Union of Concerned Scientists

Catalyst

Volume 12, Fall 2013

Rising Tide

The science of sea level rise

Confronting fracking

The ongoing threat of nuclear weapons

[Union of Concerned Scientists

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The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with citizens across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

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Editor's note: You've probably noticed that the look of UCS publications has changed, but our mission has not. We remain dedicated to solving our planet's most pressing problems with rigorous, independent science.

A *Green* Tea Party?

By Kathleen Rest

In today's polarized political environment, it seems special interests are attempting to subvert science at every turn. But this summer, we saw states across the country put partisan politics aside to cast their votes for a clean energy future.

In July, Georgia regulators voted to expand the use of solar in the state's electricity mix. What's notable about this victory is that conservative lawmakers and Tea Party members joined environmental and solar advocates in support of the measure, countering misinformation from Americans for Prosperity, an anti-science group whose predecessor organization helped the Tea Party movement get off the ground. This capped off a season in which 14 states passed or strengthened policies that will require utilities to supply an increasing amount of power from clean energy resources. Not a single state weakened or repealed their clean energy policies, despite numerous attacks from fossil-fuel-funded opponents, most notably the Koch-funded American Legislative Exchange Council (ALEC). (Read "Got Science?" on p. 14 to learn more.)

> ***This summer, we saw states across the country put partisan politics aside to cast their votes for a clean energy future.***

For years, we have worked to leverage these victories into a federal clean energy policy that benefits people in *all* states. We still have our work cut out for us, especially as industries pursue unconventional oil and gas development (including the use of hydraulic fracturing—see p. 9) that could lock us into many more decades of pollution and global warming emissions. It is an uphill battle, but these state victories make it clear that solid data, not rigid ideologies, are becoming the tool of choice for shaping our energy future. {C}

Kathleen Rest *is executive director of UCS.*

Photos: © iStockphoto.com/R-J-Seymour (solar); © Richard Howard (Kathleen Rest)

What is the best thing you have done to reduce your household energy use?

By creating buffers of plantings I've managed to cool my home and several outdoor areas, reduce watering more than 90 percent, cut back air conditioning, and in winter I rarely heat at all. I've used this approach ("estate style") in southern Wisconsin and in southwestern Florida.

Frank B. Gabry, Osprey, FL

The best thing we have done is to have solar panels installed. In less than eight months of unusually cloudy/rainy weather, we have generated half of our projected annual usage. Between the power company incentive and the federal income tax credit, we quickly recouped half the cost.

Felicia V. Nowak, Athens, OH

I started to close [my bathroom] door and open the window slightly whenever the dryer was being used. That isolated the room and caused outside air to flow into the dryer without affecting the house air. My heating oil and electricity bills dropped around 25 percent during winter and summer once I started to use this easy method.

Daniel Shapiro, Jamestown, RI

My area (Central Valley California) is known for hot summers. In the morning, I run my whole-house fan [with] my windows open. I then seal up my house and run ceiling fans as needed. When the temperature cools at sundown, I again open my windows and run the whole-house fan. My AC is normally off.

John Murray, Antelope, CA

Hands down, it has to be installing a geothermal (ground-source) heat pump when we built our passive solar house. Over 28 years, we have likely saved thousands of kilowatt-hours (and thousands of dollars) over a traditional heat pump.

Jerry Klinken, Davidsonville, MD

A vegan diet significantly decreases my water and carbon footprint, and significantly decreases numerous health risks as well. And I like the fact that I no longer support the torture and slaughter of domesticated animals. It is NOT hard to do!

Karen LaVine, RN, CDE, Albuquerque, NM

We built a 2,000 s.f. Deltec round house on our farm and absolutely love it. In addition to all the built-in efficiencies, we added a radiant barrier to the trusses and it has, we believe, been terrific in keeping down our costs.

Nancy and Ron Bryant, Norwood, NC

WE WANT TO KNOW

What innovative initiatives has your community undertaken to address climate change?

We will publish selected responses (edited for length) in the spring issue of* Catalyst. *You can respond via:
***E-mail:* catalyst@ucsusa.org**
***Facebook:* www.ucsusa.org/observations**

{C

[IN THIS ISSUE]

Fighting Fire with Facts

Against the backdrop of wildfires raging across the western United States, California State Senator Carol Liu opened a community forum on fire risk she co-sponsored with UCS on June 28 in Pasadena. The 100 attendees first heard State Insurance Commissioner Dave Jones describe how the insurance industry is threatened due to its high-value investments in areas prone to wildfire; he then called for planning, zoning, and building decisions that take climate change into account. Three expert-led panels discussed climate science, insurance, and emergency management. California Department of Forestry and Fire Protection Chief Ken Pimlott concluded the forum by outlining the recent increase in fire season length and intensity, and making a strong plea for preparedness.

The forum was covered by multiple newspapers in Senator Liu's district (including several Chinese-language papers), and the local National Public Radio affiliate interviewed Commissioner Jones. UCS strengthened and established relationships with key decision makers that we will leverage to secure strong climate action in California.

Photo: © iStockphoto.com/Byronsdad

UCS Food Expert Recognized

JAMES BEARD FOUNDATION

On October 21, the James Beard Foundation honored Ricardo Salvador, UCS senior scientist and director of our Food and Environment Program, with one of its 2013 Leadership Awards. The foundation, named after the late chef who championed America's diverse culinary heritage, presents its Leadership Awards to individuals who, in the words of President Susan Ungaro, "are on the front lines of innovation and education . . . to make our food system a safer one."

Ricardo has spent his career working to improve agriculture, combining a deep commitment to an equitable food system with creative vision, academic research, and community engagement focused on healthy food and farm policies. Since joining UCS in March 2012, he has strengthened our efforts to raise awareness of the links between food, farms, and public health, and highlight the perverse economic incentives built into our nation's agricultural policies. For a prime example, read Ricardo's "Final Analysis" on p. 15.

Time to Get (Water) Smart about Electricity

U.S. power plants depend on vast volumes of water to cool their turbines. So when heat waves and drought in 2011 and 2012 forced plants around the country to reduce output or shut down due to water limitations, it became clear that the risks

to our electricity system will only grow as our climate warms.

With many power plants nearing retirement, we have a tremendous opportunity to build a more resilient power sector. The new UCS report *Water-Smart Power* (online at *www.ucsusa.org/watersmartpower*) explores how different electricity choices can greatly reduce—or exacerbate—the power sector's water and climate risks. By shifting to renewable energy and energy efficiency technologies, for example, we can cut power plant water consumption in half by 2025 and 85 percent by mid-century.

> ***It is clear that the risks to our electricity system will only grow as our climate warms.***

Since the report's release in July, UCS has shared these findings with decision makers around the country, including the National Association of Regulatory Utility Commissioners, and regulators and legislators in Alabama and Georgia.

White House Honors UCS Board Member

On November 20, President Obama will present the Presidential Medal of Freedom to Mario Molina, a distinguished professor of chemistry and biochemistry at the University of California–San Diego and longtime member of the UCS board of directors. Dr. Molina and 15 other individuals will receive the nation's highest civilian honor in a ceremony at the White House.

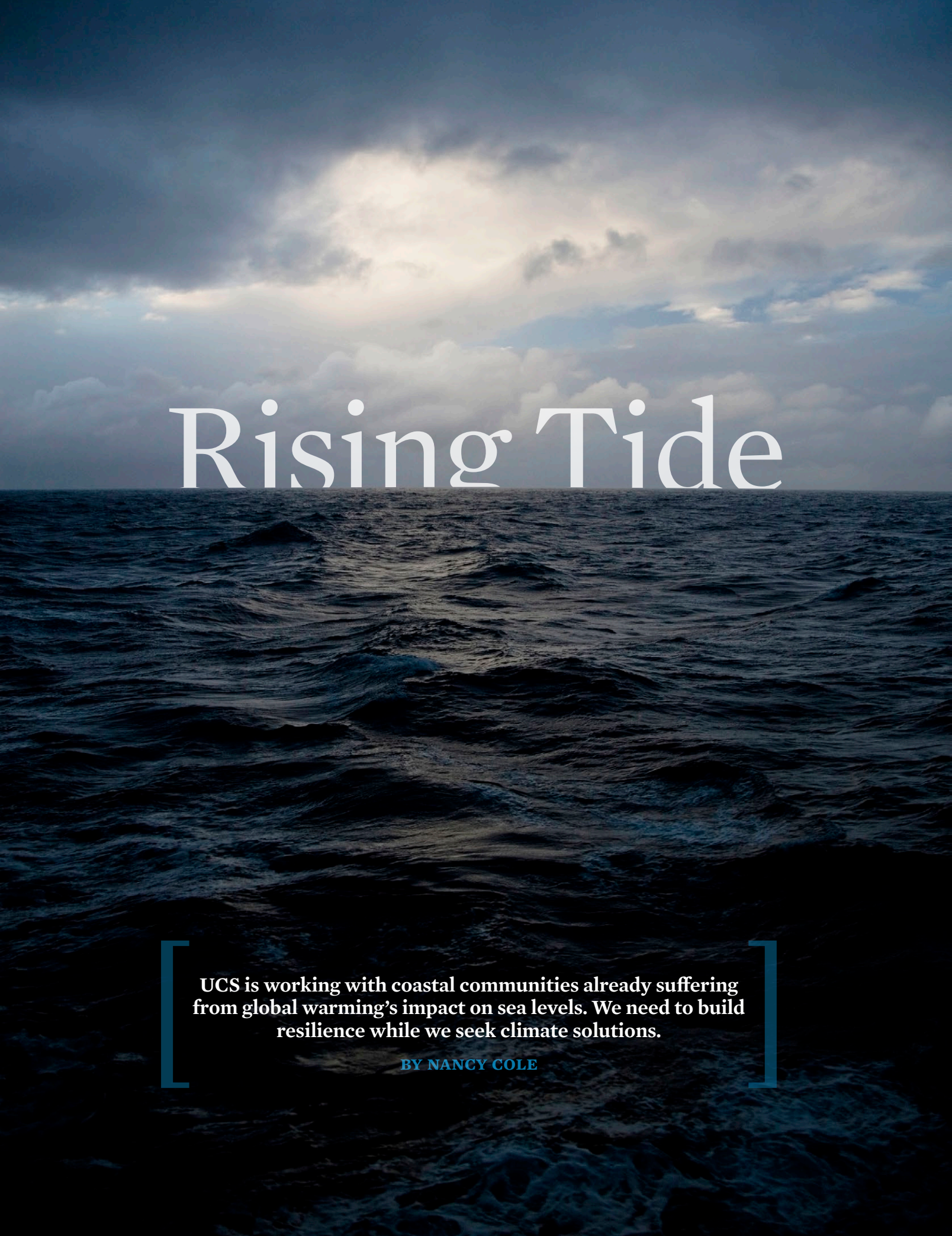
Already a winner of the 1995 Nobel Prize in chemistry for his role in discovering that the chlorofluorocarbons used in refrigerants and aerosols were damaging Earth's ozone layer, Dr. Molina said he was "stunned" by this latest honor. "The Nobel is given for work that you do in your field," he explained. "But the Presidential Medal of Freedom is given for people who are thought to have had an impact on society. This is really an incentive to keep working on the issues that I have been involved with, including climate change."

A Summertime Challenge Met

> *We want to thank the thousands of UCS members who made our Summer Matching Gift Challenge a success.*

In June, a group of generous supporters gave other members the opportunity to double the impact of their gifts by offering to match donations dollar for dollar up to a total of $125,000. UCS members exceeded this goal, with donations totaling more than $150,000.

Combined, these contributions provide an infusion of more than $275,000 to devote to our most urgent priorities: mobilizing scientists to stand up for rigorous climate change research, working to finalize stringent new auto pollution standards, transforming the ways we grow food, and securing policies that will help cut our projected oil use in half by 2020. Your generosity helps make a cleaner, healthier, and more sustainable future possible.



Rising Tide

UCS is working with coastal communities already suffering from global warming's impact on sea levels. We need to build resilience while we seek climate solutions.

BY NANCY COLE

When Hurricane Sandy finally petered out last October, it had left its mark as one of the most destructive coastal storms in our country's history, leaving 150 dead and an estimated $68 billion in damage from Florida to New Hampshire.

Even now, some New York City subway stations and Ellis Island remain closed, and several blocks of scenic Route A1A in Fort Lauderdale had to be rebuilt and just reopened in August.

But it doesn't take a hurricane to wreak havoc with coastal cities. Rising seas, driven by global warming, are making flooding an everyday concern in low-lying areas—and sparking an urgent call to action.

THE SCIENCE OF SEA LEVEL RISE

Global warming affects sea level in two ways. Extra heat in the atmosphere causes land-based ice (e.g., glaciers, ice caps, ice sheets) to melt, adding water to the oceans. Extra heat is also absorbed by oceans, causing the water to warm and expand. Together, these mechanisms have caused the global average sea level to rise eight inches since 1880; some cities along the East and Gulf Coasts have seen even greater increases, from 12 inches in Miami Beach to 30 inches in Virginia Beach (see the sidebar on p. 8 to learn why). Scientists project the global average sea level may rise an additional 6 to 16 inches by 2050 and between two and six feet by the end of the century, depending on our emissions choices today and in the future.

Storm surges riding on these higher water levels have the potential to cause greater damage further inland. This risk is exacerbated by the fact that global warming has also resulted in stronger, more destructive hurricanes in the North Atlantic. As a result, coastal cities are already being forced to raise roads, build flood defenses, improve storm water and wastewater management, and protect drinking water supplies from the ravages of saltwater intrusion.

UCS COVERS THE WATERFRONT

While hurricanes grab national headlines, flooding caused by regularly occurring high tides goes largely unnoticed. UCS is working to change that, using sophisticated outreach and media-savvy analysis to elevate the plight of coastal communities and help them prepare for the inevitability of rising seas. Here are a few examples of our recent efforts.

- We successfully nominated two Floridians to receive "Champions of Change" Community Resilience Leader awards from the White House. During their visit to Washington, DC, in April to accept their awards, Jennifer Jurado (director of natural resources planning and management for Broward County) and Caroline Lewis (founder and director of the CLEO Institute, an environmental advocacy group) painted a clear picture of the daunting challenges sea level rise poses to South Florida, and explained the region's efforts to prepare for, adapt to, and slow the pace of rising seas. UCS members and activists urged President Obama to use these Champions of Change as a springboard for national climate action.

- Also in April, UCS convened a roundtable discussion in New York City featuring 35 city and county planners, emergency managers, sustainability officers, and elected officials from Florida, New Jersey, New York, North Carolina, and Virginia who shared their experiences and best practices for adapting to and managing sea level rise and worsening storm surges. The director of coastal and storm risk management for the U.S. Army Corps of Engineers urged coastal cities to factor in sea level projections as they rebuild infrastructure. The event was covered by both local and national media including The Weather Channel, and the mayors of Hoboken, NJ, and Broward County, FL, subsequently wrote an opinion piece about it that ran on the *USA Today* website.

- UCS released a report in August on the flawed incentives that hurt, rather than protect, coastal communities. *Overwhelming Risk: Rethinking Flood Insurance in a World of Rising Seas* explains how artificially low insurance rates have reinforced risky patterns of development along our coasts, leading to repeated damage to high-risk properties and $20 billion of debt for the taxpayer-funded National

Photo: © iStockphoto.com/Mlenny (left)

Why Isn't Sea Level the Same Everywhere?

Melanie Fitzpatrick, a climate scientist with the UCS Climate and Energy Program, explains regional variations in sea level rise and the role of heat-trapping emissions.

Q ***Why are some low-lying areas more vulnerable than others?***

A Sea level rise presents challenges for all coastal communities, but in some areas—such as the Gulf Coast—the effects are magnified because the land is subsiding (or slightly sinking) as well. This natural settling can increase the amount of local sea level rise by allowing the ocean to penetrate further inland.

Q ***Is land subsidence the only variable?***

A No. Global warming is also causing ocean currents to shift in many places, resulting in changes that tend to either pull water away from the shore or push it in. Along the East Coast, changes in the path and strength of ocean currents are contributing to faster-than-average sea level rise.

Q ***How can communities address sea level rise?***

A Unfortunately, some additional sea level rise is already guaranteed due to past emissions of heat-trapping gases, so coastal communities need to prepare for rising tides and storm surges. But adopting policies and practices that reduce carbon emissions now will help minimize future sea level rise and other climate-related impacts. As a scientist, I try to help people understand what they can do to slow the trend—my ultimate goal is to work myself out of a job by making concern about sea level rise a thing of the past.

Read more from Melanie on our blog, *The Equation*, at *http://blog.ucsusa.org*. And for more information on the science of sea level rise, visit the UCS website at *www.ucsusa.org/sealevelrisescience*.

[While hurricanes grab national headlines, flooding caused by regularly occurring high tides goes largely unnoticed. UCS is working to change that.]

Flood Insurance Program. We discussed our findings and recommendations with the media and influential groups such as the Association of Flood Plain Managers, the National Association of Insurance Commissioners, and Taxpayers for Common Sense. You can read the report online at *www.ucsusa.org/floodinsurance*.

- As *Catalyst* went to press, the Center for Science and Democracy at UCS was developing "Sandy, One Year Later: Looking to the Future," an event co-sponsored with Monmouth University and New Jersey Future that is part of the Lewis M. Branscomb Forum series. The forum, held in New Jersey on October 29—the first anniversary of Hurricane Sandy—brings together scientists, local and national decision makers, and communications experts to explore the lessons learned from Sandy (such as how the public and institutions received information about the storm) and to consider how we can better prepare for the next big storm. To view a webcast of the forum, go to *www.ucsusa.org/sandyforum*.

LOCAL PROBLEMS REQUIRE NATIONAL ACTION

Our nation's coasts represent an ecologic, economic, and recreational treasure, and coastal residents, properties, and landscapes face ever greater risks from accelerating sea level rise. UCS will continue to make local conditions in coastal states a national issue while helping our partners and colleagues in these states ensure they have the information they need to protect themselves and their communities. And of course we will continue to push for policies that reduce heat-trapping carbon emissions, to prevent climate-related threats to our coasts from getting even worse. {C}

Nancy Cole *is director of campaigns in the UCS Climate and Energy Program.*

Photo: © Austin Hoffmann (Melanie Fitzpatrick)

CONFRONTING FRACKING

The technology is fueling an energy expansion—but at what risk? UCS is helping communities make informed decisions.

by Seth Shulman

For Irma Muñoz, who lives near the Inglewood Oil Field in West Los Angeles, there is nothing theoretical or abstract about the oil and gas extraction process known as hydraulic fracturing (or "fracking"). Culver City, near Muñoz's home, is the most populous U.S. municipality to directly confront this complex and polarizing issue. Like many other California communities, Culver City sits atop the vast Monterey Shale formation, now thought to contain an estimated 15 *billion* barrels of oil—the world's largest reserve of deep shale oil.

Hydraulic fracturing involves drilling wells into these deep formations and injecting, under high pressure, millions of gallons of water, along with chemicals and sand, to break open fissures in the rock and release oil and natural gas. Recent technological advances have made it easier to reach previously inaccessible oil and gas reserves, leading to a rapid expansion in domestic production that has already changed the global energy market for fossil fuels.

Photo: © iStockphoto.com/LonnyG

Thanks to formations like the Monterey Shale, the International Energy Agency now predicts that the United States could be the world's largest oil producer by 2020. The dizzying pace at which fracking is proceeding—often in locales wholly inexperienced with oil and gas drilling—has outpaced both the scientific information available on the topic and federal, state, and local governments' regulatory responses, leaving residents like Muñoz with serious concerns about the consequences for their communities.

"Oil drilling is one thing. But fracking brings out a totally different level of anxiety," Muñoz says. "It is hard to believe what the oil companies say, and few in the community have any trust in them."

> *"People in California and elsewhere facing fracking have a fundamental question: Is this safe?"*
>
> ADRIENNE ALVORD
> California and Western States Director, Union of Concerned Scientists

All the Stakeholders under One Roof

Muñoz, who leads an environmental group in Los Angeles called Mujeres de la Tierra (Women of the Earth), was invited by the Center for Science and Democracy at UCS to attend an ambitious event in Los Angeles this past July to help communities grapple with the difficult technical and policy issues surrounding fracking and other unconventional oil and gas development. Muñoz says her community has badly needed more understandable information about the technology and its potential consequences, calling the Center's efforts "cause for celebration and a great step forward."

The event, a Lewis M. Branscomb Forum titled "Science, Democracy, and Community Decisions on Fracking," was held on the University of California–Los Angeles (UCLA) campus in partnership with the university's Emmett

> *"Fracking brings out a totally different level of anxiety . . . This whole conversation is cause for celebration and a great step forward."*
>
> IRMA MUÑOZ
> Director, Mujeres de la Tierra

Center on Climate Change and the Environment, the Evan Frankel Environmental Law & Policy Program at the UCLA School of Law, and the UCLA Institute of the Environment and Sustainability. Nearly 75 scientific and regulatory experts, industry representatives, and politicians and activists from around the country took part in two days of workshops designed to shed light on what we know and don't know about the science on unconventional oil and gas development, what regulations and policies are needed and which have proven effective thus far, and how to make scientific information on fracking more accessible and useful for communities dealing with the issue.

The program culminated in a public event attended by more than 300 in person and 1,200 more via live webcast. Andrew Rosenberg, director of the Center for Science and Democracy at UCS, told the audience, "We're committed to holding events like these . . . because we know that science plays a critical role in our ability to make good decisions."

As *Catalyst* went to press, the Center was preparing to publish a report outlining the key barriers faced by the public when attempting to access scientific and regulatory information related to hydraulic fracturing. We have also produced a fracking "toolkit" designed to help communities ask critical questions before making decisions about unconventional oil and gas development (see the sidebar for some examples). These fracking-related publications and more information about the forum—including a summary report and a recording of the public event—are available at *www.ucsusa.org/frackingforum*.

What We Should Be Doing Now

To date, federal legislation has exempted hydraulic fracturing and other unconventional oil and gas development from key provisions of national statutes, undermining our ability to apply the best science in reducing health, safety, and environmental risks. Loopholes in the Safe Drinking Water Act and the Toxics Release Inventory (part of the Emergency Planning and Community Right-to-Know Act) need to be closed, and existing regulations need to be more fully enforced.

Wastewater from hydraulic fracturing operations can be highly saline and often toxic or radioactive. In many places, this water is stored at well sites in lined pits, such as this one in Arkansas.

Equally important is the issue of transparency. Public safety should take priority over trade secrets, which is the case for most industries regulated under the Toxic Release Inventory. But loopholes have allowed fracking operations to withhold the composition of their fracking fluids by claiming that information is proprietary. UCS maintains that the public has a right to know about chemicals being pumped into public lands, the oversight and monitoring of these activities, and their implications for public health and well-being. Thus, the chemical composition, volume, and concentration of all fracking fluids—even those considered proprietary—should be disclosed and made available online before drilling can begin.

Finally, experts participating in the forum stressed the need for baseline studies of water and air quality before drilling begins, and regular monitoring during and after fracking. This would safeguard communities not only by empowering citizens to hold those responsible for any water or air pollution accountable, but also by helping scientists study the effects of hydraulic fracturing so we can develop better health and safety standards for unconventional oil and gas development. {C}

***Seth Shulman** is senior staff writer at UCS.*

10 Questions about Fracking and Water

The prospect of water contamination is a top concern for communities dealing with hydraulic fracturing. Here is what you should ask town officials and drilling companies about these risks.

1. ***Where are my drinking water and other water resources located in relation to oil and gas wells and reservoirs?***
2. ***Where could spills or contamination occur in my community?***
3. ***How might they affect my drinking water?***
4. ***How much water will a typical well in my region use, and where will it come from?***
5. ***Are our planners and local decision makers undertaking a trade-off analysis to see how fracking operations may affect water availability and competing demand for (and use of) this resource?***
6. ***How and where would drilling companies dispose of their wastewater, chemicals, or other potentially harmful materials?***
7. ***Is my public water treatment facility accepting fracking wastewater?***
8. ***Is it able to adequately treat the volume and quality of this wastewater?***
9. ***How could potential changes in drinking water quality or quantity affect the health of my community, especially among those most vulnerable (including children or those with illnesses)?***
10. ***What safeguards and emergency preparedness measures are in place to deal with potential spills or contamination?***

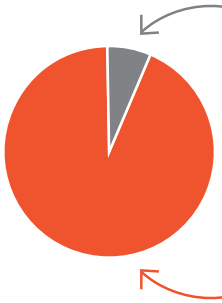
For more information, practical advice, and resources for decision making on fracking, go to *www.ucsusa.org/hftoolkit*.

In the Dark on Fracking?

We asked readers of our monthly e-newsletter the following questions.

{?} QUESTION 1

Do you think individuals have adequate information on hydraulic fracturing ("fracking") to make informed decisions on how it would affect their community?



YES 13 responses (7% of total)

NO 180 responses (93% of total)

{?} QUESTION 2

If you answered "yes," which information sources on fracking do you think are reliable? If you answered "no," which types of data do you think are needed?

YES

I think the experiences of people who have fracking in their area are good sources of information. I think that scientists not connected with the industry are reliable sources.

Joan Serda, Macon, GA

Government data is more reliable than either Big Oil or environmentalists. Fracking needs to be regulated and monitored, but natural gas is a hell of a lot better than coal. It is an intermediate and practical step.

James Lappin, Fort Worth, TX

NO

1. Geological consequences (i.e., earthquakes, subsidence, uplift, etc.). 2. Impact on groundwater and aquifers. 3. Safety of materials used in the fracking process. 4. Backflow disposition and treatment. 5. Industry accountability.

Michael Sperr, West Palm Beach, FL

Clear information on contents of fracking fluid, backflow, and evapotranspiration [sic] *from holding ponds. Who would be responsible for paying for damages due to spills and leaks? How/where will backflow be treated?*

Anne Rubin, New York, NY

Our Cold War Leftovers

Lisbeth Gronlund, senior scientist and co-director of the UCS Global Security Program, discusses the ongoing threat of nuclear weapons and what the organization is doing about it.

Dr. Lisbeth Gronlund focuses on technical issues related to U.S. nuclear weapons policy, and new nuclear weapons, space weapons, and ballistic missile defenses. She has authored numerous articles and reports, lectured on nuclear arms control and missile defense policy issues before lay and expert audiences, and testified before Congress.

UCS states that nuclear weapons are more of a liability to national security than an asset. Why?

LG: The cold war ended more than 20 years ago, but the United States still maintains some 4,500 weapons in its arsenal. Just one of these could destroy much of a large city, while a few hundred would be enough to devastate much of the world. Many hundreds of these weapons are kept on high alert so they can be launched within minutes of a Russian attack. In turn, this practice encourages Russia to keep its missiles on high alert. This launch-on-warning policy could lead to an accidental or unauthorized launch, or a launch in response to a false alarm.

We are continuing to risk everything by clinging to this cold war policy. And nuclear weapons do nothing to prevent terrorist attacks, which are a significant threat to U.S. security today.

What is the near-term likelihood of any further reductions in the U.S. stockpile of nuclear weapons?

LG: A Pentagon study concluded that the United States could reduce its deployed long-range weapons to roughly 1,000 while maintaining a robust deterrent, and President Obama has stated that he will seek such reductions in conjunction with Russia. But Russia appears hesitant, in part because it is worried about U.S. missile defenses.

The United States doesn't need to wait for Russian action—it can easily cut its arsenal to a total of 1,000 weapons (deployed and reserve, long-range and short-range) while maintaining an effective deterrent, and UCS is working to gain congressional and administration support for a unilateral reduction. Continuing to maintain more nuclear weapons than necessary is not only unwise, it's a waste of tens of billions of taxpayer dollars.

Federal officials argue that the country's nuclear weapons are nearing the end of their "useful lifetime." What does that mean?

LG: As weapons age, some parts degrade and need to be replaced. The administration, however, is seeking to replace the current arsenal by building five new types of weapons, which would undercut the U.S. commitment to the Non-Proliferation Treaty. The United States should instead extend the life of existing weapons without making major modifications.

In our new report, *Making Smart Security Choices: The Future of the U.S. Nuclear Weapons Complex* [online at *www.ucsusa.org/smartnuclearchoices*], UCS calls for increased funding to monitor the U.S. arsenal. Gaining a better understanding of how existing weapons are aging would be a wiser investment than building new ones. {C}

Photos: © Richard Howard (Lisbeth Gronlund), iStockphoto.com/IsaacLKoval (left)

> ***ALEC ultimately failed to change the fact that no state, once is has passed an RES, has ever repealed one.***

A Victory for Clean Energy—and Facts

UCS deals a blow to the fossil fuel lobby.

By Dave Anderson

The American Legislative Exchange Council (ALEC), a group funded by powerful fossil fuel interests including ExxonMobil and the Koch brothers, has made a bad habit of giving these funders a role in drafting "model legislation" that state lawmakers then introduce in their local legislatures—without any mention of the corporations' involvement. According to ALEC's guiding principles on energy policy, "Global climate change is inevitable." It is true that *some* global warming is now inevitable, thanks in part to climate contrarian groups like ALEC that have long opposed attempts to reduce carbon emissions.

This year ALEC rolled out the ironically named Electricity Freedom Act, which was aimed at repealing renewable electricity standards (RES)—state laws that require utilities to obtain a certain percentage of their electricity from clean energy sources such as the wind and sun. ALEC succeeded in getting its legislation introduced in about a dozen states, and in drawing attention from the *Wall Street Journal,* which ran a headline declaring, "States Cooling to Renewable Energy." But ALEC ultimately failed to change the fact that no state, once it has passed an RES, has ever repealed one. What went wrong?

UCS members and other clean energy advocates flooded legislators' offices with messages of support for their state's RES, and a new UCS analysis of these highly effective policies *(How Renewable Electricity Standards Deliver Economic Benefits,* online at *www.ucsusa.org/RESbenefits)* showed that utilities are meeting their renewable energy requirements at little or no cost to consumers. And when ALEC's representatives spouted misleading claims about renewable energy, such as the ALEC-affiliated senator from Ohio who likened his state's renewable energy standards to "Stalin's five-year plan," UCS set the record straight with facts: wind and solar energy have brought thousands of jobs to the Buckeye State. In Minnesota, not only did ALEC's bill to repeal the state's RES go nowhere, but lawmakers even voted to strengthen the RES by adding a new solar requirement.

ALEC wasted little time licking its wounds, instead gathering many of its corporate sponsors and member politicians in Chicago over the summer to celebrate its fortieth birthday and consider another round of anti-RES legislation (which, at press time, would again target Ohio). UCS is ready to prescribe a new dose of clean energy facts to inoculate against ALEC's fossil fuel fiction. {C}

Dave Anderson *is an outreach coordinator in the UCS Climate and Energy Program.*

Photo: © iStockphoto.com/ssuaphoto

A Simple Fix for a Deadly Problem

By Ricardo Salvador

Cardiovascular diseases such as stroke, hypertension, and coronary artery disease are the number-one killer of Americans, responsible for a third of all deaths in 2011. Many other Americans who live with these diseases must rely on modern medicine to manage their symptoms for years or even decades. The most effective treatment for cardiovascular disease is to prevent it in the first place, and there's a simple way to do that: eat healthfully. As our government recommends, filling half our plate with fruits and vegetables is the most potent and effective prescription for avoiding health-impairing, life-threatening diseases. So why are we as a nation seemingly incapable of doing this?

The problem begins with the federal government undermining its own recommendations by pouring taxpayer dollars into agricultural subsidies that make junk food cheap. Walk into any fast-food restaurant and you'll see its "healthy" offerings are often more expensive than its "combo meals" that include lots of meat, french fries, and a syrupy beverage. These skewed costs make it difficult for people to choose the healthy option, especially in neighborhoods where budgets are tight and supermarkets are few and far between.

> ***Filling half our plate with fruits and vegetables is the most potent and effective prescription for avoiding health-impairing, life-threatening diseases.***

Decades of eating too much of the wrong stuff have taken a toll on our health care system: treating cardiovascular disease costs the United States $273 billion annually. Not surprisingly, most patients need assistance to cover these staggering costs—indeed, about two-thirds of the costs in 2010 ($172 billion) were covered by Medicare and Medicaid. These programs are publicly funded, which means taxpayers are essentially getting billed twice for the same health problem: once for agricultural subsidies that contribute to disease, and once for programs that treat disease.

In August UCS released *The $11 Trillion Reward*, a report that shows how the United States could save 127,000 lives each year (and the $11 trillion in value that economists place on these lives) by investing in programs that would preserve the productivity of our farmlands and provide a greater abundance of fruits and vegetables, while reducing air and water pollution from industrial agriculture. Congress has the opportunity to get this right in the next farm bill, which sets the nation's food and agriculture policy, and UCS is working with lawmakers to ensure the bill puts maximum focus on health and nutrition. Let your representatives know you agree, and remember to eat your veggies! {C}

***Ricardo Salvador** is director of the UCS Food and Environment Program.*

If we all followed U.S. dietary guidelines, the nation would save $17 billion in annual medical costs. Visit *www.ucsusa.org/11trillionreward* to learn more.

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