



Drumbeat: April 10, 2013

Posted by [Leanan](#) on April 10, 2013 - 9:50am

[Stuart Staniford: Should The Last Few Years Have Updated Your Idea of Peak Oil?](#)

For oil production to halve over the next twenty years, it would have to decline on average by 3.5%/yr throughout that time (possibly some years by more, some years by less). Above I have posted the average annual change in oil production 1965-2012 (with data from BP except for 2012 from EIA). I have also added a linear trend line out to 2040. Obviously, this is a rather rough time series and the linear fit is not particularly strong and the extrapolation not particularly stable. But it's not clear that anything else will work much better - global oil production is a very complex process that we understand poorly. In that situation, we are probably best sticking to very simple models and acknowledging their severe limitations. At any rate, the straight line implies that peak oil (in the sense of "average growth is zero") was in about 2009. The straight line also implies that we would not reach average growth being -3.5% until almost 2040.

So Professor Meadows is asserting unequivocally that this line is going to make an abrupt turn downwards in the next decade or two. Possible, but it's a strong claim that requires strong evidence, and the interview certainly doesn't lay out the basis for his views, or his certainty in them.

[To Stem Fall in Oil Output, Alaska Seeks to Slash Industry Taxes](#)

President Obama's budget proposal this week is likely to seek an end to federal tax breaks for oil and gas companies, attempting to revive a bid that died in Congress last year. Meanwhile, with much more rigor, Alaska is heading in the opposite direction.

Alaska's State House is working on a bill already passed by the Senate that would overturn the state's progressive oil tax structure, which increases the taxes oil companies pay as the price of oil rises. Supporters of the overhaul bill, which was written by Republican Governor Sean Parnell, say the tax break will help boost dwindling oil production in Alaska, which was overtaken by North Dakota last year as the number two oil-producing state. (See related: "Pictures: Bakken Shale Oil Boom Transforms North Dakota," and "The New Oil Landscape.") Texas produces by far the most oil in the United States.

Critics of the Alaska bill, however, say the move marks the end of a taxation scheme that has filled state coffers while much of the rest of the United States struggled through the recession. And they worry the break will do little to spur oil production.

[Refineries sprout in North Dakota, bucking the trend](#)

(Reuters) - On a windswept North Dakota prairie in late March, Governor Jack Dalrymple drove a bulldozer into the fertile black earth and broke ground on the first new U.S. refinery since 1976.

The state's two U.S. senators, as well as dozens of other politicians and investors, stood nearby wearing hard hats, eagerly sharing hopes that this new refinery will help resolve North Dakota's diesel demand problem.

[WTI Falls as Supplies Rise, OPEC Trims Demand Forecast](#)

West Texas Intermediate fell, halting a two-day advance as a report showed stockpiles of U.S. crude increased to the highest level since 1981.

Futures slipped as much as 0.6 percent in New York after the industry-funded American Petroleum Institute said inventories gained 5.1 million barrels last week. An Energy Department report today may show supplies advanced 1.5 million barrels to about 391 million, the highest in 22 years, according to a Bloomberg survey of analysts. OPEC trimmed its estimate for global oil demand growth.

[OPEC joins U.S. in lowering 2013 oil demand growth view](#)

LONDON (Reuters) - OPEC on Wednesday trimmed its forecast for global growth in oil demand in 2013, becoming the second of the world's closely watched oil forecasters this week to predict weaker consumption.

The move by the Organization of the Petroleum Exporting Countries in a monthly report follows a similar downward revision to oil demand growth in 2013 by the U.S. Energy Information Administration on Tuesday.

[China Keeps Fuel Prices Unchanged in First Review of New System](#)

China, the world's second-biggest oil consumer, won't adjust gasoline and diesel prices in the first review under a new mechanism because international crude costs have remained relatively stable.

There will be no change to tariffs because average global crude costs in the past 10 working days were "basically" the same as when China last revised fuel prices, the National Development and Reform Commission said on its website today. The NDRC, the nation's top economic planner, previously considered an adjustment every 22 working days. The modification signaled this time will be carried over to the next review, it said.

[Kuwait investigating plan to extract shale gas - source](#)

KUWAIT (Reuters) - Kuwait is investigating a plan to extract shale gas from its northern fields, a Kuwaiti oil sector official said on Wednesday, estimating that the Gulf Arab state could produce 150-200 million cubic feet per day under the right conditions.

OPEC member Kuwait is a major oil producer, with a capacity of 3 million barrels of oil per day. However its gas production is relatively low and it depends in part on gas imports to serve its energy needs.

[Russia Proposes Oil-Extraction Tax Increase to Raise Road Funds](#)

Russia proposed to increase extraction taxes on oil, its biggest export earner, to raise as much as 60 billion rubles (\$1.9 billion) for road building.

The government is considering a jump of about 5 percent in the levy as part of 2014-2016 tax policy, Finance Minister Anton Siluanov said today in Moscow. Ilya Trunin, a department head at the ministry, said it's a "reserve measure" to raise funds.

[ASPO International announces Qatar confident of future gas demand](#)

The conference "Peak Oil: Challenges and Opportunities for the GCC Countries" in Doha, Qatar, has ended. It was a very interesting Peak Oil conference and was the first to be held in the Middle East. I was given the honour of summarizing the conference and will write a summary when I am back in Sweden.

[Energy and Thatcher: a tangled legacy](#)

Both sides of the environmental debate are keen to claim Thatcher as one of their own. She was, it's said, the first major politician to bring climate change to prominence as a global issue; she made speeches on the subject to the Royal Society in 1988 and to the United Nations General Assembly the following year; surprisingly, she even acknowledged in these speeches that the free market 'would defeat its object' if it did more damage to quality of life through pollution than it could improve it through providing goods and services.

It's been said that Thatcher's opinions on this were shaped by her background as an industrial chemist and her ability to read research papers, but frankly this seems to be as much of a myth as her contribution towards developing Mr Whippy ice-cream (though hot, rather than cold).

[Gay rights activists, topless protesters greet Putin](#)

Western nations need Russia for energy and as a market for exports but are uneasy about Putin's human rights policies and his treatment of opponents in his new Kremlin term.

Putin's visit to the Netherlands and Germany, Moscow's biggest trade partners in Europe, also comes at an awkward time after a wave of state inspections of foreign-funded non-governmental organizations in Russia that has been much criticized abroad.

In Amsterdam, Dutch and Russian companies signed a batch of energy deals and Putin met Queen Beatrix and Prime Minister Mark Rutte, while around 1,000 protesters blew whistles, played loud music, and waved the gay pride flag nearby in the city famous for its liberal attitude.

[Turkey open to energy ties with Israel, but early days](#)

ANKARA (Reuters) - A tentative rapprochement between Turkey and Israel could eventually pave the way for joint energy projects but it is still too early to talk of specifics, Turkey's energy minister said on Wednesday.

A U.S.-brokered thaw between Turkey and Israel could alter the energy equation in the eastern Mediterranean, in theory allowing newly discovered Israeli gas to be piped to import-dependent Turkey and on to other markets.

Israel, once energy poor, is expected to become a gas exporter by the end of the decade. Its huge offshore Leviathan field contains an estimated 17 trillion cubic feet (tcf) of gas, making it the world's largest offshore discovery of the past decade when it was found in 2010.

[FACTBOX-Political risks to watch in Iraq](#)

BAGHDAD (Reuters) - Attempts to resolve a power-sharing crisis in Shi'ite premier Nuri al-Maliki's government, disputes over oil with autonomous Kurdistan and spillover effects from Syria's war on Iraq's internal politics and insurgent violence are areas to watch.

Violence has surged since the start of the year with al Qaeda's local wing gaining from the Syrian conflict next door, and feeding off Sunni Muslim discontent in western provinces along the Syrian border.

[Iran's Q1 fuel oil exports rise more than 12 pct over Q4 - sources](#)

Iran exported nearly 18 million barrels of fuel oil in the first quarter, or around 200,000 barrels per day, an increase of nearly 12.5 percent from the previous quarter, according to traders and data from Thomson Reuters Oil Analytics.

The figures show that Iran's fuel oil exports remain healthy despite tougher Western

sanctions aimed at restraining the country's nuclear ambitions, although the measures have more than halved its exports of crude oil over the past year.

[Qatar PM promises \\$3 bln more aid to Egypt](#)

DOHA (Reuters) - The Qatari government has agreed to provide an additional \$3 billion of aid to Egypt, Qatar's Prime Minister Sheikh Hamad bin Jassim al-Thani said on Wednesday.

"We reached an agreement to add more bonds from the Qatari government in the amount of \$3 billion. During the coming days, we will discuss the details of issuing those bonds," Sheikh Hamad told a joint news conference with Egyptian Prime Minister Hisham Kandil.

[Egypt close to signing Qatari gas deal](#)

Egypt might finalize a deal to import natural gas from Qatar during a visit by Prime Minister Hesham Qandil, according to Egyptian Planning and International Cooperation Minister Ashraf al-Araby.

[APA Expects Final Bids for Australia Gas Pipeline in Next Week](#)

APA Group, whose pipelines deliver more than half of Australia's natural gas, expects to receive final bids shortly for a pipeline that may fetch about A\$400 million (\$420 million).

APA, which agreed to sell the Moomba to Adelaide Pipeline System to get regulatory approval for its takeover last year of Hastings Diversified Utilities Fund, trimmed the list of bidders to a "small handful" of companies and expects binding offers "in the next week or so," Managing Director Mick McCormack said in an interview in Sydney.

[Genel Rises on 'Significant' Oil Find in Kurdistan](#)

Genel Energy Plc, an oil explorer run by former BP Plc Chief Executive Officer Tony Hayward, rose to the highest in five months after making a significant oil discovery in Kurdistan.

[Asian LNG Set to Rise as Premium at Two-Year Low](#)

Liquefied natural gas prices in Asia are poised to reverse an eight-week drop that brought them to a two-year low relative to cargoes for Europe as Japan faces delays in starting nuclear reactors.

LNG for northeast Asia has fallen 22 percent from a record in February, cutting its premium to shipments for southwest Europe to as little as \$1.40 a million British thermal units, data from World Gas Intelligence show. Asian prices may soar about \$5 to more than \$20 per million Btu by September, according to Sabine Schels, an analyst at Bank of America Corp. in London.

[Tokyo Electric Boosts Coal Capacity to Cut Need for Costly Oil](#)

Tokyo Electric Power Co., Japan's biggest utility, may cut its oil purchases by more than one-third as it boosts its reliance on coal plants to reduce an energy bill that's ballooned since the Fukushima nuclear crisis.

Tepco, as the utility is known, will generate or buy as much as 54 percent more electricity from coal-fired plants starting this month compared with last year, according to calculations based on company statements. That may enable it to reduce its purchases of crude and fuel oil by as much as 3.95 million kiloliters, or 68,000 barrels a day, according to Osamu Fujisawa, an independent energy economist in Tokyo. Tepco bought 10.8 million kiloliters in the year ended March, the company said today in a report on its website.

[Canadian Visits U.S. to Promote Oil Pipeline](#)

WASHINGTON — Alison Redford, the premier of the Canadian province that is home to the oil sands formations that would supply the proposed Keystone XL pipeline to the United States, said Tuesday that critics of the project had distorted its environmental effects and exaggerated the impact of developing the oil.

[Killing Keystone Seen as Risking More Oil Spills by Rail](#)

A rejection of the Keystone XL pipeline by President Barack Obama would push more of Canada's \$73 billion oil exports onto trains, which register almost three times more spills than pipelines.

The March 29 rupture of an Exxon Mobil Corp. oil pipeline in Mayflower, Arkansas, provided the latest evidence for opponents citing the risk of environmental contamination in their efforts to scuttle the Keystone XL project, an almost 2,000-mile pipeline linking Alberta's oil sands with the world's largest refining market on the U.S. Gulf Coast. The alternative, hauling crude by rail, may be worse, said Charles Ebinger, director of the Brookings Institution's energy security initiative.

[ExxonMobil faces lawsuit after Arkansas oil spill](#)

(CNN) -- Residents in Mayflower, Arkansas, have filed a class-action lawsuit against ExxonMobil after a pipeline rupture that allowed thousands of barrels of heavy crude oil

to flow into a residential area.

They are seeking more than \$5 million in damages.

[Exxon Mobil Is Found Negligent in New Hampshire MTBE Use](#)

Exxon Mobil Corp. will appeal a \$236 million New Hampshire verdict in a case over the use of the gasoline additive MTBE, after having gotten a much larger award in a similar dispute thrown out by a court in Maryland.

After an almost three-month trial, a jury in Concord took about three hours to find Exxon Mobil negligent for putting the additive in gasoline without warning the state of its risks, and that the company should pay for contaminating New Hampshire's groundwater.

[U.S. proposal to move fracking wastewater by barge stirs debate](#)

(Reuters) - The Obama administration is inching ahead with a plan that would allow wastewater from fracking to be shipped on barges, fueling a debate whether it is safer than other transportation modes or risks polluting drinking water.

The Coast Guard last month quietly sent to the White House's Office of Management and Budget a proposal to allow the barging of fracking wastewater. If the plan is pushed forward, it would become a proposed rule open for public comment and could be finalized sometime in the near future.

[NRA to boost Fukushima plant staff over water leaks](#)

Nuclear Regulation Authority Chairman Shunichi Tanaka on Wednesday instructed the NRA Secretariat to increase its staff at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant to deal with radioactive water leaks at the disaster-stricken plant.

The leaks are "very serious and deeply regrettable," Tanaka told a regular meeting of the authority. "It's important to devise measures to prevent the leaks from affecting areas outside the plant premises and check progress."

[Stop using reservoirs at Fukushima: Motegi](#)

Tokyo Electric Power Co. must stop using sunken reservoirs to store radioactive water accumulating at the crippled Fukushima No. 1 nuclear plant once it has enough storage tanks, Economy, Trade and Industry Minister Toshimitsu Motegi said Wednesday.

[Combined wisdom needed to deal with leakages of contaminated water](#)

The rainy season is approaching, meaning the volume of groundwater will substantially increase. There is no time to waste in strengthening measures to deal with the leakages.

It is apparent that there has been a recent decline in the level of urgency among workers at the Fukushima No. 1 plant, as a series of blackouts have also occurred. TEPCO should brace itself.

[Asia's Accelerating Energy Revolution: Japan](#)

Largely unnoticed in the West, Asia's energy revolution is gathering speed. It's driven by the same economic and strategic logic that Reinventing Fire showed could profitably shift the United States from fossil-fuel-based and nuclear energy to three-times-more-efficient use and three-fourths renewables by 2050.

Renewable energy now provides one-fifth of the world's electricity and has added about half of the world's new generating capacity each year since 2008. Excluding big hydro dams, renewables got \$250 billion in private investment in 2011 alone, adding 84 GW, according to Bloomberg New Energy Finance and ren21.net. The results were similar in 2012.

[South Africa's bottomless pit for renewables](#)

South Africa is running way behind the curve on this. Renewable energy sounds wonderful because it claims to be infinite and clean. But it is horribly expensive and doesn't do the job anyway, because it is so dependent on natural conditions over which humans have no control. It has to be backed up by coal, nuclear, gas or thermal producers.

Very large savings can be realised by trashing these grandiose plans to spend money on solar and wind power, which fail to produce the base load we so desperately require.

[Power Shift Away From Green Illusions](#)

Every day, the news about climate change and the harms that are sure to accompany it gets worse and worse. To many environmentalists, the answer is simple: power shift. That is, shift from fossil fuels to clean, green, renewable, alternative energy. Well-meaning concerned citizens and activists have jumped on the bandwagon.

The problem with this simple solution: Things aren't as simple as they seem, and "there's actually no such thing as a free lunch" when it comes to energy consumption and production. Further, what we're often sold as "green" and "clean" is actually neither. In the spirit of these inconvenient truths came a timely and provocative book, perhaps missed by many, titled, "Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism," by Ozzie Zehner.

[Ballooning Gas Exports to Leave Australian Wind Winner](#)

Australia's \$65 billion of projects to export liquefied natural gas from the east coast are set to push up domestic prices, opening the way for record investment at home in competing energy sources to produce power.

[Energy crossroads](#)

Everyone should wish Germany well in its great experiment in renewable energy.

[Washington, D.C.'s Union Station Now Powered by 100 Percent Wind Energy Provided by Washington Gas Energy Services](#)

Union Station will transition to 100 percent wind power for its electricity load of 18,943,964 kilowatt hours annually. This is equivalent to avoiding the consumption of more than 1,400,000 gallons of gasoline or taking more than 2,700 cars off the road for one year. The world's fastest-growing energy resource, wind power displaces conventional power, reduces carbon dioxide and helps eliminate air pollution.

[First Solar surges 50% on sunny guidance](#)

First Solar shares spiked more than 50% Tuesday, rising to a new 52-week high and triggering several circuit breaker on the way up after the company issued a bullish forecast for the year.

The solar panel maker said it expects to earn between \$4 and \$4.50 per share, with annual sales between \$3.8 billion and \$4 billion. The guidance was well above analysts forecasts. Those polled by Thomson Reuters have been expecting earnings of \$3.51 per share on revenue of \$3.1 billion for 2013.

[With Help From Nature, a Town Aims to Be a Solar Capital](#)

LANCASTER, Calif. — There are at least two things to know about this high desert city. One, the sun just keeps on shining. Two, the city's mayor, a class-action lawyer named R. Rex Parris, just keeps on competing.

Two years ago, the mayor, a Republican, decided to leverage the incessant Antelope Valley sun so that Lancaster could become the solar capital "of the world," he said. Then he reconsidered. "Of the universe," he said, the brio in his tone indicating that it would be parsimonious to confine his ambition to any one planet.

[Lowest Swiss Water Levels in 13 Years Set to Boost Power Prices](#)

The lowest hydro reserves in 13 years in Switzerland, which generates more of its power using water than any other non-Nordic European country, may boost prices in neighboring France, Germany, Italy and Austria.

[Why women and kids should farm](#)

Historically, cotton and soybeans were the cash crops of Mound Bayou. In the 1960s, in an effort to battle hunger and malnutrition, local governments created programs to encourage farmers to grow fresh produce for the community. Conwell's uncle, Lewis Sanders, partnered with these programs and established Mound Bayou as a sweet potato-growing community. Following a Sweet Potato Jamboree sponsored by Alcorn State University, Conwell recognized the crop as an opportunity to engage the city's youth in agriculture.

In a 2011 interview, Conwell told Linda Rule of Southern Rural Black Women's Initiative that given an opportunity, "You can farm this land, and you can grow some vegetables, and you can put food on your children's table, and you can make a good living." To Conwell, agricultural work fosters a sense of responsibility and pride in a way that could make the difference between a young person's success versus hanging on a street corner.

[Oyster Farm Caught Up in Pipeline Politics](#)

POINT REYES NATIONAL SEASHORE, Calif. — Seen from a nearby hilltop, the Drakes Bay Oyster Company is a cluster of shacks with faded white walls. One patched roof appears at risk of being blown away by the next Pacific squall. A dozen workers on a small weather-beaten dock were busy handling a batch of oysters harvested on a recent morning, separating the mollusks on a single rusty conveyor belt.

But this modest, family-run business just north of San Francisco lies at the center of an increasingly convoluted battle pitting longtime allies against one another and uniting traditional foes. Its fate — whether Drakes Bay will be allowed to remain on public land here or forced to close, as demanded by the federal government — has drawn the attention of a little-known, well-financed watchdog group in Washington, a United States senator from Louisiana, Tea Party supporters, environmentalists, sustainable-food proponents and celebrity chefs.

[Amid Drought, Water Board in New Mexico Confronts State Over Supply](#)

A small water agency in southern New Mexico has moved to force state agencies that control water distribution to deprive some users of their supplies.

The local agency, the Carlsbad Irrigation District, or C.I.D., acted to ensure that its

alfalfa farmers receive the supplemental deliveries to which they say they are entitled.

The irrigation district voted unanimously last week to make what is known as a “priority call” on the Pecos River, a move that could force New Mexico’s Office of the State Engineer to reallocate supplies, relying on a longstanding priority list and assigning water to all the users of the river based on their seniority. On Tuesday, the district was pressing its case at meetings with state officials.

[Peru bores through Andes to water desert after century of dreams](#)

(Reuters) - Peru's Olmos Valley might be a desert now, with rare rains and rivers that trickle to life for just a few months a year, but a radical engineering solution for water scarcity could soon create an agricultural bonanza here.

Fresh water that now tumbles down the eastern flank of the Andes mountains to the Amazon basin and eventually the Atlantic Ocean will instead move west through the mountains to irrigate this patch of desert on Peru's coast. It will then drain into the Pacific Ocean.

[How a Leafy Folk Remedy Stopped Bedbugs in Their Tracks](#)

Generations of Eastern European housewives doing battle against bedbugs spread bean leaves around the floor of an infested room at night. In the morning, the leaves would be covered with bedbugs that had somehow been trapped there. The leaves, and the pests, were collected and burned — by the pound, in extreme infestations.

Now a group of American scientists is studying this bedbug-leaf interaction, with an eye to replicating nature’s Roach Motel.

[India's largest copper smelter ignites toxic debate](#)

The plant employs 4,000 and supports thousands more jobs indirectly. But since opening in 1996 it has split this coastal city between residents who say it is crucial for the local economy and farmers and fishermen who see it as a health hazard.

Similar debates are playing out across India where disputes over safety, the environment and livelihoods overshadow the efforts of Asia's third-largest economy to industrialize. Just 100 km (62 miles) south, in Kudankulam, fishermen are fiercely opposing a new nuclear power plant.

[Amid China air, water pollution, soil survey reveals century-old heavy metals](#)

(Reuters) - Soil samples across China have revealed remnants of toxic heavy metals

dating back at least a century and traces of a pesticide banned in the 1980s, an environmental official said on Wednesday, revealing the extent of the country's pollution problems.

Street-level anger over air pollution that blanketed many northern cities this winter spilled over into online appeals for Beijing to clean water supplies, especially after rotting corpses of thousands of pigs were found last month in a river that supplies tap water to Shanghai.

[Europe's toxic air: clearer but not clean](#)

LONDON/BRUSSELS (Reuters) - Europeans no longer see the kind of pollution that within living memory killed thousands of Londoners in the Great Smog of 1952, but the air they breathe still bears invisible threats scarcely less deadly, and little more controlled.

While attention is given to curbing the carbon dioxide (CO₂) emissions blamed for global warming, substances more directly harmful to human health, notably nitrogen oxides, are pumped out of diesel engines and from European power stations burning coal that is getting cheaper as Americans exploit new gas reserves.

The result, say those campaigning for change, is ever poorer air quality shortening lives. Yet a move by the European Commission to tighten vehicle emissions rules is being challenged by some car makers.

[New Guidelines Call for Broad Changes in Science Education](#)

Educators unveiled new guidelines on Tuesday that call for sweeping changes in the way science is taught in the United States — including, for the first time, a recommendation that climate change be taught as early as middle school.

[California Carbon Advances After Governor Approves Quebec Link](#)

California carbon futures rose to the highest price in almost three weeks after Governor Jerry Brown approved a proposal to link the state's greenhouse-gas program with one in Quebec.

The regulation behind carbon markets in Quebec and California are “similar or identical” enough to be linked, Brown said in a letter posted on his website late yesterday. State law requires the governor's approval before the state Air Resources Board links carbon systems with any jurisdiction. The board is scheduled to consider regulation April 19 to join systems with Quebec beginning Jan. 1, 2014.

[Shanghai to Start Emissions-Trading Trials Before End of June](#)

Shanghai, China's financial center, said it will start trials of emissions trading before the end of June in an effort to reduce the intensity of its energy use and carbon discharges.

Shanghai aims to cut its energy consumption and carbon releases per unit of gross domestic product by 3.5 percent this year, according to a document posted on the website of the Shanghai Municipal Development & Reform Commission.

[Air travel to get bumpier as CO2 emissions rise, scientists say](#)

Turbulence on transatlantic flights will become more frequent and severe by 2050 as carbon dioxide emissions rise, leading to longer journey times and increased fuel consumption, British scientists said in a study on Monday.

[Will Obama Put Coal out of Business?](#)

In 2008, candidate Barack Obama infamously said that as president he would set policy that would bankrupt the coal industry: "So if somebody wants to build a coal-powered plant, they can; it's just that it will bankrupt them because they're going to be charged a huge sum for all that greenhouse gas that's being emitted."

Now, according to a new Duke University study, pending regulations by President Obama's Environmental Protection Agency may just accomplish that goal. It concluded that tougher air-quality standards would make two-thirds of the nation's coal-fired power plants more expensive to operate than comparable natural-gas-fired facilities. And if the price of natural gas soared four times higher than what it currently trades for, the costs of operation between the two systems would simply be comparable.

[After Sandy, Jersey shore looks for protection](#)

A line of more-modest protective dunes saved the neighboring borough to the south from widespread damage. So Akers might be expected to embrace any plan to protect his battered town, where the roller coaster still sits upright in the ocean and workers are busy replacing the boardwalk in anticipation of the Memorial Day start of the beach season.

But he has grave doubts about the Army Corps of Engineers' plan: a 300-foot-wide sand dune project along 14 miles of the Jersey shore. Sand dunes will loom over the boardwalk, blocking much of the view. "You can do 'Lawrence of Arabia' out there on the beach," he said.

[Rebuilding the Shores, Increasing the Risks](#)

This might be a good time to take a look at the most important environmental law that nobody has ever heard of.

The real estate industry fought that law bitterly in Congress, but lost, and it landed on Ronald Reagan's desk in 1982. The president not only signed it, but did so with a rhetorical flourish, calling it a "triumph for natural resource conservation and federal fiscal responsibility."

The law — the Coastal Barrier Resources Act — was intended to protect much of the American coastline, and it did so in a clever way that drew votes from the most conservative Republicans and the most liberal Democrats.

[Clamshells Reveal Secrets of Pre-Columbian Society's Decline](#)

The effects on society would not have been sudden or dramatic, but nevertheless, the Moche apparently had difficulties contending with the changes, Andrus said. Eventually, they disappeared as a people.

"I think we can say climate change posed a severe challenge," Willams said. "It has as much to do with the social and political configuration of their society as it does with the actual climate impacts."

[Experts sound alarm over 'perfect storm' in African Sahel](#)

The vast region of Africa known as the Sahel will descend into large-scale drought, famine, war and terrorist control if immediate, coordinated steps are not taken to avert the perfect storm of climate change and the most rapidly growing population in the world, a group of experts from the University of California, Berkeley, and the African Institute for Development Policy (AFIDEP), concluded in a report released today, which summarizes findings from the first international, multidisciplinary meeting on the region.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](#).