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Farmers Will Leave More Water in Northwest Rivers

Letter

This summer, for the first time in Washington State's history, irrigation water rights were transferred back to a river when Dan and Gloria Walker, of Cle Elum, Washington, curtailed irrigation on their land. This was the first action in one of two novel EDF projects to transfer existing irrigation water rights back to rivers in the Pacific Northwest. The precedent of adding freshwater improves the ecological health of the rivers, benefits salmon, steelhead trout, and other wildlife, and also generates additional hydroelectricity downstream, thereby reducing fossil fuel consumption and air pollution.

Thanks to the first project, some of the most important water rights in Washington State's Yakima River Basin will stay in the Teanaway River, a tributary of the Yakima. This was once a premier spawning site for salmon and steelhead, a subsistence base for



EDF economist Dr. Zach Willey (right) and Ken Smith, a member of the Confederated Tribes of Warm Springs, worked together to protect the tribes' natural resources.

the Yakama Indian Nation. Irrigated agriculture, which began in the area in the 1890's, often drains critical parts of the Teanaway and has damaged the fish's reproduction.

A 1994 EDF report, Restoring the Yakima River's Environment, recommended using voluntary transfers of water rights to help restore once-healthy habitats in the Yakima and tributaries such as the Teanaway. EDF economist Dr. Zach Willey worked with the U.S. Bureau of Reclamation, the Washington Department of Ecology, and the Yakama Nation to find area farmers with high quality water rights who were willing to leave more water in the river. Farmers would be paid for reducing their irrigation operations by beneficiaries, including agencies responsible for fish and wildlife recovery and the Bonneville Power Administration.

With the first transfer of water rights completed by the Walkers, other farmers in the Yakima Basin and elsewhere in *Continued on page 5.*

"Great Printing" Advances in the Great Lakes States

Governors, printing industry representacific actions and goals to make pollution prevention a standard practice in the lithographic printing industry in Great Lakes states, where 39% of the nation's printing is done. The impact on the air, land, and water of all printing operations can be significant, especially in urban areas where large numbers of individual firms may operate in a small, environmentally stressed area.

The actions, which result from the Great Printers project launched by EDF, enable printers, print buyers, suppliers, distributors, regulators, and technical advisors to work together up front to reduce the environmental impacts of printing. The new goals were presented in July by Wisconsin Governor Tommy Thompson, Robert Murphy, Chairman of the Board of the Printing Industries of America, and EDF Executive Director



John A. Briegel (center), a vice president at McNaughton and Gunn, Inc., shows EDF's Kevin Mills and Carol Andress a product of the Great Printing process at his plant.

Fred Krupp at the annual meeting of Great Lakes governors.

Four pilot states—Illinois, Michigan, Minnesota, and Wisconsin—have set up teams of environmentalists, regulators, and printers to implement the recommendations. Progress to date includes:

Consolidated Reporting: By December, Wisconsin will be using a single, easy-to-use computerized report form, designed from an EDF template, which consolidates more than 90% of a printer's reporting obligations. One large printer said that even preliminary changes to one of the reporting forms had already cut the time they need to complete it from 30 days to one. The interactive reporting process takes advantages of a "teachable moment" to encourage pollution prevention.

Continued on page 8.





Faith and Ecology For EDF Trustee Sally Bingham, religion and the environment go hand in hand.



ESF News Briefs

Chico Mendes's Murderer Is Recaptured in Brazil

Convicted murderer Darly Alves da Silva was recaptured by Brazilian Federal Police in June, more than three years after he escaped from prison where he was serving a 19-year sentence for ordering the murder of Francisco "Chico" Mendes. The internationally known Mendes was assassinated in 1988 while fighting to protect the Amazon rain forest and the livelihood of his fellow rubber tappers. Da Silva's son, Darci Alves Pereira, who was convicted of doing the actual shooting, also escaped and is still at large.

EDF helped focus attention on the murder and escape. On Earth Day 1995, EDF anthropologist Dr. Stephan Schwartzman, who worked with Mendes to protect the rainforests, appeared in a segment of "America's Most Wanted" on the escapees. That same month, EDF attorney Bruce Rich delivered more than 4,000 letters from EDF members to Brazilian



Chico Mendez with EDF anthropologist Dr. Stephan Schwartzman.

President Fernando Henrique Cardoso, urging him to recapture the killers. After the arrest, President Cardoso told Brazilian Senator Marina Silva, a longtime colleague of Mendes, that he would ensure that da Silva is now held in a secure prison to avoid "any more international problems."

How to Beat Both Air Pollution and Rush Hour Congestion

Two new EDF reports illustrate how communities can cut traffic and air pollution problems using transportation and land use strategies that reduce sprawl and promote broader travel choices. The reports document new ways to evaluate pedestrian, bicycle, and transit-oriented development, countering the built-in bias of most highway models.

A Network of Livable Communities, a joint report by EDF and the Chesapeake Bay Foundation, shows how transit and community design alternatives could cut vehicle hours of travel by 22% by 2010 compared with existing plans for the Washington DC region, while accommodating the same substantial job and housing growth. Achieving this would take a combination of pricing reforms, improved transit and traffic management, and development of transit-oriented communities on underutilized land near public transportation, instead of continuing subsidized sprawl at the car-dependent edges of urban areas. These recommendations support Maryland Governor Glendening's efforts to

work with local governments in countering sprawl across the state.

The second report, *Inside the Black Box: Making Transportation Models Serve Livable Communities*, is a joint effort by EDF and Citizens for a Better Environment, based in Madison, Wisconsin. It is a non-technical overview of an important but not well understood subject, written for activists, elected officials, citizens, and professionals involved in regional and local planning. *Each report is available for \$8 from EDF Publications, c/o the Washington office.*

Farewell to John Chancellor

This summer America lost one of its great newsmen, veteran NBC broadcaster John Chancellor, and EDF lost a member and friend of more than 15 years. Chancellor and his wife Barbara first joined EDF in 1979. Eight years later, Chancellor volunteered to host a "video newsletter" to help introduce new members to EDF's work. Since then more than 50,000 members have seen the program, *Environmental Vision*.

Chancellor put into words the idea that underlies EDF's approach: EDF "is based on the practical notion that environmental problems need rational solutions, solutions that take into account the country's need for growth and jobs—solutions that protect our world without hurting ourselves."

"No one could say it better than John Chancellor," recalls EDF executive director Fred Krupp. "He helped so many people understand what EDF is trying to accomplish. We'll miss him."



John Chancellor hosted the EDF program "Environmental Vision," filmed at the New York Botanical Garden.

Can You Give at the Office?

If you are employed by the Federal government, you can donate to EDF through your paycheck as part of the Combined Federal Campaign. Environmental Defense Fund is listed under "Earth Share;" EDF's code number is **0906**.

If your workplace has a payroll deduction campaign that does not already include environmental organizations, you may still have the option of earmarking your donation to EDF. Just *write in* "EDF, 257 Park Ave. South, New York, NY 10010." Please ask to have your gift acknowledged so that EDF can credit your account.

If you would like to help EDF gain access to the payroll deduction campaign at your workplace, please call or write Rory Beelek at EDF's New York office.



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Visit EDF Online at www.edf.org

National Headquarters 257 Park Avenue South New York, NY 10010 212-505-2100

Capital Office 1875 Connecticut Ave., NW Washington, DC 20009 202-387-3500 **California Office** 5655 College Avenue Oakland, CA 94618 510-658-8008

Membership Line: 202-387-3525 Fax: 202-234-6049 Internet: members@edf.org Rocky Mountain Office 1405 Arapahoe Avenue Boulder, CO 80302 303-440-4901

North Carolina EDF 128 East Hargett Street Raleigh, NC 27601 919-821-7793 **Texas Office** 44 East Avenue Austin, TX 78701 512-478-5161

Project Office 6 Faneuil Hall Marketplace Boston, MA 02109 617-723-2996

Director's Message

Science Above the Fray

Is Earth's climate warming? Are Northern spotted owls in danger of becoming extinct? Are trace concentrations of dioxin dangerous to human health? Objective, factual answers to such questions allow the



development of good environmental policy. It is the role of science to answer them.

At EDF, sound science has been a cornerstone of our work since the scientists who founded EDF showed the disastrous consequences of DDT use on Long Island

Executive Director

nearly 30 years ago. EDF has reached its scientific conclusions not in isolation but in conjunction with the larger scientific community. For example, a clear consensus of scientists worldwide would answer "Yes"—albeit with some reservations—to the three questions posed above.

To underscore the critical role of credible science in EDF's advocacy work for the environment, I have appointed Dr. Michael Oppenheimer to the new position of Chief Scientist. An atmospheric physicist and world-renowned expert on global climate change, Dr. Oppenheimer will spearhead an effort to involve the research science community in environmental policy issues. This effort has been made possible with the help of the Charles Stewart Mott Foundation.

Dr. Oppenheimer will also work with our Science Advisory Committee (an eminent group of scientists on EDF's Board of Trustees) and with our outstanding group of staff scientists to ensure that our scientific work continues to meet the most rigorous standards.

EDF scientists have used their expertise to analyze complex environmental problems, devise solutions, and advocate those solutions. Yet their science is, in an important sense, neutral. Like their peers the world over, EDF scientists approach their work with an open mind and commit to following the data wherever they may lead. Not only is this essential to our credibility, it is also essential to finding the truth upon which any lasting environmental solutions must be based.

Fred Krupp

US Acts on Global Warming at Geneva

At the Geneva Climate Summit July 17, AUndersecretary of State Timothy Wirth announced a major shift in U.S. policy, endorsing three key points advocated by EDF.

First, the U.S. hailed the Intergovernmental Panel on Climate Change (IPCC) as providing the most comprehensive, authoritative scientific information available and called for urgent action in light of the IPCC findings. Wirth noted that the handful of skeptics who have attacked the IPCC were at the "margin" of the scientific community.

Second, Wirth said that the U.S. would support legally binding targets and timetables for reductions of greenhouse gas emissions in industrialized countries. These would be a marked improvement over the non-binding and largely ineffective "aims" of the current Climate Treaty.

Third, the U.S. announced that it would support emissions trading as a means of meeting the targets. The announcement demonstrated significant environmental leadership.

Action Spurs Other Nations

The U.S. statement set off a ripple effect around the world. Surprised delegates sent frantic cables to capitals for further instructions, according to EDF international counsel Annie Petsonk, who was in Geneva as an observer. Following 36 hours of intensive work in Geneva by Petsonk and EDF international liaison Karan Capoor urging other delegations to follow the Administration's lead, delegates from more than 100 countries reached agreement on the Geneva Declaration on Climate Change.

This Declaration signals the countries' commitment to negotiate, by 1997, legally



Annie Petsonk

binding targets and timetables based on the science of the IPCC. Although the Declaration does not go as far as EDF had hoped, it sets the stage for serious negotiations to be concluded by the Third Climate Summit in Japan in December 1997.

Forward-looking American industry reacted positively to the Administration's policy shift. But the OPEC countries, Russia, and Australia objected, as did a number of U.S. oil, coal, and automobile companies. The car makers are threatening an attack in Congress to stop any further action on climate change.

"The Geneva Declaration marks an important victory for science," said Dr. Michael Oppenheimer, EDF's chief scientist.

Capoor added, "While it shows that a majority of governments are determined not to let a small OPEC-led group of countries block the international process, we need to maintain the momentum of the Geneva Declaration and broaden the industry coalition supporting strong action on climate change."

EDF will work to ensure that this momentum carries forward to achieve, in Japan, in December 1997, an international agreement on tough emissions reduction targets to protect the global climate and on economically sensible measures for meeting those targets.

Wildlife Loses a Friend With the Death of Mollie Beattie

Mollie Beattie, the first woman to serve as Director of the U.S. Fish and Wildlife Service and a fierce advocate for endangered species conservation, died of brain cancer in June, at age 49. In less than three years in the position, Beattie oversaw the creation of 15 new national wildlife refuges and was instrumental in reintroducing wolves into Yellowstone National Park.

"Mollie Beattie was a real fighter for conservation," said EDF wildlife attorney Michael J. Bean. "She conferred regularly with EDF on endangered species issues, in which she had a particular interest, and she encouraged our efforts to create incentives for protecting endangered species on private lands."



EFColumn

Albatrosses and Petrels Are Dying on Fishhooks

By EDF Founding Trustee Dr. Charles F. Wurster, Emeritus Professor of Environmental Sciences, Marine Sciences Research Center, State University of New York at Stony Brook, and research associate Angela Kalmer.

With his cruel bow he laid full low The harmless Albatross

n Coleridge's poem, "The Rime of the Ancient Mariner," the albatross was guardian of the ocean and seamen, and when this great bird was killed, the sailors were thereby doomed.



The Ancient Mariner killed only one albatross, but now they are dying by the tens of thousands, hooked and drowned on tuna, swordfish, and groundfish fishing lines that are up to 80 miles long. These longlines carry thousands of

Charles F. Wurster

baited hooks, and albatrosses, petrels, and shearwaters go after the bait behind the boats before the hooks sink out of sight. About 180,000 of these oceanic birds of nearly 30 species are lost each year in longline fisheries operations worldwide.

The bird in the poem was probably a Wandering Albatross. Its 10-foot wingspan is the greatest for any bird, and using wind energy it can glide over many thousands of miles of ocean in a month. These birds can live about as long as humans, and they mate for life. They begin reproducing when they are 10 years old and raise a single chick every other year. But when a breeding adult is lost at sea, its chick starves to death because the other parent cannot raise it alone, and two more years are lost while the widowed bird finds a new mate.

Most of us will never see an albatross. They are not found in zoos or aquaria, and they should not be confused with "seagulls." The 14 species of albatross and 61 shearwaters and petrels spend their lives at sea far from land, feeding and resting on the water and visiting oceanic islands only to breed. But if a huge and magnificent white bird with black trailing wing edges and a pink bill glides close by your ship almost touching the waves, you'll remember that you saw a Wandering Albatross.

These great oceanic birds are a visible signal of the health of the oceans, and many are in decline. World population of the Wandering Albatross has declined 41%, from 98,000 to 58,000, in 30 years, and is now believed to be dwindling by nearly 10% per year. Other species are threatened, and extinctions are likely unless the slaughter on longlines is curtailed. Even the highly endangered Short-tailed Albatross, with only 700 birds in the world, is suffering mortality on longlines.

Commercial marine fisheries have encountered serious problems in recent years. Stocks of target fish species in the world's major fisheries have been depleted by overfishing, while non-target species have been damaged. The drowning of sea turtles within shrimp nets and dolphins in tuna nets, as well as the killing of various marine mammals, birds, and non-target fish within driftnets, have been widely publicized. International concern led to the UN moratorium on driftnetting in 1992. Less well known, however, is the mortality of oceanic birds on longlines.

Measures to Save the Birds

This slaughter is unintentional and preventable. Several measures could greatly reduce bird mortality, do no harm to fish harvest, and might actually increase fisheries' profits. Perhaps the best solution is releasing the lines under water, making the baited hooks inaccessible to the birds. Streamers flapping in the wind above the hooks scare away most birds, setting hooks at night saves the albatrosses (but not the petrels), and sinking the hooks more rapidly also helps.

Implementing these solutions on countless ships of many nations in international waters is a daunting legal and diplomatic challenge. EDF and Defenders of Wildlife recently coordinated a coalition of a dozen other American and foreign environmental organizations in undertaking this task. They submitted a motion on seabird bycatch to the International Union for the Conservation of Nature (IUCN). The motion will become a key piece of international policy in favor of the birds if the members of IUCN vote for it at a meeting in October in Montreal. This policy will raise the profile of this important issue among governmental bodies and non-governmental organizations, and, more importantly, it will help make longline fishing



Wandering Albatrosses shown in courtship display. These birds can live as long as humans and they mate for life, raising just one chick every other year.

operations more sustainable.

U.S. organizations that have joined EDF and Defenders of Wildlife in giving official support to the IUCN motion include the Center for Marine Conservation, National Audubon Society, Natural Resources Defense Council, Sierra Club, and the World Wildlife Fund. Other support for the motion comes from the government of New Zealand and organizations in Australia, the Bahamas, New Zealand, South Africa, and the United Kingdom. But national and international agencies must act quickly if we are to save these magnificent birds, and the health of the oceans on which they, and we, depend.

EDF MEMBER ACTION ALERT

EDF members can help by urging the State Department to support the goal of eliminating seabird by-catch in longline fisheries and to give special attention to the problem in US waters. Write to Timothy Wirth, Undersecretary of State for Global Affairs, Department of State (2201 C Street, N.W., Room 7250, Washington, D.C. 20520) and ask him to speak in favor of the IUCN Motion on Seabird By-catch at the IUCN meeting in October, in Montreal.

Focus on Environment in Southeast Asia

During a recent trip to Indonesia, Secretary of State Warren Christopher told the Jakarta branch of the American Chamber of Commerce, "I have launched an initiative at the State Department to integrate environmental issues into every aspect of our



diplomacy." Dr. Stephanie Fried, EDF scientist and Southeast Asian expert, praised the action, saying "Diplomatic support for regional and local environmental action can be important in several Asian countries."

Stephanie Fried

Indonesia, a nation of over 13,000 islands, is the fourth most populous country in the world with as much as 60% of Asia's tropical forests. "U.S. support can help move environmental issues into the mainstream of Indonesian policy discourse," Fried said. "This is important because most of Indonesia's environmental groups have, at one time or another, been subjected to raids, harassment, and intimidation by security forces who, at times, equate environmental activism with subversion or opposition to economic development."

Said Christopher, "Governments and businesses increasingly recognize that pitting eco-

Indonesian environmental NGO's have been raided and harassed.

nomic development against environmental protection is a false choice. Both are necessary...and they are very closely linked." He spoke of joint U.S.-Indonesian efforts to reduce pollution and to promote the sound management of tropical forests and coral reefs, and said the U.S. is supporting environmental non-governmental organizations (NGO's).

Fried called Christopher's remarks to Indonesian business leaders "especially significant" since trade between the U.S. and Southeast Asian countries surpassed \$100 billion last year and U.S. companies, such as copper and gold giant Freeport McMoRan, have been embroiled in battles with environmental NGO's and indigenous communities in Indonesia. She welcomed his public declaration of support for NGO's, given the state of siege in which many Asian environmental groups find themselves.

EDF is currently expanding its working relationships with Asian governments and non-governmental organizations and will continue to press for U.S. diplomatic support for environmental initiatives around the world.

Novel Projects Add Water to Northwest Rivers

Continued from page 1.

Washington are watching to assess the attractiveness of such transactions.

In another breakthrough EDF project, the largest irrigation district in Oregon's Deschutes River Basin has contracted to reduce water losses within its distribution system and leave the saved water in the Upper Deschutes River. A 1995 report, *Restoring Oregon's Deschutes River Basin*, by EDF scientist Deborah Moore, analyst Adam Diamant, and the Confederated Tribes of the Warm Springs Reservation, identified such transactions as a key means of improving the Basin's degraded fish and wildlife habitats.

Oregon has had water conservation and transfer laws on the books for nearly a decade, but they were never used. This is because rights holders must estimate in advance how much water they will save and must permanently commit to transfer that amount, with no opportunity to measure in advance how much can actually be saved.

To overcome this obstacle, EDF's Willey proposed an option: When a rights holder commits up front to return some of his saved water to the rivers, allow him to retain ownership of the remaining saved water for five years of operating experience. If he then elects to keep some of the remaining saved water, he must repay, with interest, part of the payment he received as an incentive for the transfer.

Willey worked with the Basin's seven major irrigation districts, the Confederated Tribes, the U.S. Natural Resources Conservation Service, and others to develop the pioneering contract recently signed by the North Unit Irrigation District. The Oregon Water Resources Congress, a statewide council of water districts, is promoting this type of option throughout the state.

"Both of these pilot projects demonstrate possible technical and legal strategies that could be widely replicated in restoring Pacific Northwest rivers," Willey said. "EDF will continue to work to develop other innovative arrangements to finance river restoration projects."

The two EDF reports cited above are available for \$10 each from EDF Publications, c/o the Washington office.

Students Go Online to Learn About the Environment

Students show EDF associate editor Tim Connor some of the work they've done on the World Wide Web as part of the Harlem Environmental Access Project (HEAP), a partnership of Columbia University, EDF, and five middle schools in Harlem. Manhattan borough president Ruth Messinger spoke at the event, held at Countee Cullen Library, to congratulate the students and their teachers. Student work can be viewed on the Web at **www.edf.org/heap.**



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For further information, please contact: Anne B. Doyle, Director of Planned Giving, EDF, Box 56, 257 Park Avenue South, New York, NY 10010. (Phone 212-505-2100 or e-mail doyle@edf.org.)

Section 12 Section 12

DF Trustee Sally Grover Bingham is a woman with a conscience. She sees what needs to be done, and in true grassroots fashion, she does it.

Bingham always had an idea of the general direction she wanted her life to take, but her mission wasn't clear until after she became involved with EDF, went back to college, and entered divinity school, all within the last decade. With assistance from the Episcopal Church, she began spreading the word: ecology and religion go hand in hand.

"If we go back and look at the book of Genesis," she says, "God placed humankind in a garden, and our first call was to care for that garden. Further, God called Noah to save 'birds, animals, and every creeping thing.' (*Gen.* 8:17) You might say that our first endangered species act was between God and Noah."

Many of Bingham's earliest memories revolve around nature and her ability to feel closer to God through outdoor experiences. As a child growing up just south of San Francisco, Bingham spent time alone with her horse, riding into the countryside.

"My little sanctuaries were in the bushes and the wild," she explains. "I was a child of nature. You just couldn't keep me indoors." When her family moved to a ranch in central California, she was ecstatic. Bingham developed a great respect for creation, realizing that the land is what sustains us. Later, after she lived through a family tragedy, her faith deepened, and she felt a call to holy orders.

"With my love of nature and conservation, I knew I was headed in the direction of ecology, faith, and healing," she says. "Healing involves not just reconciliation of people, but reconciliation with the land and who we are."

Her passion for nature became known to her longtime friend Wren Wirth, an EDF Trustee, during a rafting trip that Bingham took with Wren and her husband, Timothy Wirth, down the Gunnison River in Colorado. "I personally feel so close to the creator when I am in the natural world," she explains. "Wren didn't know that about me at the time, but somehow she had a sense, at least, that I care tremendously about conservation of nature."

It wasn't long before Wren Wirth called Bingham to ask, "Do you want to do something worthwhile with your life, or do you want to keep playing golf and tennis and going to the country clubs?" Thinking about Wren's comment, Bingham decided it was time to get



Sally Bingham has a life-long love of nature and conservation.

serious about her pursuits. Later she was invited to join the EDF Board of Trustees.

Shortly thereafter, Bingham completed her bachelor's degree in psychology and religion at the University of San Francisco. In 1994 she received her master's of divinity from the Graduate Theological Union in Berkeley. This fall, Bingham will be ordained as an Episcopal priest. "I'm a very late bloomer," laughs the mother of three grown children.

In 1992, while still a divinity student, Bingham founded the Regeneration Project, a non-profit interfaith organization intended to raise environmental awareness and help congregations make the connection between ecology and faith. Members of the group travel to parishes around San Francisco and conduct workshops and Sunday school classes on topics such as recycling, enjoying the outdoors, or riding a bicycle to church.



Bingham also helped EDF develop a poster of suggested environmental activities for churches that was distributed nationwide. (Copies are available on request from EDF's membership office in Washington.)

Bingham also leads the Episcopal Commission for the Environment, a group of activists who have done such things as helping to save the California mountain lion and to protect the Headwaters Forest in California's Humboldt County.

"When people ask me why I think the church should be involved in ecological issues, my answer is simple," says Bingham. "We are called to love the world the same way God does. You cannot proclaim a love of God and simultaneously destroy God's creation."

Traveling this summer, Bingham met with many others who share her mission, beginning with a national church conference for Justice, Peace and Integrity of Creation, near Santa Fe, New Mexico. At Christ in the Desert Monastery, Bingham completed a silent retreat. She later discussed building an ecological center at St. Stephens Mission, which is run by Steven Plummer, the Episcopal Bishop of the Navajo reservation near Bluff, Utah. While in Utah, she also explored a recently discovered kiva and visited the Anasazi ruins.

For Bingham, the trip was simply an extension of her daily life; she views every experience as an opportunity to learn, every day an adventure. "I'm regenerating myself

"I'm a very late bloomer," Bingham laughs.

so I can go back and do more of the same," she says. "When I get up in the morning and drive across the Golden Gate Bridge to my parish, I sometimes think I'm just going to burst with the excitement of getting there. Along with living in a beautiful place, I'm blessed with being able to do the work that I feel so passionately about."

When asked what goals she has set for herself, Bingham thinks for a moment, and then replies, "If I can change ten people's thinking about how they relate to creation, I have done my work. I want to help people make the connection between a healthy environment and the survival of all that was created by God. Environment, human health, and the Judeo-Christian religion are intimately interdependent. Along with my other priestly duties, I feel called to deliver that message."

Without a doubt, Sally Grover Bingham is well on her way.

Debunking the Myths of the "Anti-Recyclers"

By EDF recycling experts Dr. Richard A. Denison, a biochemist, and John F. Ruston, an economic analyst.

Over the past decade, Americans have strongly embraced recycling, reflecting the common-sense instincts to conserve resources and not foul one's own nest. The very success of recycling has spawned detractors, including a group of consultants and think tanks who have strong ideological objections to recycling or a vested financial interest in opposing it. We call them the "Anti-Recyclers."

Recycling is not a panacea for our environmental problems, to be pursued at any cost or to the point of diminished returns. Yet there is compelling evidence that, by



Fact: The use of recovered glass, metal, plastic, and paper by manufacturers has grown steadily since 1985.

transforming waste materials into useable resources, recycling provides major environmental and economic benefits.

EDF supports a robust, fact-based assessment of recycling's benefits and costs. But recently the quality of the debate was undermined by a highly inaccurate article in *The New York Times Magazine.* Titled "Recycling is Garbage," the story by John Tierney unquestioningly repeated the claims of the Anti-Recyclers.

Recycling has always had critics. At first, their argument was that citizens would not bother to recycle. We now know that participation in well-designed and publicized curbside collection programs is 80% or higher. Anti-Recyclers imply that environmentalists and government officials have imposed recycling on an unwilling populace, conjuring up an image of Big Brother lurking behind every recycling bin. In fact, overwhelming public support, not government edicts, is the major reason why state and local recycling initiatives are flourishing.

Is the public right in believing that recy-

This article is adapted from EDF's 17-page, fully documented critique, "Anti-Recycling Myths," available free from EDF Publications, c/o the Washington office, or by email from **members@edf.org**, or on the Web at **www.edf.org**. cling is good for the environment? The answer is a resounding "Yes!" Let's examine the claims of the Anti-Recyclers.

Anti-Recycling Myths

Myth #1: The modern recycling movement responds to a false landfill-space "crisis" created by the media and environmentalists.

FACT: Concentrating on landfill space misses the point. Most of recycling's environmental benefits lie in reduced energy use and natural resource damage and pollution from extracting virgin raw materials and from manufacturing—benefits documented in every recent study that has examined virgin and recycled products over their full life cycle. As just one example, recycling at current levels saves enough energy to supply 9 million U.S. households.

Myth #2: Landfills are innocuous.

FACT: Landfills can be major sources of water and air pollution. One out of five toxic waste sites in the Superfund program is a former municipal landfill that has contaminated our water or threatens to do so. Landfills also release substances to the air, including smog-producing chemicals and methane, a highly potent contributor to global warming.

Myth #3: Landfill space is cheap and abundant.

FACT: Landfill space is a commodity, priced according to supply and demand. The major growth in recycling has occurred where landfills are expensive or recyclable materials command higher than average prices. Curbside recycling in these areas is a rational response to economic costs and opportunities.

Myth #4: Recycling should pay for itself. FACT: We do not expect landfills or incinerators to pay for themselves, nor should we expect this of recycling. The real issue is how recycling's net costs over the long term compare with those of the alternatives. "Snapshot" accounting of recycling costs early in the life of a program is misleading; substantial efficiencies are occurring as these programs innovate and mature, making wellrun recycling programs cost-competitive.

Myth #5: There are no markets for recyclable materials.

FACT: Recycling is the foundation for large, robust manufacturing industries that are an important part of our economy. The *volume* of the major scrap materials sold in domestic and global markets is growing steadily. As

with all commodities, *prices* fluctuate over time, yet recycling is often the lowest-cost option for manufacturers. For example, more than 45 new or expanded recycling mills built this decade to make corrugated boxes, newsprint, commercial tissue products, and folding cartons have lower capital and operating costs than new mills using wood.

Myth #6: Recycling doesn't "save trees" because we are growing at least as many trees as we cut specifically to make paper. FACT: While this is true, it has been achieved largely by replacing natural forests with plantations, which provide far less animal habitat and biodiversity. By extending the overall fiber supply, recycling reduces pressure on our remaining natural forests.

Myth #7: Strict regulations ensure that the environmental costs of making and using products are included in their prices.

FACT: Many of the environmental costs of virgin materials extraction, manufacturing, consumption, and disposal are not included in products' prices. An entire sub-discipline of environmental economics has developed to address these market "externalities," which occur even in the most regulated industries.

Myth #8: Misguided laws and regulations compel manufacturers to make costly changes in their packaging and products. FACT: The asserted influence of legislation is grossly overstated. The vast majority of environmental improvements manufacturers have made are cost-cutting measures or voluntary responses to customer demand.

Myth #9: Recycling is nearing its maximum potential.

FACT: There remains enormous room for growth in recycling. We still throw away about 35 million tons of highly recyclable materials each year—including half of all newspapers and almost three-quarters of magazines and glass containers.

Myth #10: Recycling is a time-consuming burden on the American public.

FACT: Convenient, well-designed recycling programs allow Americans to take action in their daily lives to reduce the environmental impact of the products they consume. Informing citizens of the costs of their own consumption and disposal activities through "pay as you throw" user fees, long supported by EDF, makes economic and environmental sense—but only alongside viable recycling programs.

Coping With China's Monumental Energy Demands

China is exploding with economic growth and the resulting demand for energy. Gifts from the Starr Foundation and others to EDF's 21st Century Campaign are supporting EDF efforts to help China



meet its energy needs without massive damage to its own environment and the global atmosphere. As part of this initiative, Marcia Aronoff, EDF

deputy director for programs, and EDF economist Dr. Daniel J. Dudek recently met in China with academic, governmental, and non-governmental organization (NGO) officials who are

CAMPAIGN working on China's air quality problems and other environmental concerns. In more than a dozen meetings in Beijing and elsewhere, they learned how these institutions and individuals are working to promote more sustainable development in China, in particular how they are carrying out new

China, in particular how they are carrying out new environmental policies announced recently. Pollutionfee systems, used in China for several years, are being refined for greater effectiveness.

Aronoff and Dudek shared information about EDF's activities, particularly projects in other countries whose economies are in transition from central control to more market-based systems. EDF's experience with market-based solutions to environmental problems was of particular interest to the Chinese.

EDF was encouraged to partner in projects involving both policy and implementation, with government, academic institutes, and NGO's. Projects discussed focused on the use of market-based tools to control air emissions and to protect critical wildlife habitat. Further discussions with potential partners and funders will help shape the dimensions of EDF's future work.

Project Cuts Pollution and Paperwork

Continued from page 1.

Sharing Information: Printers and technical advisors can exchange the latest information on pollution prevention technologies and materials through the new Printers National Environmental Assistance Center, an Internet site created by EPA at the urging of the Great Printers project team.

Demanding Great Printing: All four pilot states are working to enroll printers as Great Printers and to educate customers on where and how to buy Great Printing. By December, all of Wisconsin's official state printing will be consistent with Great Printers guidelines.

The printers, Great Lakes governors, and EDF also pledged to:

- •Make simplified reporting a reality in the other pilot states by 1997, and recruit other Great Lakes states to adopt the Great Printers principles.
- •Enroll 500 new Great Printers in the Great Lakes region by 1997.
- •Revise all state printing practices to meet Great Printers principles by next summer. EDF and other national environmental groups are working to incorporate these standards in their use of printing services.

"The Great Printers Project shows that it is practical to meet both environmental and economic objectives harmoniously through pollution prevention," said EDF attorney Kevin Mills. Other EDF staff on the project team were economic specialist Carol Andress, attorney Bill Davis, and engineer Lois Epstein.

In addition to making this future work in China possible, gifts and pledges to the 21st Century Campaign will support EDF efforts to safeguard oceans, rewrite environmental regulations, engage businesses in preventing pollution, and protect wildlife. To date, EDF has received \$10.6 mil-



Ma Zhong, President of the Beijing Environment and Development Institute (center) meets with EDF's Dr. Daniel J. Dudek and Marcia Aronoff.

P. O. Box 96969

address Corrections to:

lion toward the \$15 million overall Program Fund goal, including a special challenge grant from the Kresge Foundation. If EDF reaches the \$15 million Program Fund goal by April 1997, Kresge will contribute \$1 million toward upgrading computer facilities in EDF offices.

For more information about donating to the China Initiative or any program area supported by the *21st Century Campaign*, please call or write Paula Hayes, Director of Development, in EDF's New York office (212-505-2100).

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\$10.6 Million So Far

Program Goal

by April 1997

\$15 Million