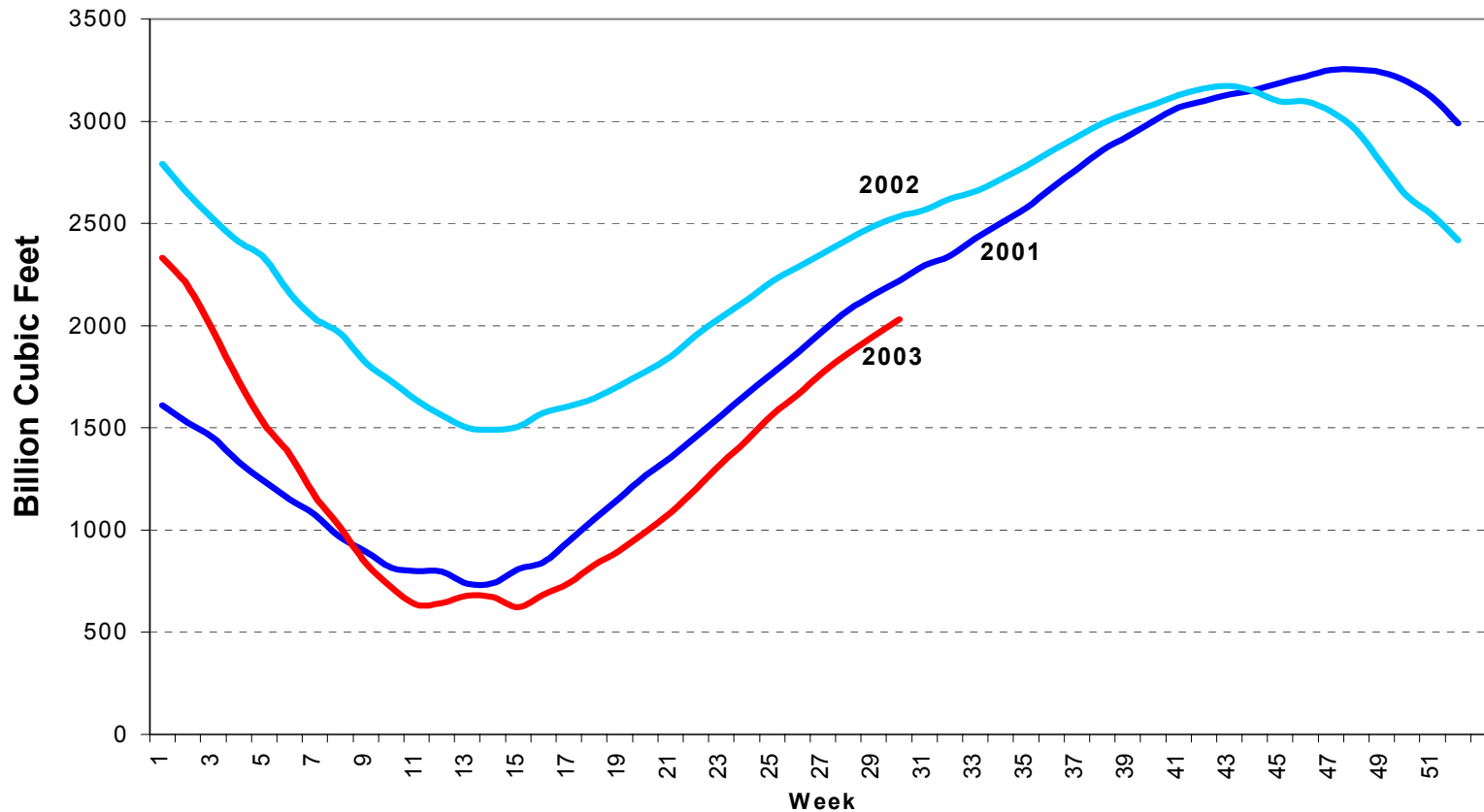
During the summer, we work to inject gas into storage for the coming winter. This summer we began with the lowest storage level in EIA history (the red line below), and the prospect of building a sufficient reserve to meet the coming winter's demand is in doubt.

## U.S. Working Gas in Storage



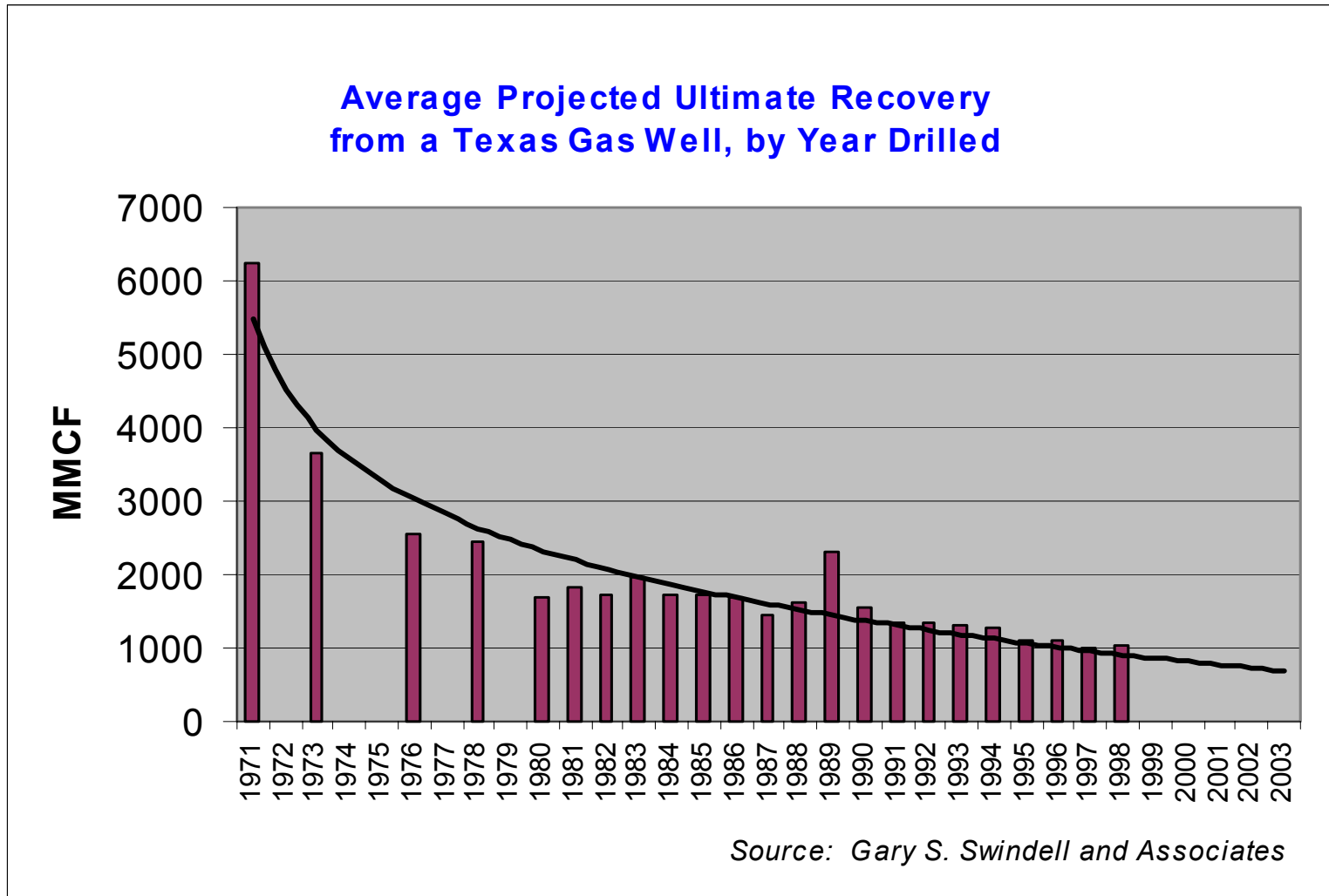
We are presently more than 500 billion cubic feet short of last years gas storage level, in spite of the 900+ drilling rigs working to bring new gas wells on line. Even if we manage to reach last year's level, it won't be enough to keep prices stable this winter. Last winter ended with nine-days of gas remaining in storage.

## U.S. Working Gas in Storage

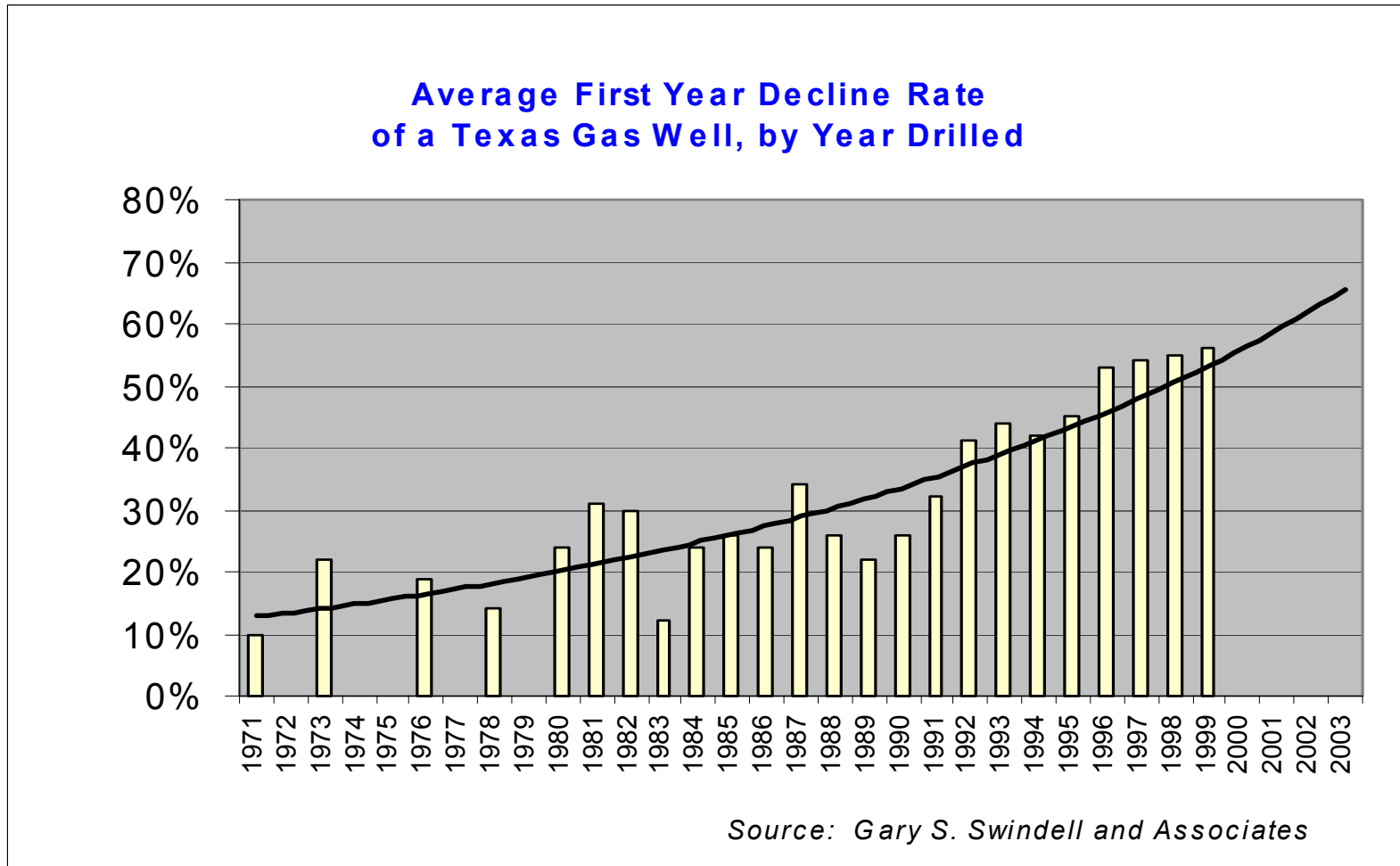


Source: Energy Information Administration

**Drilling new gas wells has become less effective, as each one produces less gas than the one before. Texas still supplies about one-third of our gas, in spite of the yield-per-well falling more than 80% since 1970.**



**In addition to having a lower total yield, the production rate from a new gas well in Texas typically falls by more than 80% in the first year.\*  
(Higher than predicted by this 1999 analysis!)**



*\*according to Simmons and Company International*

**News story discuss the shortage, but not the geologic limitations that make the problem inescapable. There is still plenty of gas in the ground – the problem is the perpetual decline in reserve *quality*, which makes it ever more difficult to produce gas at the rate demanded by the market. Every extracted resource (silver, gold, iron) declines in quality over time, and gas is no exception.**

**Important Energy News:**

[Fertilizer Industry Weighs In On Energy Crisis At Natural Gas Summit \(PDF - 172kb\)](#), The Fertilizer Institute, *June 26, 2003*

[Energy Sec. Warns of Natural Gas Crunch](#), Associated Press, *June 26, 2003*

The impact of natural gas shortages "will touch virtually every American," Energy Secretary Spencer Abraham warned Thursday, but said the administration has no plans to ease air regulations or impose other requirements to force a shift to substitute fuels.

[Natural Gas Prices Worry Industry, Feds](#), Associated Press, *June 25, 2003*

While most consumers aren't yet affected - though they'll likely see higher heating bills next winter - talk of a natural gas crisis is growing louder. The cost of everything from food to automobiles could rise if high energy prices persist, economists say.

[DOE Says U.S. Natgas Supply Crisis Not Yet Over](#), REUTERS, *June 24, 2003*

The U.S. natural gas supply crisis is not yet over, despite recent strong injections of gas into underground storage in preparation for the winter heating season, Energy Secretary Spencer Abraham (news - web sites) said on Tuesday.

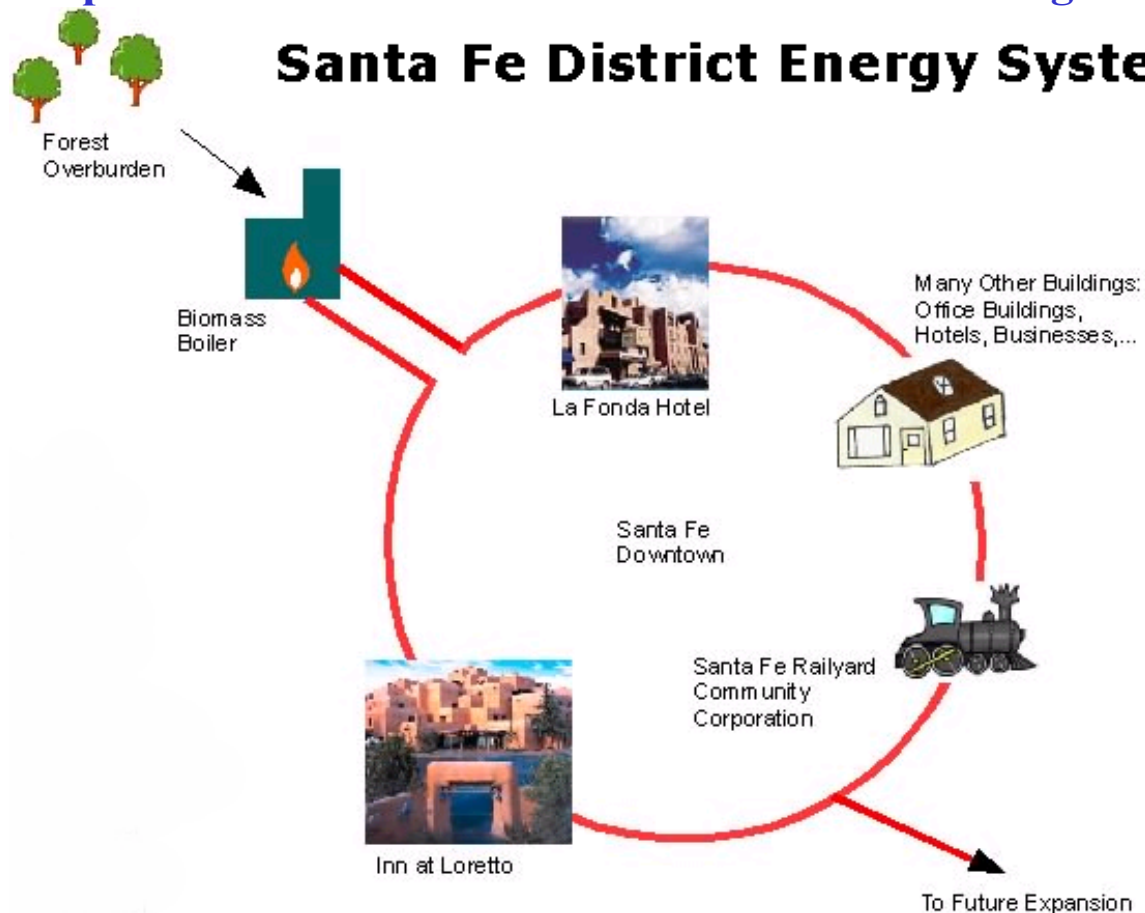
[Short Supply of Natural Gas Is Raising Economic Worries](#), The New York Times, *June 17, 2003*

The economy has been cool, and so has the spring in much of the country. Nonetheless, the United States is facing its most severe shortage of natural gas in a quarter-century.

**Solutions begin with improving energy efficiency, but we also need to switch to renewable fuels. Fortunately, woodchips from forest thinning projects are cheap and plentiful in New Mexico. They can be burned at very high efficiency to heat local homes and businesses.**



The scale of the problem dictates that community-based solutions are warranted. One possibility is district-energy, in which hot water circulates in underground pipes, and businesses and homes simply hook-up to the system for their heat. There are an estimated 6,000 such systems in the U.S., although in most cases the water is heated by natural gas. A district-energy system in Santa Fe could be fired by woodchip biomass, and provide heat at a fraction of the cost of natural gas.



To get the full advantage of switching to a renewably fuelled district-energy system, and to avoid the pitfalls that led to our present energy crisis, certain principles should be adopted:

- Use only **locally harvested, renewable** resources
- Harvest **sustainably**, creating good jobs by using **local labor**
- Create a **community-corporation** or **cooperative** to own the system
- Serve **local needs** prior to exporting any fuels
- Never risk loss of **sovereignty over fuels** through trade agreements



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