

# The Impending World Oil Shortage:

## Learning from the Past

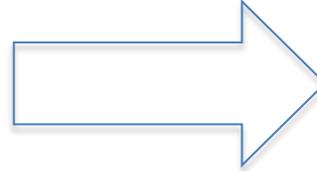
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# Some Definitions & Implications

Prediction: *a forecast, prophecy*



Implies a high level of certainty

Anticipation: *foretaste, expectation.*



Implies a lower level of certainty

Suggestion: *to propose as suitable or possible.*



Implies worth thinking about, if not more

Prediction: World oil production will go into decline at some future date.

Anticipation: World oil production will go into decline in the next 1-4 years.

Suggestion: Public reactions to the decline may be similar to 1973-1974.

## Fact (?)

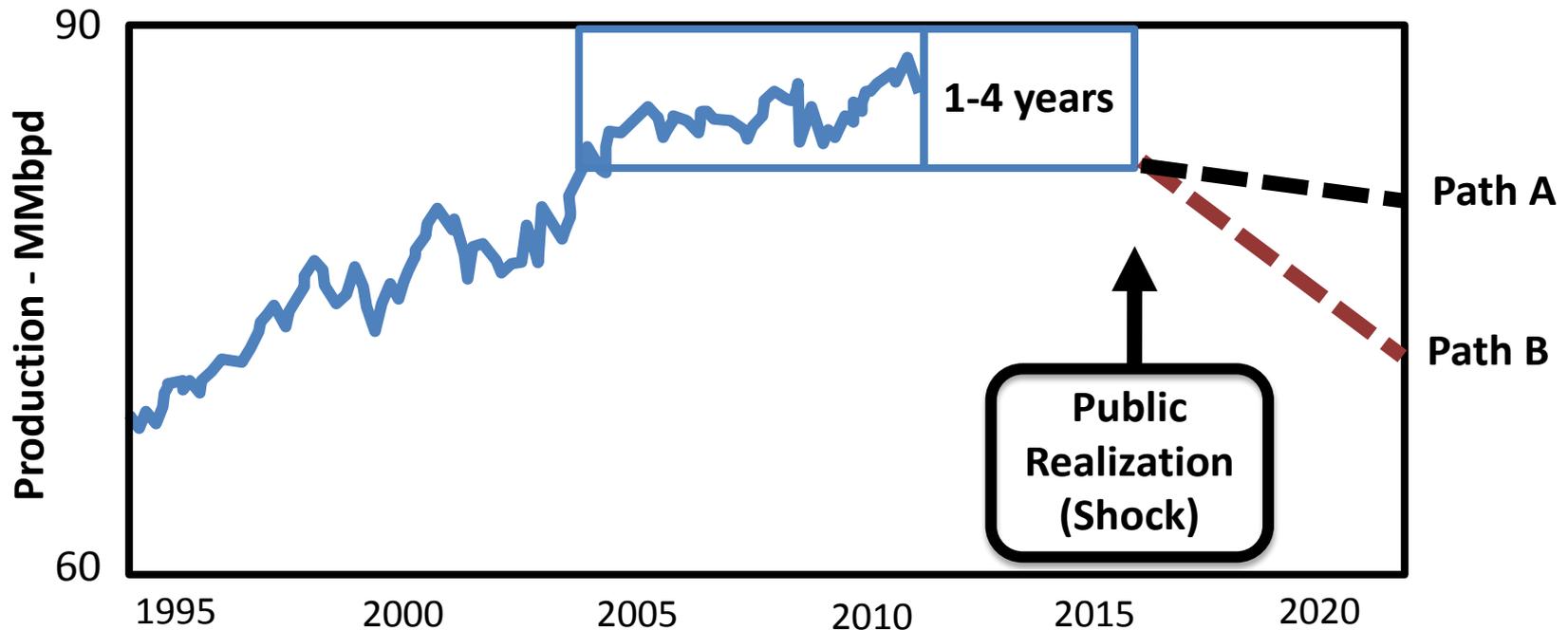
World oil production made a major break from the past in 2004-2005 – Now a plateau or slow rise.



Source: EIA

## Anticipation:

World oil production will likely stay on its current plateau / slow growth & enter decline in 1 - 4 years.



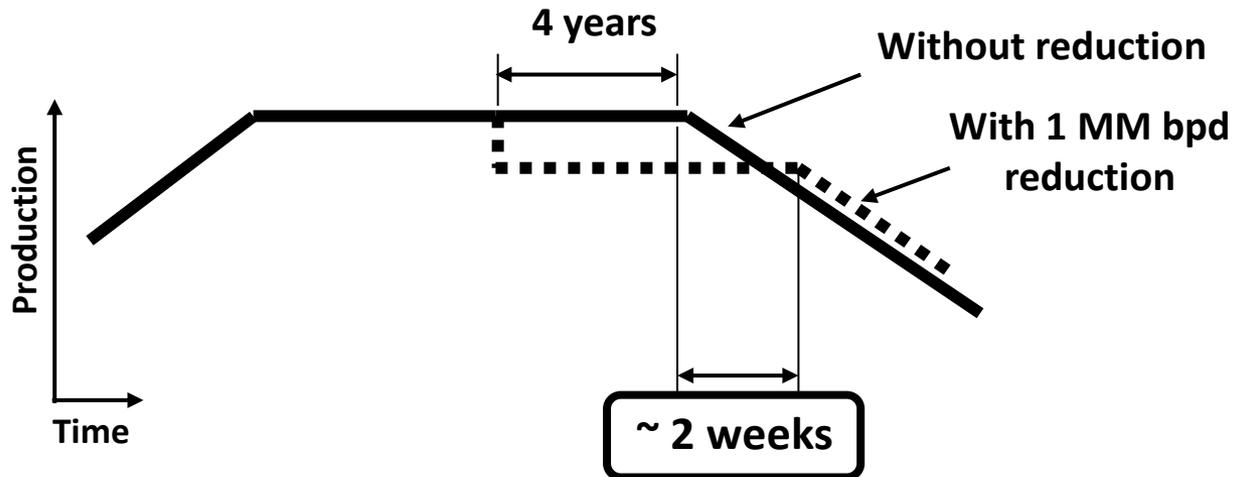
If Path A decline is  $\ll 1\%$ , the problems are manageable.

**If Path B decline is  $\geq 3-4\%$ , the problems are disastrous.**

## Observation:

A drop in demand is unlikely to have a big impact on the date of the onset of decline for the plateau model.

Consider a 1 MM bpd production decline over 4 years – Our maximum.



**So a reduction of a few million barrels/day over 4 years  
might delay the onset of decline by a matter of weeks!**

**Negligible!**

CONCEIVABLE reactions after the widespread public realization of world oil production decline based on the period 1973-1974.



- The 1973-74 situation was influenced by prevailing economic circumstances, the recent abandonment of the gold standard, energy price controls, energy ignorance, environmental concerns & energy management friction, etc.
- To gain insights into what the public heard, let's look at what the newspapers were saying during that period.
- The following is based on my selection of articles collected by Locke Bogart, generously shared.

# Newspaper Quotations – I

**Note: Embargo started in October 1973.**

... the country's growing dependence on foreign oil is not only detrimental to the balance of payments but has contributed to inflation. 5 March 1973

## **Energy Industry Unites in Warning of Coming Crisis.**

- ... the energy problem is continuing to worsen “to the point that the nation is on a collision course with a major energy shortage.”
- Federal offshore leasing has been delayed for environmental concerns....
- A balance must be struck between the need for environmental protection and the need for economic development, including energy growth.

12 March 1973

## Newspaper Quotations - II

### **Overhaul Proposed For Energy System.**

.. senators proposed a 10-year, \$20 billion crash program to ... bring new energy-creating technology to the point of commercial application.

16 March 1973

... The shortage (of gasoline) is here, it's critical and it's not going away quickly or cheaply. Some truckers are predicting a serious transportation slowdown in the Mid-South by summer's end.

23 March

... President Nixon yesterday abolished the 14-year-old quotas on oil imports and called on Congress to end the 35-year-old federal regulations on natural gas prices.

19

April 1973

# Newspaper Quotations - III

**Energy Message Offers No Cohesive Policy.** President Nixon's message on what he calls the nation's energy "challenge" – not energy crisis – is a great disappointment. 23 April 1973

## **Farmers Run Low On Fuel.**

... fuel shortages threaten to idle tractors and ... irrigation pumps.

... Congress granted Mr. Nixon authority to allocate fuels... Priority customers were to be farmers, food processors, doctors and hospitals, and municipal transportation systems. 19 May 1973

Texaco ... began a 10-gallon a customer rationing system at its service stations along toll ways in three states... The Texaco rationing system also applies to diesel used by trucks and buses. Since the start of the gasoline shortages two months ago about 880 gas stations have gone out of business and early 1,900 more are threatened with closure. 31 May

1973

## Newspaper Quotations - IV

While Congress debates who is responsible for the closing of 2,000 gas stations across the land and farmers cry that there is not enough fuel to move their tractors this summer, U.S. policy planners are worrying that the worse is yet to come – an absolute worldwide shortage of oil.

17 June 1973

**More Gas Stations Report Curtailed Business Hours.**

20 June 1973

**4<sup>th</sup> Florida Gas Truck Is Hijacked.**

20 June 1973

**Energy Crisis Is Focus of Much Talk, Little Action.** 29 June 1973

Now some congressional voices are going so far as to demand nationalization of the oil industry....

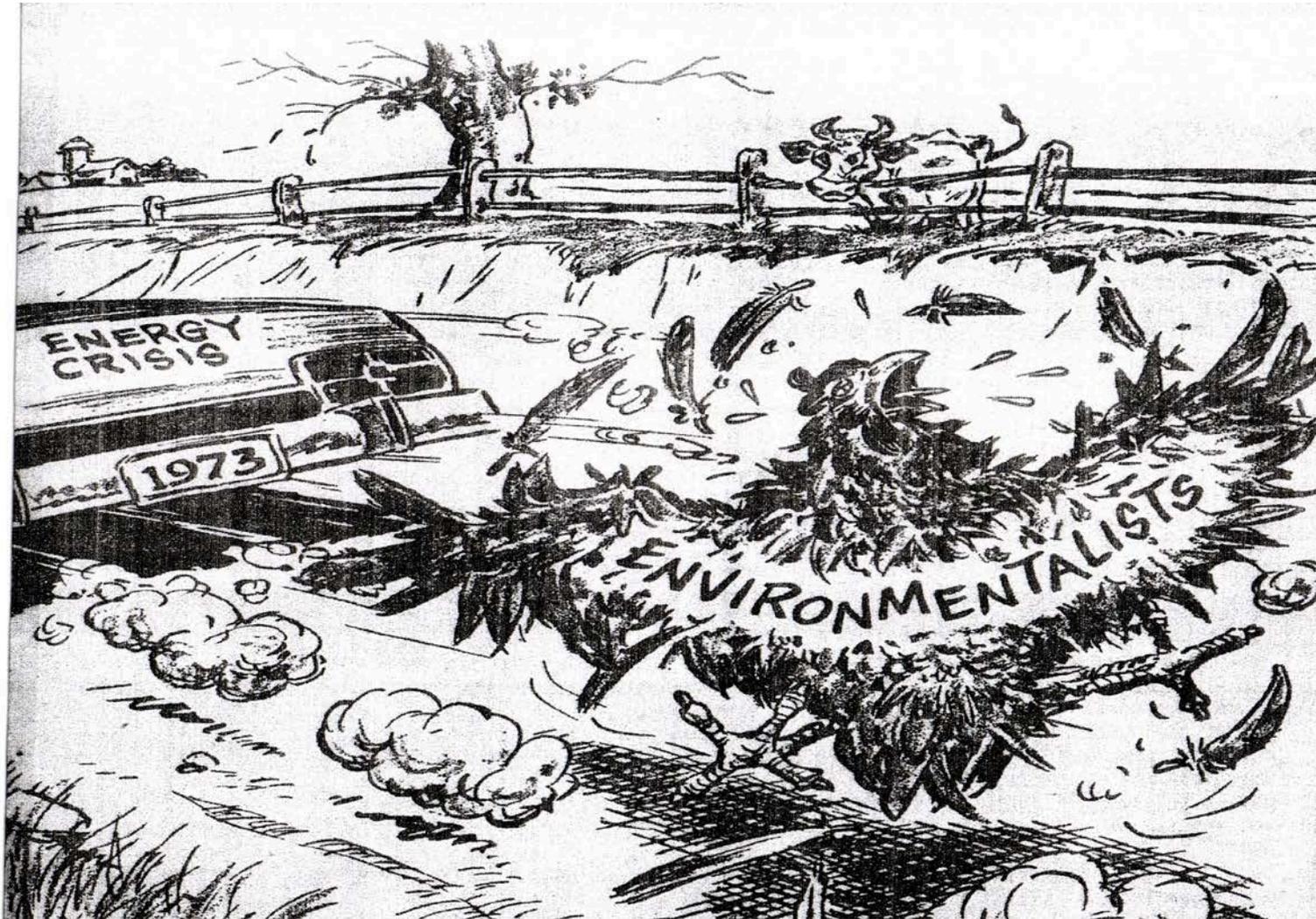
8 July 1973

The environmentalist movement could lose its public support unless it takes a more practical approach to the nation's energy crisis....

20 August

1973

Some thought environmentalists were part of the problem.



# Newspaper Quotations - V

... President Nixon yesterday declared that the country must retreat from its clean air standards to avoid a fuel shortage this winter. 9 September 1973



**Saudi Arabia To Embargo All Oil to U.S.** 21 October 1973

**More Arab States Halt Oil.** 22 October 1973



**Oil Has Europeans In Stranglehold.**

26 October 1973

**Sunday Drives Banned in Holland.**

31 October 1973

**Canada Raises Tax by 400% On Oil Exports to U.S.**  
1973

2 November

The administration stuck too long to the vain hope that voluntary allocations of fuel would be sufficient to bring about a fair sharing of what were pictured as relatively minor inconveniences. 5 Nov. 1973

# Newspaper Quotations - VI

## **President Proposes Controls on Energy**

... sweeping authority to ration gasoline and fuel oil, reduce automobile speed limits, exempt industries from environmental controls and impose taxes on excessive use of energy.

8 November 1973

## **West Europe, Japan Draft Crisis Plans.**

8 November 1973

## **Economics of War and Energy.**

... hopes for a balanced budget next year look less solid...

... the energy situation has a double-barreled inflationary impact. ... higher gasoline, fuel oil and electricity prices will have a “cost-push” effect making other products more expensive. ... the loss of output will result in the increasing “demand-pull” inflation... The combination of events is causing a reassessment of thinking.

8 November 1973

## Newspaper Quotations - VII

### **Energy Crisis Laid to Laxity.**

... the causes of the crisis go back at least three years, with the White House and the oil industry sharing the blame...

... Texas oil fields began to decline in 1970, a situation that caught the country's oil policy makers by surprise.

11 November 1973

### **Oil Executives See No Way Out.**

Leaders of the nation's oil industry, in a mood of near despair, see absolutely no way out of the worst oil shortage in U.S. history. They say gasoline rationing will be necessary for years... Moreover, they expect the shortage to reduce supplies and raise prices of consumer good made with petroleum. ... because oil takes a long time to transport, some parts of the country will be unable to get anything near their needs. "There's a limit to how fast you can increase energy supplies, but you've just had no limit on consumption.

14 November 1973

### **It's Worse Than We Thought.**

14 November 1973

## Newspaper Quotations - VIII

The experts used to say that a country couldn't suffer from inflation and recession at the same time. But from 1969 to 1971, President Nixon proved that both could go on simultaneously. We were also told that shortages and recession were contradictory..... But in 1974, it would appear the United States will achieve the impossible...

25 November 1973

**Even before the crunch reaches homeowners, drivers, production planners and government managers, it has pounded the stock market into a decline that carried prices down faster and farther than at any time in recent years – and still shows no signs of ending. The selloff caught Wall Street by surprise and left it utterly confused.**

25 November 1973

Conflicting forces will operate on interest rates. The economy's slower pace will reduce demand for credit, which will tend to lower interest rates. But inflationary effects of the energy shortages will lead lenders to demand higher interest rates as compensation.

26 November 1973

# Newspaper Quotations - IX

**Defense Drafts Civilian Oil.** Major oil firms have been ordered to deliver fuel immediately to the Defense Department to replace supplies cut off... .. the fuel is being taken from the civilian sector to maintain defense readiness.

27 November 1973

**Big Jump in Fuel Prices Spurs New Inflation Spiral.** Fuel and power prices soared 19.3 percent at the wholesale stage in November ..... The increases are expected to spread through the economy and boost the retail prices paid by consumers, dashing hope for an significant abatement in inflation.

7 December 1973

... the general conclusion seems to be that the administration was caught unprepared by events and even now is refusing to face some of the hard decisions that must be made.

9 December 1973

**U.S. Pushes Car Pooling Plan.** Based on cutbacks in jet fuel, airlines have already canceled 1000 daily flights, plan to cut 1,600 more in January and have said they will have to lay off 25,000 employees next year.

13 December 1973

## Newspaper Quotations - X

**Cheating on Fuel Already Starting.** ... although the use of rationing would have considerable support ... it would open the door for coupon counterfeiting and other forms of devious practice. 15 December 1973

**General Motors to Idle 38,000; Airlines Plan Layoff, Flight Cuts.** 29 December 1973

**Soaring Oil Costs Threaten to Swamp World Economy.** The economic implications of recent oil price increases are so staggering that most ... analysts confess that it will take more time to figure out the full impact. ... the outlook for less-developed countries is “nearly disastrous.” ... the developing nations would begin to dry up as a market for the industrialized countries, worsening the recession in the rest of the world. 30 December 1973

**N.Y. Bandits Hijack 5,000 Gallons of Gas.** 30 December 1973

# Newspaper Quotations - XI

**Gasoline Line Blues.** Early birds trying to beat the Saturday jam at gas stations by filling up yesterday found they just couldn't win – the lines were longer....

5 January 1974

The Nixon administration has all but decided that it can wait several more months (before deciding on) gasoline rationing.

16 January 1974

**World Economics – Forecast Darkens.** ... with oil prices soaring, the picture is turning darker. For the first time in many years, virtually all the major national economies are expected to bog down simultaneously.

22 January 1974

**Conferees to Try Again To Get Energy Bill Going.**

2 February

1974

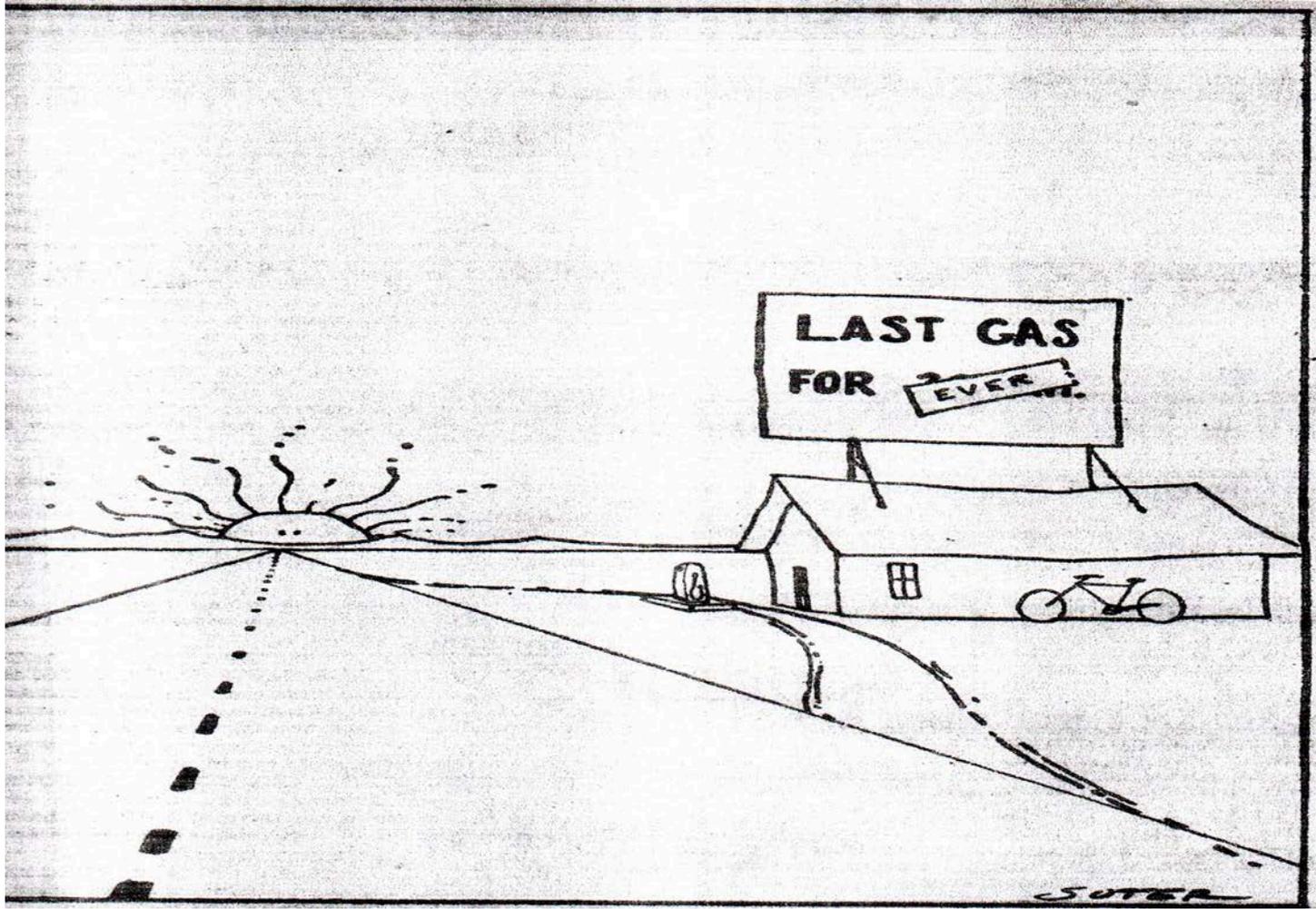
(The Amoco Chairman) pointed out that after taking into account priority users such as hospitals, truckers, railroads, food processors, and growers ... plus industrial firms, which are supposed to receive 90-95 percent – “the swing has to come back to the gasoline used for passenger car driving ....”

7 February 1974

# Oil Embargo Gasoline Lines



# Hopelessness?



## What Happened & Could Happen Again

- **High fuel prices, shortages, gasoline lines**
- **Economic slowdown, chaos**
- **Layoffs, service cancellations, gas station closings**
- **Public anger, impatience, confusion, desperation**
- **Government confusion, unpreparedness & deadlock**
- **Rationing by industry / government**
- **Inflation, high interest rates, stock market declines**
- **Environmental conflicts with pragmatic mitigation**
- **Fuel theft & hoarding**
- **Darkening outlook**

# In Conclusion

- "Those who cannot remember the past are condemned to repeat it." George Santayana
- If you haven't already, you might want to pay careful attention to the two previous oil cutoffs, because the onset of world oil production decline could engender similar reactions & impacts.
- We're all going to be affected.

Will you act before the awakening?  
or  
Will you wait & be swept up by events?