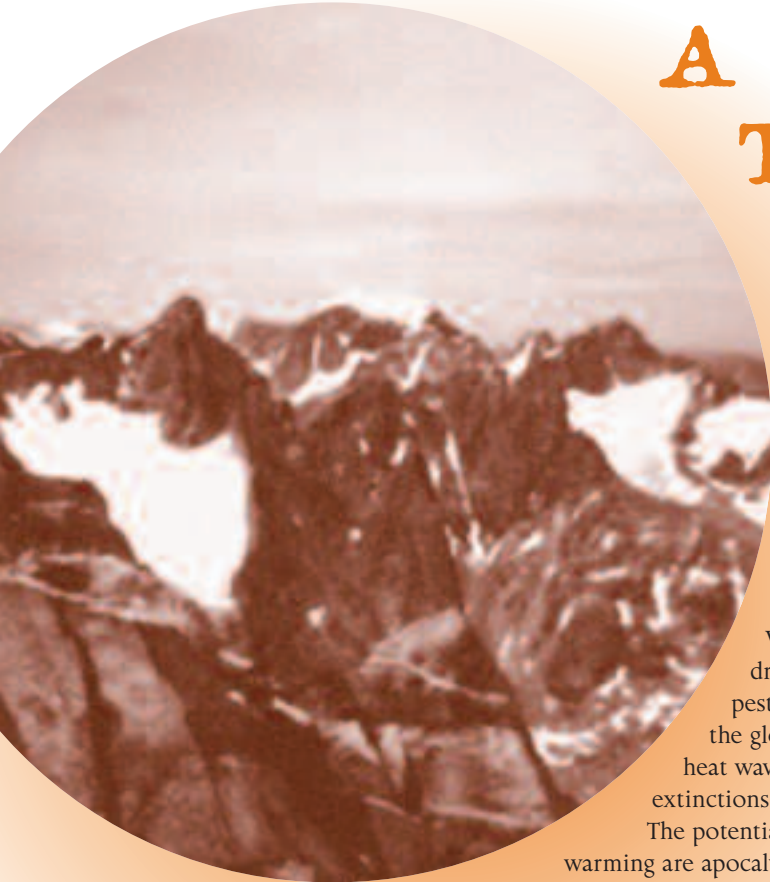




WYOMING OUTDOOR COUNCIL WINTER 2007

FRONTLINE

R E P O R T



The Wind River Range's glaciers are expected to disappear by the end of this century.

A Global Warning: The World Is Warming

By Molly Absolon

You've heard the dire predictions. Floods inundating New York City. Fires blackening the Rocky Mountain West. Polar bears drowning. Plague and pestilence sweeping the globe. Hurricanes, heat waves, drought, mass extinctions.

The potential effects of global warming are apocalyptic. Climate-change alarmists can sound surprising similar to religious zealots proclaiming the onset of Armageddon and the end of the world. The populace at large has often ignored these prophets of doom, especially when Judgment Day comes and goes without the projected disaster. So it goes with global warming. The problem has been too big, too abstract, too distant and too surreal for individuals to grapple with. Until now.

Fact versus fiction

Scientific evidence shows that the ten warmest years in the past century have all occurred since 1990. In Wyoming the effects of the change are obvious: glaciers are melting; pine bark beetles are killing large swathes of forests; drought is ravaging the state; the mountain snowpack is accumulating

later and disappearing earlier; and summer heat waves are more intense and last longer.

The economic consequences of these changes are just beginning to be felt but ultimately scientists predict reduced crop production, restricted water supplies, and the loss of forests, all of which will dramatically affect the way Wyoming people do business.

Yet in spite of these tangible changes to our environment, as recently as spring 2006 a Gallup poll found that Americans were not particularly concerned about global warming. Now things have changed. You can't pick up a newspaper or magazine these days without spotting an article on climate change. A January 2007 poll in Canada found that the environment has surged from a distant blip on people's radar screens to their number one concern. Twenty-six percent of them say the environment is their top concern, and nine out of ten of them claim they are willing to make sacrifices to help address the problem. Americans may not be to this point, but even President Bush has broken down and in his 2007 State of the Union called global warming "a serious challenge."

The United States is responsible for 30 percent of global carbon dioxide emissions. Reducing these emissions requires a concerted effort that includes everything from energy conservation and increased efficiency to increasing renewable energy supplies. The sea change in public opinion on the global warming issue that has occurred over the past year seems to be finally having an effect as leaders around the world are moving forward with laws and regulations *(continued on page 3)*



More on
Global Warming
Pages 3-8



Roadless Area
Victory
Page 9



Around Wyoming
Page 10-11

INSIDE

MESSAGE FROM THE BOARD PRESIDENT

As most of you know, Mark Preiss left the position of executive director of the Wyoming Outdoor Council in early October. During Mark's two-year tenure, we made important strides improving our organizational health and effectiveness, including implementing a clarified strategic plan; completing a process to identify our "brand;" establishing a program focused on renewable and clean energy; securing major legal advances including two stays on oil and gas leasing in the Wyoming Range; and increasing our involvement with the legislative process in Cheyenne. We are deeply grateful to Mark for his dedicated service working to protect Wyoming's environment and quality of life.

When Mark stepped down, we appointed Laurie Milford, then our director of development, as acting executive director. At our December 2006 board meeting, the board decided to postpone its search and give her a one-year appointment as executive director. Our intent is not to forego the search for the best possible leader for the Wyoming Outdoor Council, but rather to delay it while we further reinforce our new strategic plan. We have asked Laurie to serve as executive director during this time and would welcome her application for the position when we do conduct our national search. We expect that a search might be initiated in the third quarter of 2007, resulting in the identification of our future executive director by the end of the year.

Laurie joined the Wyoming Outdoor Council as development director in October 2005 after leaving LightHawk, the environmental aviation group. Prior to joining the staff, she served on our board of directors. Based in Laramie, Laurie has nine years of experience working in the nonprofit and education sectors, including a stint at the Carnegie Foundation for the Advancement of Teaching. Laurie holds a bachelor's and a master's degree in English from the University of Iowa and the University of Wyoming.

Laurie possesses the strong support of both our board and staff. Having worked closely with Mark during his time as director and having recently been the vice president of our board of directors, Laurie is uniquely qualified to guide our organization in the ongoing implementation of our one-year-old strategic plan. She will be based in Laramie and will periodically work from our Lander headquarters.

Laurie's plan for the Wyoming Outdoor Council over the coming year—our 40th anniversary—includes continuing to hold government accountable to our nation's environmental laws, supporting our partners in conservation through coordinated efforts at the regional and state level, and influencing public and private leaders to adopt policies that protect Wyoming's environment. Laurie will also work to optimize the efforts of the team of professionals that make up the Wyoming Outdoor Council.

If you have any suggestions or questions, please call Laurie or me. I hope you will join me in welcoming Laurie to her challenging and important new role. If you have not yet met Laurie, I encourage you to seek a chance to do so in the year ahead. I am confident you will be pleased with her selection as our executive director. I know she looks forward to working with you to prepare the Wyoming Outdoor Council for another 40 years of hard work.

Sincerely,



Scott Kane, President, Board of Directors



Established in 1967, the Wyoming Outdoor Council (WOC) is the state's oldest and largest independent statewide conservation organization. Our mission is to protect Wyoming's environment and quality of life for future generations.

Frontline Report is the quarterly newsletter of WOC and is provided as a benefit of membership. Letters to the editor and articles by members are welcome.

FOR MORE INFORMATION CONTACT:

WOC, 262 Lincoln, Lander, WY 82520

(307) 332-7031 (phone)

(307) 332-6899 (fax)

woc@wyomingoutdoorcouncil.org

BOARD OF DIRECTORS

Scott Kane, Lander
President

Anthony Stevens, Wilson
Vice President

Barbara Parsons, Rawlins
Treasurer

Terry Rasmussen, Casper
Secretary

Tom Bell, Lander
Emeritus

Mac Blewer, Washington, DC

Joyce Evans, Saratoga

Barbara Oakleaf, Lander

Susan Lasher, Worland

Sandy Shuptrine, Jackson

Keith Rittle, Laramie

Jim States, Saratoga

STAFF

Molly Absolon
Communications Director

Michele Barlow
Director of Government Affairs and Conservation Education

Andy Blair
Community Outreach Coordinator

Bonnie Hofbauer
Office Manager

Steve Jones
Watershed Program Director

Lisa Dardy McGee
Director of National Parks and Forests

Laurie Milford
Executive Director

Bruce Pendency
Program Director

Kathy Sanderson
Administrative Assistant

Meredith Taylor
Wildlife Program Coordinator

Anne Austin, *Frontline Designer*

Scott Kane

daytime phone: 307-332-3410

cell phone: 307-349-4052

email: scott@CEsolar.com

Laurie Milford

office phone: 307-721-7610

cell phone: 307-399-8440

email: laurie@wyomingoutdoorcouncil.org

contact
information

Look for articles on carbon offsets, whitebark pine and grizzlies, and global warming prophets on our website: wyomingoutdoorcouncil.org

(continued from cover) designed to promote wise-energy use and reduce carbon emissions. But the news is not all good. Traditional coal-fired power plants continue to be proposed and built, and the American West's public lands and wildlife are being ravaged by the rush to secure fossil fuels.

What we need to know

The Earth's average temperature rose approximately one degree in the 20th century to 59 degrees Fahrenheit. Most of this increase took place since the 1970's. Seas have also risen over the last century—about six to eight inches globally—and the rate of rise increased in the last decade. Such global warming events are not unprecedented, according to Central Wyoming College professor and geochemist, Suki Smaglik.

“What's happening now is within the realm of things that have happened in the past. The Earth has been hotter and it has been colder. What's different is that this time all evidence indicates the change is human caused,” Suki says. “There have been five or six mass extinctions in the past and many small ones. All of these extinctions were associated with climate change. The animals that could not adapt to the change died; those that could, did not. What remains to be seen is if humanity can adapt to a warmer planet.”

The latest computer models project a probable warming of around five degrees Fahrenheit should the concentration of carbon dioxide reach twice the 280-parts-per-million figure that has been the norm for at least 400,000 years. Levels of carbon dioxide—which are already nearing 400 parts-per-million—could easily surpass this threshold by the year 2050 without radical intervention.

Five degrees doesn't sound like much, but its implications are far reaching. A report commissioned by the British government and released in October 2006 warned that these kinds of temperature increases would have a “cataclysmic effect” on the global economy and, if left unchecked, could consume up to 20 percent of the world's gross domestic product.

What we can do

As the Wyoming Outdoor Council moves into its 40th year, we are joining the effort to stave off global warming. We've recently adopted a global warming policy to help guide our program work. Our renewables program has a direct impact on reducing carbon emissions by supporting the development of clean energy such as wind and solar. In addition, as an organization we are beginning to explore ways to reduce our own carbon emissions including enrolling in the Blue Sky energy program, which supports renewable energy; reducing the office use of electricity generated from fossil fuels with solar panels; and encouraging waste reduction and recycling.

We understand that curbing carbon emissions is a global effort and taking steps such as drying your clothes on a clothesline or replacing your light bulbs with compact fluorescents can seem quixotic in face of the scale of change needed to make a difference. Currently scientists estimate that in the next 50 years the world will need twice as much energy as it is using now with no increase in carbon emissions in order to sustain our current lifestyles. Obviously one person's efforts are negligible in face of such requirements. But we have to start somewhere.

Carl McDaniel, a professor of biology at Rensselaer Polytechnic Institute in Troy, New York, sums up our challenge as follows: “We won't make it on blind optimism. We need true hopefulness. True hopefulness in dire straits means first recognizing the odds are heavily against us, believing those odds, and then doing everything possible to beat them.” ▶

WYOMING OUTDOOR COUNCIL GLOBAL WARMING RESOLUTION

Whereas,

The mainstream scientific community overwhelmingly agrees that Global Climate Change is a proven phenomenon made worse by human activities, and

The humanitarian, economic and ecological consequences of Global Climate Change are uncertain, but range from damaging to catastrophic, and

Current technology is available to apply solutions to Global Climate Change at a cost that is less than the long-term societal consequences of not taking action, and

The consequences of Global Climate Change impact all inhabitants of Earth and extend to the people and the environment of Wyoming, and

The likely impacts to Wyoming's environment and economy include loss of wildlife and habitat, reduced water supplies, increased transmission of diseases carried by insects, and damage to the many economic interests of the state that are tied to natural resources and climate including agriculture, tourism and recreation.

Therefore,

The Wyoming Outdoor Council supports immediate and meaningful action on a local, regional, national, and global level to reduce the future impacts of Global Climate Change, and

Individuals are implored to 1) examine their own lifestyles and reduce the greenhouse gas output resulting from their choices, 2) encourage the organizations with which they affiliate to do the same at an institutional level, and 3) urge their elected officials to pursue regional and national legislation and global agreements to take the immediate and meaningful actions that are necessary to mitigate the likely dire impacts of Global Climate Change to current and future generations and to the Planet, and

The Wyoming Outdoor Council within its mission commits also to take the above actions, and to undertake public and government outreach, policy development, and other efforts that will contribute toward solutions to a looming global crisis.

Energy from down on the farm

Biofuels are liquid fuels made from plants instead of petroleum. These fuels include ethanol and biodiesel. Improved technology and changing economics have raised hopes that biofuels can make a significant contribution to easing the United State's dependence on petroleum for fueling its transportation sector and reducing its carbon emissions.

Biofuel proponents believe biofuels can contribute to solving several critical problems such as:

- **Promoting energy independence and national security.** Biofuels could replace or supplement oil imports, particularly imports from "dangerous" countries that threaten U.S. security.
- **Alleviating global warming and other air pollution.** Carbon dioxide emitted from burning biofuel is offset by the absorption that takes place when the fuels are growing as crops.
- **Providing jobs and rural economic development.** The emerging biofuel industry can provide jobs, stimulate local economies and support local farms.

Biofuel Challenges

Energy balance

Critics have questioned the efficiency of biofuel production in the past but changing technology is beginning to address this concern. A U.S. Department of Energy and U.S. Department of Agriculture study found that for every unit of fossil energy needed to make biodiesel, 3.2 units of energy were gained. Corn-based ethanol provides 26 percent more energy than is required in its production while cellulosic ethanol—or ethanol made from plant fibers—provides 80 percent more. Even though corn ethanol requires less petroleum than gasoline, its greenhouse gas emissions are similar. Moreover,

a study from the University of Minnesota estimates using the entire U.S. corn crop for ethanol would replace only 12 percent of the gasoline we use in this nation.

The Wyoming Outdoor Council enrolled in Rocky Mountain Power's Blue Sky Program in October 2006. We are purchasing 12 blocks—or the equivalent of 12 100 kilowatt hours per month—of wind power for our Lander office's electrical use.

Hot Fact

Hot Fact
The EPA estimates that changing only 25 percent of your home's bulbs to compact fluorescents can cut a lighting bill in half. Incandescent bulbs waste 90 percent of their energy as heat.

Food or fuel

The competition between food and fuel is a potential problem with biofuels. But the issue of hunger is more complex than a simple either/or debate. Currently, the amount of food produced in the world should be enough to feed its inhabitants, yet many suffer from hunger and malnutrition, even in the United States. The causes of world hunger include everything from poverty to inequitable food distribution, war, weather, and actual food shortages. Still a major shift by farmers from food crops to biofuels could exacerbate the problem.

A January 27 article in the *Casper Star-Tribune* attributed rising corn prices and food shortages in Mexico to the growing use of corn for ethanol. In other parts of the world, including Brazil, Indonesia and Malaysia, farmlands and forests are being transformed into soybean or palm oil plantations for biofuel production. A paper published in December 2006 by the International Food Policy Research Institute found that "without [agriculture] productivity improvements, aggressive growth in biofuels could have adverse effects on regions like Sub-Saharan Africa." These concerns are real and demand thoughtful policy solutions.

Hot Fact

A poll conducted in July 2006 found voters were way ahead of policy makers on energy efficiency with 78 percent of those surveyed saying they supported requiring SUVs to get 40 miles per gallon.

Sustainable agriculture

The fear that biofuel production will lead to industrial agriculture with all its inherent problems is also a concern. A farm-based energy system must meet the same criteria as a sustainable agriculture system, which means it must be economically viable, locally owned and managed, ecologically sound and socially responsible.

The Western Organization of Resource Councils has developed biofuels sustainability criteria that outline the considerations needed for creating a sustainable biofuels energy system. These criteria are available at: <http://www.worc.org/issues/biofuels.html>.

Feeding the world's engines while feeding its people and protecting its wildlands and wildlife is a daunting challenge, and biofuels are not a simple solution. However, biofuels remain one viable piece of the puzzle that can, and should, be pursued. ▶

Shining a light on energy use

Energy Star program promotes efficiency

By Keith Rittle

Most people have seen the U.S. Environmental Protection Agency (USEPA) ENERGY STAR® label on newer home appliances or computer equipment. But did you know that the program also extends to building-energy efficiency? When Trihydro Corporation, an engineering and environmental consulting company based in Laramie, was planning its new headquarters building in 2004, the company integrated energy-saving designs into its plans leading it to become the first privately owned building in Wyoming to earn the label.

The 23,000 square-foot facility was designed and built to be energy efficient and environmentally friendly, as well as provide a comfortable work setting for employees with state-of-the-art technical capabilities. The architectural layout and design, operating systems, and the materials used in construction all contribute to the building's requiring significantly less energy than the average office building for heating, cooling and lighting. The company tracks and reports its energy bills annually to USEPA to make sure the building continues to be operated in an energy-efficient manner, and as a result has been awarded the USEPA Energy Star certification in both 2005 and 2006.

ENERGY STAR is a voluntary partnership between business, government and others united to protect our environment for future

An Inconvenient Truth

A movie to buy and share with friends and family

By Andy Blair

I remember talking about climate change when I was in college back in the late 80's. At that time the idea was a hotly contested, distant issue. It's not anymore. Al Gore's film, "An Inconvenient Truth," puts global climate change right in front of the viewer and clearly articulates the threat. He traces the history of climate change research from the 60's to the present and builds his argument throughout the film. He counters criticism of the climate change theory by repeatedly pointing to supportive data that is endorsed by the vast majority of scientists. The resulting film is persuasive.

For me, one of the most striking parts of the film was when Gore showed the graph of atmospheric concentrations of carbon dioxide going back 650,000 years. Until the last century, concentrations of carbon dioxide ebbed and flowed within a fairly narrow range. Then the world experienced the industrial revolution. Gore had to get on a lift to show how dramatically the concentrations have increased since that time.

Another striking scene for me was a graph that showed the fuel efficiency standards for European

generations by changing energy practices today. To qualify for the ENERGY STAR rating, a building must rank in the top 25 percentile in terms of energy usage. Businesses can use ENERGY STAR to improve efficiency, enhance profits and create a competitive advantage. In 2005 alone, ENERGY STAR helped businesses and consumers save more than \$12 billion in energy costs while reducing greenhouse gas emissions equivalent to those of 23 million cars. ▶

For more information about ENERGY STAR, visit www.energystar.gov or call toll free 1-888-STAR-YES (1-888-782-7937).

Board member Keith Rittle is a vice-president at Trihydro Corporation.

Hot Fact

The shipping industry moves billions of units every year and accounts for more than 600 million tons of carbon dioxide, according to U.S. government figures. This is more than all of Canada's carbon dioxide emissions. Some companies have begun to change this equation by offering carbon offsets on shipping. Consumer pressure could push more to make the leap. Next time you order on line, ask the company if it offers a carbon-neutral shipping option.

Union countries, Japan and China. Gore pointed out that the U.S. government is taking California to court because California has passed a bill that will raise fuel efficiency standards for automobiles sold there to match the standards already in place in China.

"An Inconvenient Truth" is disturbing, but Gore also leaves viewers with a message of hope. If you have not been able to see the film yet, I

highly recommend it for viewing by all Americans. The United States is currently responsible for the release of roughly 30 percent of all so-called 'greenhouse gases.' It is our responsibility to our children and the rest of the people on this planet to lead the way in controlling those emissions. ▶

Hot Fact

To produce one pair of regular cotton jeans takes three-quarters of a pound of fertilizers and pesticides that are largely petroleum based and a source of carbon emissions. The farming of organic fibers, by contrast, releases less carbon dioxide into the air and uses 50 percent less energy. Look for organic cotton, hemp and silk, as well as recycled synthetics when shopping for clothes. Used clothing also reduces energy costs.

Wyoming People Making a Difference

By Molly Absolon

It started with a conversation around a backpacking stove.

"I was working a course for the National Outdoor Leadership School," recalls Wyoming Outdoor Council board president, Scott Kane. "We were focused on teaching our students to leave less impact on the land, and we started talking about how we could translate that ethic to our own lives."

From that abstract conversation, an idea was born. Ten years later, the resulting company—Creative Energies—is booming. The company installs renewable energy systems on houses and commercial or public buildings around the state and can barely keep up with the demand for its services.

"We recognized that the way people in our society use energy is not sustainable," Scott says. "Our company may not be able to change the world, but we can help individuals make more environmentally friendly energy choices, and that is important to us."

Vision and leadership

Creative Energies is just one of myriad businesses and individuals in Wyoming quietly looking at ways to use energy more efficiently in order to lessen our dependence on fossil fuels and reduce carbon emissions. Under

the leadership of these innovators, efforts to promote energy conservation, efficiency and renewables are starting to come into their own as viable options for chipping away at the specter of global warming. Some financial analysts have called clean energy the next dot.com bubble, with the hope that this bubble has more staying power.

"I hope it's not just trendy—that these kind of sound-environmental business practices are sustainable—but the fact that it is trendy certainly helps us get buy-in for our efforts," says Julie Klein, the director of environment, health and safety for the Grand Teton Lodge Company, which operates concessions in Grand Teton National Park.

Grand Teton Lodge Company launched a green program called

Envision in 2003. The program codified the company's efforts to incorporate sustainable business practices into its daily operations and made it accountable to an international accrediting organization that verifies the legitimacy of the green program through routine audits. Today the company prides itself on the Envision initiative, which includes everything from offering organic food and beverages in its restaurants to providing incentive packages for conference planners who host "green meetings" at one of the company's facilities.

"Mass tourism is pretty consumptive," Klein says. "Our Go Green, Get Green initiative helps conference planners lessen the impact of their meeting from start to finish."

The motivation for Grand Teton Lodge Company to go green came from a number of different corners including pressure from the National Park Service for concessions operating in the park to be environmentally friendly. The decision to adopt the Envision initiative, which requires extra work and investment by the company and its employees, has been a popular move, however. Klein says she doesn't necessarily believe the company's guests choose Grand Teton Lodge Company because of its green programs, but most are appreciative of the company's efforts to minimize its impacts and protect the spectacular setting in which it operates.

It costs too much

The cost-benefit ratio for renewable energy or green practices has been seen as an obstacle in the past, and for many it continues to be a limitation. Green buildings do cost more. Renewable energy is pricey particularly in contrast to energy provided by the firmly ensconced fossil fuel industry. Research and development lag behind demand for clean energy because of lack of funds. But some of the discrepancy is simply a lack of awareness on the part of consumers and elected officials.

"There is a big educational rift between the technology that is available and affordable and what is being implemented," Scott Kane says. "If we all had the time and energy to learn, we'd be using a lot less energy. For example, if you have a 10-year-old refrigerator in your house, it is a good economic decision to get rid of it and buy a new energy-efficient model. New refrigerators save energy and pay off quickly. But are you going to do it? The answer is probably not. It's too much hassle.

"But I think this is slowly changing," Scott continues. "School districts, county commissioners, business owners are looking 50 years out and recognizing that they may have to pay more upfront for clean energy, but in the long run it is not only a good economic decision, it is



Wyoming Outdoor Council board president, Scott Kane, installing a solar panel.

also good for the environment. When I start seeing this kind of sea change in public opinion, I am hopeful we can make a difference.”

Mainstreaming clean energy

Lander-based contractor Trey Warren, who founded Whimpy Wolf Builders LLC in 2001 to offer resource-efficient construction services, says he too has had to work hard to get the word out and educate people about green building and its benefits.

“I had to do a lot of remodels to pay the bills before I got contracts for straw-bale houses. Now green building is no longer fringe. Five years ago there were just a few straw-bale houses in the whole state; now there are a dozen in Fremont County alone.”

Straw-bale buildings and other natural structures are about more than energy efficiency. But Trey says people’s decision to build a straw-bale structure is often motivated more by their concerns about their impact on the planet more than other factors. Trey shares these concerns and in an effort to walk his talk, Whimpy Wolf Builders LLC purchases local materials, uses biodiesel in company vehicles, and buys wind-generated energy credits to offset energy used in construction.

Biofuels

Biofuels—biodiesel, ethanol and recycled cooking oil—continue to be challenging to obtain in sufficient quantities in many parts of Wyoming. Entrepreneur Mark Thornberry hopes to change that, at least in Fremont County. He is in the preliminary stages of establishing a new company—Frontier Fuels—that he hopes will provide a closed-loop energy cycle for the area.

“Our vision is a complete circle. We’ll provide biodiesel to run farm machinery. Farm machinery will be used to grow dry-land fuel crops like rapeseed. The silage from the biodiesel manufacturing process will be used to provide high-protein food for cattle and so it goes,” Mark says. “Our goal is to keep the energy in the community.”

Such local energy systems can be the beauty of clean energy. In Wyoming where distances are great and urban centers few, dispersed energy providers—be it small-scale wind farms, solar installations or local biofuel manufacturers—have great appeal. They can stimulate the economy, provide jobs, reinvigorate small farms, and provide energy to reduce the community’s dependence on foreign fuels.

“Biofuels are not going to be a panacea,” says Ben Ellis, who recently was elected to the Teton County Commission on a carbon-neutral platform. “But we get close to 15 to 20 percent of our oil imports from dangerous nations like Iran. If we can replace that amount with biofuels, and I think we can, it will be good for the country, good for the economy and good for our kids.”

Ben Ellis’s mother-in-law and Wyoming Outdoor Council board member, Sandy Shuptrine, is another person who seeks ways to reduce our use of fossil fuels.



Trey Warren

Trey Warren designed and built this straw-bale, off-the-grid home near Lander.

Sandy, who lives in Jackson, is the program coordinator for the Yellowstone-Teton Clean Energy Coalition, one of 90 coalitions across the country designated by the Department of Energy (DOE). The goal of the initiative is to promote the use of alternative fuels and lessen our reliance on petroleum.

The changing climate

Sandy, like many others, thinks that we may have reached a tipping point in terms of public concern about global warming. Her optimism seemed to have been vindicated by November’s election with the Democratic takeover of Congress and closer to home, the election of her son-in-law to the county commission.

“I think it is an exciting time,” Ben Ellis says. “I feel like there has been a breakthrough in public opinion regarding greenhouse gases. It feels different because the momentum crosses political ideological boundaries. We’ve been waiting for leadership from the federal government and it just hasn’t happened. So cities, states and businesses have stepped forward to take the lead.”

Ben is one of those stepping forward. He believes his vision for making Teton County carbon neutral was one of the main reasons he was elected.

“Local efforts like the one I envision are not in lieu of a reasonable national federal energy policy,” Ben concedes. “But if affluent communities like Jackson can’t take the initiative and strive to be carbon neutral, who can?”

Fortunately, Ben is not alone in his mission. Jackson’s mayor recently signed the mayor’s climate protection agreement linked to the Kyoto Protocol.

“[Clean energy] is an exciting field to be working in right now,” Sandy says. “There is a tremendous amount of space for making progress.”

Creative Energies was recently named 2007's Innovator of the Year by the Converse Area New Development Organization (CANDO)

Footloose and Carbon-free

By Sheryl Eisenberg

It's frustrating to feel you're part of the problem when you want to be part of the solution. But there isn't much choice in a fossil-fuel driven world. Unless you practice a severe form of back-to-nature self-sufficiency, you contribute to global warming, like it or not.

There's no avoiding it—not even if you drive a Prius, perfectly insulate your home, replace all your incandescent bulbs with compact fluorescents, use rechargeable batteries and follow every other precept in the energy-savers rulebook. No, not even if you power your home with your very own solar panels and bike to work each day (though kudos to you if you do).

The reason is that personal emissions—the ones from home energy use and driving that you're directly responsible for—account for just 40 percent of your total. The larger part comes from everything else you buy and do. Your clothes, for instance. The songs on your iPod. The food you eat. For all of these things are made, grown or transported with the help of fossil fuels. So is the bike with which you may idealistically pedal to work. So are the solar panels.

But let's get real. If you're like most people, these indirect emissions are beside the point. You do depend on a car for transportation and the "grid" for power and are not about to overturn your whole life in a quixotic attempt to fight a global problem singlehandedly. Still, you wish there were something reasonable you could do. And there is: buy carbon offsets to cancel out your emissions.

Carbon offsets are projects that reduce or prevent the accumulation of global warming gases in the atmosphere to make up for the gases that you have inadvertently put there. They achieve this either by increasing the availability of renewable energy, supporting energy-efficiency improvements by industry or capturing and sequestering emissions.

Of course, you don't really buy these projects. What you do is contribute to them. Depending on who you do it with, the contribution may or may not be tax-

deductible. What it goes towards will also vary. Some organizations and companies focus on just one thing, such as buying renewable energy certificates. Others make a point of funding different types of projects, much as a mutual fund would. Certain groups choose projects that not only help with global warming, but other environmental or social problems as well, such as forest degradation or poverty.

Here are some of the major players in the United States:

CarbonFund.org (<http://carbonfund.org>) is a non-profit that funds renewable energy, efficiency and sequestration projects. You can choose among them on the contribution form. The site has an easy-to-use calculator on the homepage for estimating your emissions, both direct and indirect. However, it only factors in carbon emissions, not those from other global warming gases. If this bothers you, contribute a little extra.

CarbonCounter.org (<http://carboncounter.org>) is a joint project of The Climate Trust and the international relief organization Mercy Corps, which has gotten involved out of a desire to forestall humanitarian disasters stemming from climate change. CarbonCounter.org funds energy efficiency, renewable energy, cogeneration, transportation efficiency and reforestation projects. For project details, see The Climate Trust site (<http://www.climatetrust.org>).

Native Energy (<http://www.nativeenergy.com>), a privately held Native American energy company, helps build new wind farms and biomass generators owned by Native Americans and/or farmers. Native Energy also offers renewable energy credits. In addition to an all-purpose calculator, it has a travel calculator that factors in all kinds of transportation (including train and bus) as well as accommodations. Unfortunately, the site itself is a little confusing, but not so bad you can't make sense of it.

Bonneville Environmental Foundation (<http://www.b-e-f.org>) is a non-profit that sells renewable energy credits to offset emissions. Bonneville's site has several calculators—one is all-purpose, another is for



Per capita global warming gas emissions in the U.S. are among the highest in the world.

special events and a third is for car and air travel.

Terrapass (<http://www.terrapass.com>) is a for-profit company that offers a simple 1-2-3 process for offsetting your car emissions. Funds go toward a variety of wind, biomass and efficiency projects.

Solar Electric Light Fund (<http://self.org>) provides rural villages in developing countries with solar power. A gift to this group isn't an offset per se, but a way of extending the benefits of electricity—in a climate-neutral way—to some of the two billion people on the planet who lack it.

Each of these groups, other than the Solar Electric Light Fund, takes pains to get third-party certification for the projects it funds. Unfortunately, certification criteria aren't uniform, so you can't be sure all projects measure up. Renewable energy certificates are the exception. You can feel confident they conform to high standards if they have the Green-e (<http://www.green-e.org>) seal of approval.

Some people question whether buying offsets isn't like paying for the right to pollute. They think we should focus on bringing our individual emissions down instead. I don't see it that way. Sure, we should do what we can in our personal lives. But dealing with global warming requires something more—a change in the technologies that power our world. In my view, offsets will get us there quicker.

Besides, it's not an either/or choice. We can reduce our energy use and buy carbon offsets at the same time. The more we do—and the sooner—the better. Time is short. ▶

Reprinted with permission from the National Resource Defense Council. For a free online subscription to This Green Life go to <http://www.nrdc.org/thisgreenlife/>.

Roadless area victory: Everyone except Wyoming is celebrating



Jeff Vanuga

Wyoming's roadless areas provide accessible recreation to many.

By Lisa Dardy McGee

This fall, public land enthusiasts and advocates nationwide—especially those of us in the West—had reason to celebrate. President Clinton's 2001 Roadless Rule, which protected nearly 60 million acres of U.S. Forest Service land from new road construction and commercial timber harvest, was reinstated. Hunters, anglers, horsepackers, wildlife watchers, outfitters, hikers and tourism-based business owners raised a glass (as did those of us at the Wyoming Outdoor Council) to toast the victory.

People in Wyoming, regardless of political affiliation, are discovering common ground on the roadless issue. Two fundamental things unite us and contribute to what we can all agree makes life in Wyoming special: large tracts of accessible public land and healthy and abundant wildlife.

We're not alone. Governors and state biologists in Arizona, Colorado, Montana, New Mexico, Oregon, and Washington all support protecting national forests from roads. Even Idaho, which rivals Wyoming for the distinction of being the most anti-conservation western state, has come out in favor of roadless area protection.

Wyoming is noticeably absent from this list. Worse, Governor Freudenthal is actively reviving a lawsuit that seeks to overturn the 2001 Roadless Rule. Although he is quick to clarify that his opposition to the rule is rooted in procedure more than substance—in other words, he doesn't care for national rules and instead prefers

locally crafted solutions—his lone stance is disappointingly out of touch with both regional and local sentiment.

Wyoming's roadless areas are some of the most outstanding lands in the national forest system. Wyoming people know what's at stake and what we have to lose. Without the Roadless Rule, nothing stands in the way of the Forest Service authorizing new road construction on our non-wilderness, backcountry forestlands. New road construction degrades stream quality, fragments wildlife habitat and facilitates the introduction and spread of exotic plants. The result is poorer hunting, fishing and recreational opportunities.

Wyoming's pending lawsuit threatens the public lands and wildlife we all cherish. In a state as wealthy as ours, how can we not afford to protect our last special places? 🏹

WHY "LOCALLY CRAFTED SOLUTIONS" FALL SHORT OF NATIONAL PROTECTIONS:

Last summer Governor Freudenthal initiated an agreement between the state of Wyoming and the Shoshone and Bridger-Teton National Forests, both of which are undergoing revisions of their forest plans. The agreement states that no new oil and gas leasing would occur in inventoried roadless areas on either forest until the plan revision processes were complete—sometime in 2008. Although this was welcome news, the agreement is not an adequate substitute for the Roadless Rule. First, it's temporary. After 2008, without the Roadless Rule in place, the forest plans will govern management of roadless areas—and compromise rather than full protection is expected. Second, unlike the Roadless Rule, this agreement affects only two of the eight national forests within Wyoming's boundaries—and does so in a limited way. The 2001 Roadless Rule offers broad, nationwide protection to national forest roadless areas—the kind of protection that is appropriate for national treasures like the forests in Wyoming.

Please contact Governor Freudenthal to express your support of roadless area protection and your opposition to Wyoming's lawsuit: governor@state.wy.us, Governor Freudenthal, State Capitol, 200 West 24th St., Cheyenne, WY 82001, 307-777-7434.



AROUND WYOMING

HIGHLIGHTS OF PROGRAM WORK

GREATER YELLOWSTONE

2006 Update on Anticline Mule Deer Study.

Hall Sawyer, of Western EcoSystems Technology, Inc., released a progress report on the ongoing Pinedale Anticline Mule Deer study this past fall. The study, which in 2005 showed a 46 percent decline in mule deer wintering on the Anticline over the first four years of development, found that deer populations were not further reduced during the fifth year. This seems to indicate that the Anticline's carrying capacity for mule deer has been lowered by natural gas development. Direct and indirect habitat losses to well pads and roads appear to change the deer's use patterns for the life of the development with only 48 percent of areas that were considered 'high use' prior to development still considered 'high use' five years later. Sawyer's study did indicate some preliminary positive signs for the deer. A wastewater collection system that eliminated 25,000 truck trips on the Anticline as well as the use of locked gates to control traffic seem to have helped reduce mule deer displacement. But the fundamental conclusion of the study is, "The weight of evidence suggests the observed deer decline in the

treatment area was due primarily to reduced survival rates associated with [natural gas] development activities and secondarily to limited amounts of emigration." *Contact: Bruce Pendery*

Forest plan revision: pulling out the maps. Forest plan revision—the three-year process underway on both the Shoshone and Bridger-Teton National Forests—continued this winter with a rollout of maps illustrating everything from wildlife winter range and roadless-area boundaries to motorized-recreational trails and tracts leased for oil and gas development.

The Shoshone National Forest most recently tackled the topic of roadless areas. With the fate of the national Roadless Rule still uncertain (see story on page 9), the forest is preparing a variety of management options. As part of this process, the Shoshone asked for specific feedback about what uses the public felt were appropriate in approximately 31 roadless areas on the forest. The Wyoming Outdoor Council provided detailed comments advocating for the protection of these areas. We are hopeful the national Roadless Rule will remain in place, but if it does not, that the final forest plan will provide adequate safeguards for roadless areas.

In December, the Bridger-Teton National Forest hosted a series of local workshops to receive public input on the topics of oil and gas development and recreational uses. Armed with colorful markers and pens, meeting participants made notations and circled areas on maps indicating where they thought certain uses were appropriate. One result was unequivocal. Pinedale, Jackson and Kemmerer residents do not want any more oil and gas development on the forest. With respect to a forest like Bridger-Teton, which is beloved for its backcountry recreation and wildlife values, the onus should be on the Forest Service to justify why any new oil and gas development is appropriate anywhere on the forest. We are hopeful the plan will reflect this sentiment. *Contact: Lisa McGee*

Elk get their day in court. Our efforts to reduce the prevalence of disease in western Wyoming's prized elk herds moved one step forward this fall when our Earthjustice attorneys appeared in district court in Cheyenne to present oral arguments on the case. The lawsuit, which is aimed at ensuring Wyoming's elk remain healthy and wild, asks the court to order the U.S. Forest Service and Bureau of Land Management (BLM) to begin an environmental review of 15 feedgrounds located on federal lands in western Wyoming. The outcome we are looking for will require the agencies to study alternatives to feeding including the phase out of the feedgrounds to reduce disease. We're hopeful the case is having an effect. One positive sign is that the U.S. Forest Service has responded with a scoping notice calling for public input into several elk feedgrounds on the Bridger-Teton National Forest. This is a real step in the right direction for the agencies to learn about the impacts of the feedgrounds on the land and wildlife. *Contact: Meredith Taylor*

Where the deer and the antelope roam—still. The Wyoming Outdoor Council worked with the Jackson Hole Wildlife Foundation to remove a mile of fence near Kelly Warm Springs this past fall. This area is a congregating site for the Teton



Jeff Vanuga

The fast pace of oil and gas development in the West is cutting at the very heart of some of the most valued mule deer habitat in the Northern Rockies, including the Upper Green River Valley.



Jeff Vanuga

Efforts to protect pronghorn migration routes continued this past fall with a fence-removing project near Kelly Warms Springs outside of Jackson.

National Park antelope herd before beginning its long migration down to winter range in the Upper Green River Valley. The project was part of our efforts to secure the pronghorn's migration corridor permanently. We've also been working with landowners and wildlife managers to develop management plans for the three bottlenecks along the route. Landowners at the Funnel and Red Hills bottlenecks and the BLM at Trapper's Point bottleneck have cooperated with our efforts by helping to remove unnecessary fences and make existing fences wildlife-friendly.

Contact: Meredith Taylor

BLM pulls parcels from lease sale. The BLM pulled two Upper Green River Valley parcels from its December 5, 2006, lease sale and eight more from the February sale after receiving protests from conservation groups, local citizens and the Wyoming Game and Fish Department about the historic, cultural and wildlife values of the lands in question. In both cases, the Wyoming Outdoor Council and its partners submitted protests. The Wyoming Game and Fish Department's decision to jump into the fray and protest the December

STATEWIDE

'A Land Out of Time' tours Wyoming. The Wyoming Outdoor Council has been touring the state hosting screenings of a new, award-winning documentary film—*A Land Out of Time*—that highlights the impacts of the current energy boom on the Rocky Mountains. Our founder, Tom Bell, is featured in the film, which shows how energy development is changing the land and people's lives in the West. Check out our web site for a schedule of screenings, or call us and we can arrange a special showing for you. Contact: Andy Blair

Time for the State of Wyoming to quit howling about wolves. The Wyoming Outdoor Council has intervened in Wyoming's lawsuit against the U.S. Fish and Wildlife Service over its rejection of the state's wolf management plan. Wyoming wants to treat wolves as predators subject to indiscriminate killing outside the bounds of Yellowstone National Park and surrounding wilderness areas. Inside those boundaries, wolves would be managed as trophy game. We chose to intervene because we disagree with the state's position and believe that trophy game status for wolves statewide provides the best vehicle for delisting wolves and for

preventing their future relisting. In addition, hunting license fees resulting from trophy game classification would provide an income source that could be used to offset wolf management costs. Contact: Meredith Taylor



Jeff Vanuga

sale—and the BLM's subsequent decision to withdraw two parcels—validated our concerns, many of which were identical to concerns raised by Game and Fish biologists. These specific leases include important transitional habitat for mule deer migrating between summer and winter ranges. They also provide sage grouse habitat. The Game and Fish Department did not formally protest any of the February lease parcels; nonetheless, the BLM withdrew eight parcels citing concerns we raised with others over the "important historical and cultural resources as well as important wildlife habitat" of the area. Leasing in the Upper Green River Valley is moving forward under the 1988 Pinedale Resource Management Plan, which is woefully out of date regarding wildlife issues in the area. We have argued that leasing needs to be halted until the BLM issues its new plan, which is due to be released in early 2007 after nearly four years of preparation. Contact: Bruce Penderly

Welcome back, Mac



After a two-year hiatus during which he tromped around Capitol Hill in Washington, D.C. on behalf of the nation's wild places and wildlife, Mac Blewer has rejoined the Wyoming Outdoor Council as our newest board director. Mac was the Wyoming Outdoor Council's outreach coordinator for six years and we're thrilled to welcome him back into the fold.

"I joined the board of the Wyoming Outdoor Council because of the organization's pragmatic approach to resource-management challenges in a state that values pragmatism," Mac says. "I love the group's ability to fight like a junkyard dog when defending Wyoming's wild lands. I also

like its ability to come to the table and advance common sense solutions when necessary."

Mac left the Wyoming Outdoor Council in 2004 to work for the National Wildlife Federation in Washington, D. C. as a lobbyist on public land issues. He saw this move as an out-growth of his years of work focused on the Red Desert and sought to use his influence on the Hill to gain supporters for protection of our nation's public lands, which are special to many, including Mac.

"Last year, I fished in the Poconos, hiked in the Green Mountains of Vermont, and looked for birds and wildlife along Chesapeake Bay. In Acadia National Park, I watched sea otters tumble in the surf and meteors blaze over the Atlantic. I traveled to Yellowstone and viewed wolves running in the cold dawn light on Dunraven Pass. I heard elk bugling near Beartooth Pass. I hiked in endangered landscapes of the desert like Adobe Town and

Powder Rim. I spent time at my cabin outside of Lander and listened to the stillness," Mac says.

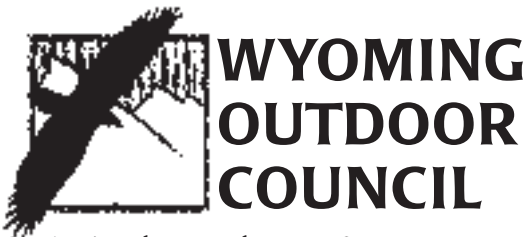
"These experiences helped me slow down and put things in perspective. They also renewed my commitment to my work and to the work of organizations like the Wyoming Outdoor Council," Mac concludes.

Mac started a new job as an associate director for the National Parks Conservation Association's park-funding campaign in Washington, DC, this past October. He will continue, however, to commute out to Wyoming for a respite from the hustle and bustle of the big city and a chance to reconnect with places like the Red Desert.


"The Wyoming Outdoor Council's staff, board and especially its volunteers have taught me how to be a better conservation advocate," Mac says. "Without the volunteers, the Wyoming Outdoor Council and every other group within the conservation movement would be dead in the water. I missed WOC and wanted to be involved with the group again, so here I am."

We welcome Mac and look forward to his enthusiasm and commitment. ▶

Thank you for...
your generous response to our end-of-the-year fundraising letter. We received an amazing outpouring of support. Please let us know when you make stock gifts. Because of post-9/11 security, we cannot determine who makes individual stock gifts.



262 Lincoln • Lander, WY 82520
Ph: (307) 332-7031 • Fax: (307) 332-6899
e-mail: woc@wyomingoutdoorcouncil.org
Web: www.wyomingoutdoorcouncil.org
RETURN SERVICE REQUESTED

 Printed on 100% recycled paper, using vegetable-based ink

NON-PROFIT ORG.
U.S. POSTAGE
PAID
PERMIT NO. 149
LANDER, WY 82520