A GREENER SHADE OF CRIMSON: LAW AND THE ENVIRONMENT ALUMNI FORUM

On October 21–24, 1999, the Harvard Environmental Law Society and the *Harvard Environmental Law Review* hosted an Environmental Alumni Forum in conjunction with the Law School's Fall Alumni Reunion Weekend. The Forum sought to assess the Law School's progress on the creation of an environmental law program, discuss what the program should look like, and offer alumni an opportunity to become involved in the development of the program.

The main event of the Forum, A Greener Shade of Crimson: Law and the Environment Alumni Forum, consisted of two keynote addresses, two responses, and a question-and-answer session. The addresses were given by George Frampton, Jr., acting chairman of the Council on Environmental Quality, and Frederick A.O. Schwarz, Jr., senior partner at Cravath, Swaine & Moore and chairman of the board of the Natural Resources Defense Council. Richard Lazarus, professor of law at Georgetown University Law Center, and Professor Michael McElroy, chairman of the Harvard University Committee on the Environment, responded to the addresses. Amanda Cohen Leiter, president of the Harvard Environmental Law Society for 1999-2000, moderated the event.

A transcript of the proceedings follows.

AMANDA COHEN LEITER: I want to set the stage for those of you who may be unfamiliar with the state of Environmental Law at Harvard.

Tony Rossman, a distinguished alumnus who participated in yesterday's career panel, is fond of saying that he founded the Environmental Law Society exactly thirty years ago this month.

I am sorry to report, though, that the Environmental Law Program at Harvard is in much the same state as it was in in 1969.

Although the administration has recently begun an active campaign to hire a permanent faculty member to teach environmental law, that position has yet to be filled. So the basic environmental law class here has mostly been taught by a string of wonderful, but sadly temporary, visiting professors.

As a result of this deficiency, students and alumni have been campaigning actively to improve the law school's curricular offerings in environmental law and to encourage the administration to accelerate the search for permanent faculty members.

We have invited you all here today to discuss the future of environmental law at Harvard. We sincerely hope that our keynote speakers and the professors who have been invited to respond will offer suggestions for the Law School that will not only stimulate a lively discussion here today, but also catalyze further progress towards development of an environmental law program worthy of this great institution.

I want to pause for a minute to give you all some sense of the structure of the rest of the afternoon.

Professor Emeritus Abram Chayes will first introduce the keynote speakers, and we will hear from them in turn. Then Professors Richard Lazarus and Michael McElroy will offer their thoughts on the speakers' suggestions.

Before I introduce Professor Chayes, I would like to ask alumni Tony Rossman and Nick Eisenberger to come forward to make an announcement that should be of interest to all of those in the audience who work in, or are interested in, environmental law. (Applause)

Tony Rossman: I am Tony Rossman, from the Class of '71. With me is Nick Eisenberger, from the Class of '96.

The very first announcement we want to make is to express, on behalf of all of us, our deep gratitude to Amanda Cohen Leiter and Annecoos Wiersema, who did so much work to make this Environmental Alumni Forum possible. They put in many hours, days, and weeks of preparation. So I think we should acknowledge their great contribution. (Applause)

Thirty years ago this month, as Amanda mentioned, was the first of perhaps three milestones in the history of environmental law at Harvard. It was my privilege to call to order the first meeting of the Harvard Environmental Law Society.

This afternoon, it is my privilege to call to order the first meeting of the Environmental Alumni Section of the Harvard Law School Association, which has just been formed. By your presence here, you are our charter members.

(Laughter)

But there has been a wonderful convergence over the years of faculty, student, and alumni interest. The students started it thirty years ago. In 1996, we had another wonderful convergence of interest. Nick was then president of the Environmental Law Society. Professor Chayes had provided much leadership as a faculty member, keeping the torch alive.

At my 25th reunion we gathered in this room a group of alumni in a session just about this size with a similar spirit. Out of the session came the first Austin Hall Statement on Environmental Law. As a result of that statement and Dean Clark's wonderful acceptance of the spirit of it, a lot of progress has been made.

We now, however, are ready to move forward again with the convergence of student leadership, faculty leadership, but above all, as is evi-

dent in the presence of our distinguished alumni here today, alumni leadership.

I should say that in 1996, we drafted the Austin Hall Statement after our meeting, drawing together the ideas that we had developed in this room. But now we are trying to stay a little bit ahead of the ball. We have actually been working on this draft for several weeks. Our work came to a culmination this morning at the meeting of the Alumni Advisory Board of the Environmental Law Society.

So the text that was handed to you this afternoon is our latest draft of a work in progress. We hope that before we leave this afternoon, you will give us your ideas as to how it can be improved so that we can place it into final form for, we hope, the same unanimous and enthusiastic adoption that launched us on this course three years ago.

Nick will briefly describe to what we are now aspiring with our second statement.

NICK EISENBERGER: Thank you, Tony.

The Austin Hall II Statement embodies four principals, which we think are fairly non-controversial, but nonetheless stand for something very important. First of all, we would like to thank the administration for taking steps in response to the First Austin Hall Statement. The administration created a working group composed of alumni, students, and faculty to examine what we would need to do in order to create a first rate environmental law program here at this law school.

As part of the efforts of the working group, we have been developing a strategic plan. One of the first recommendations of the working group was to hire an environmental law fellow who would have the full time responsibility to oversee programmatic development. We now have our second environmental fellow, Annecoos Wiersema. Our first fellow was Jason Waanders, who is also here with us today. We want to thank the Law School for the progress that has been made.

But the second principal calls for the Law School to implement the strategic plan and to take affirmative steps to create a first-rate environmental law program.

The third principle moves into the subject matter of environmental law. It declares that environmental law is a fundamentally interdisciplinary endeavor. The Law School has to reach out to take advantage of the resources across this university.

We have here today Professor McElroy, who is the chair of the University Committee on the Environment, which was created by President Rudenstine. We truly believe that any environmental law program that is created here has to be coordinated with the broader university environmental effort.

The fourth and final principle calls on the Law School to envision what it can do in the world through education and scholarship. We believe that there are many unforeseen environmental issues that are coming over the horizon. It is critical that the Law School provide leadership and find innovative solutions to the problems that we will face. In that way, the Law School can have the kind of impact that it has always had in the world.

Those are the four principals. I ask you to consider them during today's event. If you are willing, please sign the petition that I have circulated and give us any input that you might have. Thank you so much. (Applause)

AMANDA COHEN LEITER: Thank you, Nick and Tony, for the thanks to Annecoos and myself. I want to emphasize that none of this would have been possible without a lot of hard work on the part of all of the student members of the Environmental Law Society and the Environmental Law Review. There are too many of them to name individually, but they have all been instrumental in the planning of the Forum. It has been a lot of fun to work with such a committed and excited group of students.

Now, it is my honor to introduce Professor Emeritus Abram Chayes, the Felix Frankfurter Professor of Law. Professor Chayes teaches a variety of international law courses, including, of particular interest to us today, International Environmental Law. Professor Chayes graduated from the Law School magna cum laude in 1949, and has been on the faculty since 1955, with a brief leave of absence from 1961 to 1964 to serve as legal advisor in the Department of State during the Kennedy Administration. In the 1980s, Professor Chayes represented Nicaragua in its World Court case challenging the Reagan administration's policy of support for the Contras. He is the author of numerous books and articles, including The Cuban Missile Crisis: International Crisis and the Role of Law. And with his wife Antonia Handeler Chayes, he has written The New Sovereignty: Compliance with Treaties and International Regulatory Regimes and Planning for Intervention: International Cooperation in Conflict Management.

On a more personal note, I would like to say that Professor Chayes has been a warm and wise mentor to several generations of students, and I consider myself very lucky to have learned from him. His energy, insights, and enthusiasm are truly inspirational. Professor Chayes. (Applause)

ABRAM CHAYES: Well, thank you Amanda. You will see that I have reached the stage where my only function is to lend an air of dignity and a little bit of gravitas to the program.
(Laughter)

Nobody is really interested in what I have to say. (Laughter)

So I am here to introduce the keynote speakers. But I do want to say that I wholeheartedly endorse the Second Austin Hall Statement. I am reminded of the story about Professor Powell who taught Constitutional Law here in the 1930s. There was a big controversy about whether you had to take an academic oath to support the Constitution of the United States. That was a big political issue at the time. Professor Powell was asked whether he would take this oath. He said "I'm perfectly willing to take an oath to support the Constitution. It has supported me all of these years."

(Laughter)

The Environmental Law Program, such as it is, and the Austin Hall Statement, in a way, have supported me all of these years. I do not think Bob Clark can fire me because otherwise the program, as it stands now, goes down the drain. We do not have any other environmental law professors. So I am the beneficiary of the Statement.

Now, it turns out that I taught both of the speakers when they were here. They are both heroes of mine. They are heroes of mine because when, as frequently happens, students come to me and say, "Do we really have to spend the rest of our lives in a law firm?," I can say, "No, you don't, if you don't want to." Then they say, "Can you give me any examples of people who haven't?" Here are two living examples of lives in the law that really are remarkable.

Fritz Schwarz left the Law School in 1960. He was in the second class I taught. He completed a judicial clerkship and then instead of going off to a law firm, he went to Nigeria. There was a program called "MIT Fellows in Africa" which placed young law students in the justice departments of newly independent African countries.

Fritz went to Nigeria and applied the Constitution of the newly independent nation of Nigeria. It didn't last too long, but I think they're getting back on track, aren't they Fritz?

(Laughter)

After two or three years he came back and went to Cravath. But he did not disappear into the maw of the law firm. A few years later, he remerged as the Chief Counsel for the Senate Select Committee on Intelligence in 1975 and 1976, that investigated the FBI, CIA, and other intelligence agencies. You will recall that that committee was the source of many fundamental changes in the intelligence arrangements of the federal government. A few years later, he emerged again as the Corporation Counsel for the City of New York, while Ed Koch was mayor. He served five years as Corporation Counsel during a difficult time in the history of New York. After he had done that, he went back to Cravath, pausing in 1989 to chair the commission that entirely re-wrote the City's Charter.

Today, in addition to being a practicing lawyer at Cravath, he is, as I told him, a one-man NGO coalition. He is chairman of the board of the Natural Resources Defense Council and the Vera Institute of Justice, and also a board member of the NAACP Legal Defense Fund, the Constitutional Education Foundation, and the Atlantic Foundation.

George Frampton, too, has had this kind of diverse career in the law. He clerked for Justice Blackmun after leaving the Law School. Then he spent some time as a litigating lawyer, first in a public interest law firm and then in a private firm. In the mid-eighties he became head of the Wilderness Society.

It was only a matter of time before he went into the federal government, first as Assistant Secretary of the Interior, supervising the National Park Service and the U.S. Fish and Wildlife Service. More recently, he was appointed Chairman of the Council on Environmental Quality, which sits in the White House and is sort of the top policy organization for the federal government on environmental affairs.

So, we have people who, first of all, have had an extraordinary life experience, which ought to be an inspiration to generations of students.

Secondly, these men have a remarkable capacity for telling us what we ought to be doing in the field of environmental law over the next few years. George, do you want to start?
(Applause)

GEORGE FRAMPTON: Well, I want to thank you, particularly the Environmental Law Society and Amanda. Abe, if you're the gravitas and dignity here, I don't know what I am supposed to represent. I don't know whether I am a bomb thrower, or if I am supposed to show up as a demonstrator in a bear suit or something.

(Laughter)

But I am very honored and excited to be here, and to try to do what I can to help promote the idea that Harvard Law School should take a greater leadership role on environmental issues in the future.

I suspect that environmental law has not been regarded as one of the Law School's priorities over the last fifteen or twenty years because a lot of people, particularly within the Law School community, tend to view it as doctrinally not very challenging.

Environmental law is perceived as being mostly about the interpretation of statutes, most of which were not even enacted until the late sixties or early seventies. These statutes include the National Environmental Policy Act, the Clean Water Act, RCRA, Superfund, and the Endangered Species Act. The perception is that interpretation of these statutes has not produced many new, exciting, or interesting issues of administrative law or other legal doctrine.

So environmental law has not been regarded as being particularly sexy from the legal scholar's point of view. I say that with due deference to those of you who teach environmental law, including Tony Rossman, Lois Schiffer, and John Leshy. But from the point of view of Harvard Law School, this does not seem to be a subject that is on the cutting edge.

And of course, there was an older corpus of environmental law: zoning, planning, takings, and nuisance law. But again, that was not law

that seemed to be offering the sort of doctrinal challenges in which Harvard was very interested either.

However, in the last few years, environmental policy, and therefore environmental law, has been exploding out into perhaps a dozen new areas that are going to change dramatically this whole field. The legal challenges that are going to be posed by that explosion are going to be far more interesting, doctrinally and intellectually, than the way in which environmental law has been perceived in the past.

For example, I am absolutely convinced that the new kinds of information, and the wider availability of this new information base, are going to revolutionize environmental policy in a very short period of time. In a few years, with real-time remote sensing from satellites, we will be able to tell where the oil from an oil slick came out of the ground and where it was refined. We will know what kind of truck or ship it was in. This technology raises some pretty interesting issues about information access and the law of privacy. Soon, you will be seeing, on your computer or via the internet, or even on your television, in real time, what an industrial plant five or ten miles away is putting out the smokestack or over the fence. You will get real time readings.

Of course, pretty soon, a device that you carry around with you every day will be able to give readings about what kind of dosages of various chemical compounds you have absorbed in the last day, week, or year. All of that information is going to be available to you and to everybody else on the Internet.

So, some of the privacy, policy, and legal issues that were the subject of discussion this morning at the "Lost in Cyberspace" panel are going to become central environmental issues.

Consider the progress in genetic engineering. Now we can design new substances, new chemicals, and new forms of life. We are engaged in an intensive effort within the Administration right now to figure out whether we have a regulatory system that deals adequately with genetically modified crops and genetically modified animals. We have laws that are administered by three different federal departments: the Department of Agriculture, the EPA, and the Food and Drug Administration, which have some relationship to this issue, but none of these agencies or their organic statutes were designed to deal with genetically modified substances.

This is a right-to-know issue and a regulatory issue. We are going to have to design a brand new regulatory system in the next three to five years to deal with a set of problems about which consumers are becoming increasingly concerned. These problems pose new interactions between patent law, health and safety laws, environmental regulation, and science. Scientists are telling us, perhaps, something different from what consumers are telling us. It is a very, very, interesting issue—the interre-

lationship between science and environmental policy which is raised here.

A few of you have read of this in the newspapers, and are familiar with something called "The Terminator Gene." About forty percent of the corn that was grown last year in the United States was genetically modified corn. Everything that you ate in the last year that has a corn ingredient probably has a genetically modified substance in it. This corn is genetically engineered; it is called Bt Corn. It is engineered to contain a natural pesticide so that the corn needs less pesticide application.

Now, Monsanto, which pioneered Bt Corn, wanted to make sure that it protected its intellectual privacy rights in Bt Corn. It did not want farmers who purchased and were growing Bt Corn in one year using the seed from that corn to grow next year's Bt Corn crop for free.

So Monsanto began working on a gene to go into the Bt Corn called the Terminator Gene that would render the Bt gene sterile after one year. Then farmers would have to come back year after year and buy, each year, a completely new supply of Bt Corn seed.

Obviously, this raises interesting intellectual property rights issues. It is very frightening for some people to think that these companies are not just producing corn that is more resistant to pests, but that also has sterility genes in it. Suppose such a gene gets loose in the environment.

Some of you read a few weeks ago that Monsanto gave up on its Terminator Gene development project, but is going to continue to work on ways in which it can genetically modify substances to protect its property rights in a particular genetic modification. Think about the legal issues that are posed by that set of problems.

International environmental law is expanding into new substantive areas: climate change under the Kyoto Protocol; eliminating ozone-attacking chemicals; regulating hazardous waste shipments (the Basel Convention); and now new negotiations to reduce the use of persistent organic pollutants ("POPs"), such as DDT and PCBs, worldwide.

But the more interesting development is the extent to which these laws are becoming intertwined with the law of trade and international finance. Globalization is characterized by increasing flows of goods, services, and capital. Much international environmental law is now becoming, or running up against, trade law.

You could argue that the future of the world environment is going to depend heavily on how well we are able to integrate environmental strategies with international finance, international trade, and international energy development. These are all brand new frontiers in the law and we are only starting to look at them.

Some of you who live in New Hampshire or California know that a hot issue in some states now is the pollution of the drinking water supply with a chemical called MTBE, which is added to gasoline to improve its environmental quality. Starting in 1990, we required gasoline in a lot of areas to contain two percent oxygen. Industry responded by using MTBE. Unfortunately, it turns out that MTBE is very soluble and gets into drinking water. Now we have to figure out how to get rid of MTBE.

Last month a Canadian company that manufactures MTBE filed a complaint under the North American Free Trade Agreement ("NAFTA"), claiming that if the United States gets rid of MTBE, we have taken their property rights. This is based on a NAFTA provision protecting companies of one country from being "expropriated" by the government of another country. Do our trade agreements bar us from doing something that is domestic, regulatory, and necessary for protecting our drinking water? Do we have to compensate this Canadian company for taking their market away from them because there will not be any market left for MTBE? Is this a trade issue? Is it a treaty issue? Is it a financial issue? Is it a Fifth Amendment takings issue? Is it a domestic environmental regulatory issue? This is the kind of problem that is beginning to crop up in our trade policy and our global environmental policy.

Or take climate change. The International Framework Convention on Climate Change that was adopted in 1990 and the Kyoto Protocol, which is the subject of continuing work, are the implementing framework for an international climate change regime. It could be potentially the most comprehensive regulatory mechanism of international law ever developed. Yet, it is also very market-driven, and provides designs for international financial assistance and private investment. We are moving in the direction of adopting an international convention that will affect the decisions every country makes about developing its energy sector in the next 50 to 100 years. Tremendous issues of international law, treaty law, and international sovereignty, as well as reporting and information, are going to be involved.

The impacts of global financial regimes—for example, policies of the International Monetary Fund ("IMF")—on the environment pose challenges that I do not think anybody has really thought very much about. The reverse is also true: international environmental arrangements are going to depend on and even create new financial markets. For example, because of the expectation that the Kyoto Protocol will create an international system to trade carbon emission "allowances," we are starting to see markets grow up internationally, in which people are buying and selling a commodity called "no carbon."

This is a trading future, a hedge against a future international legal regime in which people will have to reduce their carbon emissions. People are basically speculating on world markets by creating an emissions allowance or permit for a system that does not exist yet. What kind of international financial issues are raised by this developing system?

Issues relating to the global commons, particularly oceans, will become increasingly important. I was reading a newspaper clip yesterday coming up here on the plane about the Northern Right Whale, of which

there are only 290 or 300 left. The article noted that the International Maritime Organization has never changed or limited a shipping route in its history to protect any marine species.

We have, right now, an international treaty that, to some extent, regulates the trade in endangered species. But when you think about where we are in international species protection law, we are probably where we were fifteen years ago on climate change. We are at the beginnings of what will be a new international regime on this issue.

There are issues relating to health, such as anti-microbial resistance and the asthma epidemic. There is the developing central issue in health policy of how we detect disease vectors, and what we do about those disease vectors. Issues that have traditionally been health policy issues at a local scale are going to become regional, national, and international issues. They are going to be perceived as environmental issues as well as health issues.

I wanted to do this sketch of what some of the central issues of environmental policy may look like in 2010 because most of these issues were not even identified five, seven, or ten years ago. As a result, I think that environmental law is increasingly going to become law that we have traditionally thought of as treaty law, or privacy law, or financial law, or international law, or intellectual property law, or Internet law. This is all going to be part of the new body of environmental law.

My proposition to you is that the doctrinal and intellectual issues of the new environmental law are going to be *very* challenging and sexy, but that if Harvard Law School wants to build a competitive environmental law program, that program will have to be global in scope and it will have to be interdisciplinary and interdepartmental within the university. It will have to take advantage of many other parts of this university and be a university-wide program.

There are many other schools at Harvard that are recognized around the country as having a leadership role on some, or many, environmental issues. The Kennedy School of Government, the Public Health School, and the Business School are doing a lot on the environment.

All of these departments and schools are recognized as doing more in the way of environmental policy and taking more environmental leadership than the Law School is. What Harvard Law School has to do is figure out how to harness the energy of the rest of the University.

When I talk with people who are interested in environmental issues and are thinking about going to law school or have just gone to law school, they talk about going to Yale, Duke, Michigan, NYU, Berkeley, or Georgetown. For western issues, they speak of Colorado or Oregon. But in most of those cases, it is not just because those law schools have a vibrant program in environmental law. It is also because most of those universities offer joint degree programs, multi-disciplinary programs, multi-departmental programs, or joint programs among a number of dif-

ferent departments. These programs allow students to go to law school for three years and then get a business, government, or public health degree in four years. They enable people who are interested in a number of different disciplines besides law to come away with a law degree and a lot of substantive graduate-level education in several other major disciplines. It seems to me that this is really the challenge for Harvard Law School.

For those of you who have ever known anybody who has been involved in dog sled racing, you know that putting together a team of dogs to pull a sled is a fairly time consuming, expensive, and complicated endeavor. If Harvard Law School is going to have a competitive environmental law program, the sled is going to have to be pulled by more than one or two dogs.

So it is not really an issue of hiring one or two good new law professors. We are going to have to have a good team. Here at Harvard University, there are already a lot of good dogs, even potential lead dogs. So the problem that the Law School has, it seems to me, is to get one or two additional good dogs, put them together with some other top dogs already at Harvard, and make a team that is a whole in which the Law School gets pulled along and helps pull the others in a world class team effort. It has to be a joint effort within the university.

I believe this is doable. The good news is that there are a lot of resources at Harvard that can be harnessed. Getting the Law School to harness too is the challenge. Based on what I think environmental policy is going to look like ten or fifteen years from now, the Law School can have a world-class environmental program that is exciting and doctrinally challenging, but it needs to build that program together with the rest of the university. Thank you.

(Applause)

Frederick A.O. Schwarz, Jr.: Abe, it was a pleasure to be introduced by you. I don't know if George was referring to you as the lead dog on the dog sled, but anyway, you were a great teacher when we were at the Law School many years ago.

I want to also refer to John Bryant, who I met for the first time today and sat next to at lunch. He is a great environmentalist and has been involved in New Hampshire all of his life as a lawyer and environmentalist. I also want to honor Amanda Cohen Leiter and the Environmental Law Society for what they are doing.

When I was here as a law student, we were picketing Woolworth's in sympathy for the sit-ins in the South. You are doing just the right thing now in pressing the Law School on environmental issues. That is just what you should be doing.

I want to talk about, really, the same things: "The Environment as a Necessary and Proper Subject for Study at the Harvard Law School." Having read this beautiful one page statement, frankly, I think it could

replace everything I am going to say in the next twenty-five minutes. It is a great statement.

Why are we lawyers? What is the Law School meant to do to help us to become lawyers? Obviously, there are many answers to those questions. We want to be intellectually challenged. We want to earn a decent living.

But there are deeper desires behind why we want to be lawyers. We want to help people. We want to help our country. We want to be tested by addressing major issues of our time.

I think that Justice Holmes had it exactly right when he said "as life is action and passion, it is required of a man that he should share the passion and action of his time at peril of being judged not to have lived."

Picking up on that, I have three points I want to make this afternoon. First, the preservation and protection of the environment is part of the action and passion of our time. Every man—and woman—should want to share in this passion and action.

Second, the legal questions that can be presented in courses on the environment are varied, complex, and challenging for both students and scholars, as George explained.

Presumably, law schools cannot possibly prepare their students to share in every issue that is part of an era's passion and action. A fad is not an issue for an era. Perhaps there are some issues that are part of the passion and action of the time that are not fit for law schools. But environmental issues are not fads; they are fundamental in our world. They do raise challenging legal questions.

I think that my third point follows clearly from the first two: the Harvard Law School—our Harvard Law School—should challenge its students and stimulate its scholars by using the environment, and all the legal issues it raises, as part of a rich and mixed core curriculum.

So first, I would like to explain why the environment is part of the passion and action of our time. The Justice Holmes quote was addressed to the human spirit. He was really saying that one is bereft as a human being if one does not act on some of the key issues of one's era. That is particularly so for lawyers, and particularly so in this country. Why? It is because given our constitution and legal tradition, lawyers can aspire to be broadly of use on our country's and our era's issues that matter.

Holmes's concluding words, "at peril of being judged not to have lived," when applied to lack of involvement in environmental issues, really have a second meaning. If we of this generation or this era do not address the looming issues of the environment, we will be the first generation in human history to knowingly leave the world a worse place for our children and our children's children.

^{1.} Oliver Wendell Holmes Jr., Memorial Day Address (May 30, 1884), reprinted in Oliver Wendell Holmes Jr., Speeches 3 (1891).

When I left the Law School in 1960, far too little was known about the environment. Yes, Abraham Lincoln had begun to protect our great national parks by establishing Yosemite in 1864. And yes, at the turn of the century, John Muir, Gifford Pinchot, and Theodore Roosevelt had done much to recognize the importance of our wild places and our wild things, and to expand our great national parks system. But despite those decent instincts and decent starts, certainly by the time I graduated from Law School, environmental degradation had spread, largely unchecked.

Most importantly, when I graduated, the nature and complexity of environmental issues were in no way comprehended. Civil rights, quite properly and naturally, was the passion and action of law students of our time. The environment may have been passively enjoyed, but it was not actively analyzed or understood. The prevailing sense was blindness to the effects of human intervention in the natural world.

Rachel Carson wrote to a friend shortly before beginning her writing of *Silent Spring*,

[O]ld ideas die hard, especially when they are emotionally as well as intellectually dear to one. It was pleasant to believe, for example, that much of Nature was forever beyond the tampering reach of man: he might level the forests and dam the streams, but the clouds and the rain and the wind were God's. It was comforting to suppose that the stream of life would flow on through time in whatever course that God had appointed for it—without interference by one of the drops of that stream, Man.²

Now, of course, we know that is not true.

Silent Spring was published in 1962. At that time, the general lack of interest in the issues we are talking about now can be summed up simply by stating that Carson, then a best selling author, could not, for a substantial amount of time, find a publisher for her great work Silent Spring which awoke the public to the effects of DDT upon the natural world—bugs, birds, animals, and ultimately, human beings.

The publication of *Silent Spring* in 1962 was one of several events in the 1960s and 1970s which heightened awareness of the environment and of the role of law in preserving and protecting the environment. Building on the ideas of the civil rights movement, the late sixties and early seventies saw the beginnings of today's environmental movement.

I learned for the first time today that you started the Environmental Law Society in 1969. It is one of a litany of great events of that time: Earth Day in 1970, early cases such as *Scenic Hudson v. The Federal Power Commission*, which successfully challenged environmental as-

^{2.} Frank Graham Jr., Since Silent Spring 13 (1970) (citing an unpublished essay by Rachel Carson).

saults and recognized broad standing to do so, the formation of public interest law firms focusing on the environment, like NRDC, which I am honored to chair, the creation of the EPA, the passage of NEPA, and the passage of pioneering national environmental laws like the Clean Water Act and Clean Air Act.

So, in the decades after *Silent Spring*, we witnessed an explosion of environmental consciousness and environmental law. This has continued in the eighties and nineties, though as George pointed out, the issues are much more complex and interrelated today.

And, we must admit, that despite the new consciousness and the new role of law, while much has been done, far too much remains to be done. We must also admit that while many battles have been and are being won, we are at risk of losing the war. So again, I would ask the question, are we to be the first generation in human history to knowingly leave the world a worse place for our children and our grandchildren?

There are too many disturbing signs now. Species are disappearing, becoming extinct. In America and all over the world, they are disappearing at rates never seen in human history, and indeed, at rates which are unmatched since the great catastrophe some 65 million years ago at the end of the Cretaceous Period.

Forests are being cut down and burned all over the world. Here in America only about ten million hectares of old growth forest remain in the lower forty-eight states, as compared to 170 million hectares when the Mayflower landed at Plymouth Rock.

Fish stocks all over the world are rapidly dwindling, sword fish and salmon being two prime examples. Wilderness and farms are being paved over. In short, wild places and wild things are inexorably saying "goodbye."

Similarly, public health is harmed by all sorts of assaults, including pesticides and pollution.

All of these problems plague America and every other country in the world. But there also are new, more complex global problems that harm the earth as a whole. Holes in the ozone layer are one such problem.

But the most important new environmental problem is global warming—or as it should be put more generally, climate change—produced by the accumulation of greenhouse gases in our atmosphere. Global warming, or climate change, is a good example of why the environmental problems of the next century will be so challenging.

To the extent that human activity compounds the problem, adds to the greenhouse gases, two powerful forces make the problem both more pressing and more difficult to solve. George touched on both of these. First, the world population continues to grow. More people mean more human activity, and that tends to mean more greenhouse gases. Second, whatever the industrialized world does to address the problem, economic growth in the developing world can smother improvements.

I think it is fair to say that what the industrial world has done is more talk, more hot air, than it is action. But whatever the industrial world ultimately can do, the developing world can, and should, strive to raise its own standard of living. But, unless, for example, cars and refrigerators are developed that use less energy and different kinds of energy, global warming will get much worse as countries like India, China, and Indonesia provide for their people what they are entitled to, the same things we take for granted like iceboxes and cars.

Much has been lost. More importantly, the upcoming challenges are daunting. But we cannot despair. We cannot just go sulk in our tents. On these issues, for our time, we must act with passion—but also with intelligent hope.

I have that hope. First of all, because we have the songs on our side. In "Cool, Clear Water" and "Blue Skies Shining on Me" and our national songs, we long for and honor the environment, open space. In singing "America the Beautiful" we start by exalting our "Beautiful for spacious skies," "amber waves of grain," and "purple mountain majesties, above the fruited plain." Must our grandchildren be condemned to hear those words as only frosty relics of a bygone past? Shall they instead sing the wistful words of Joni Mitchell, "They paved paradise and put up a parking lot."? I hope not.

As someone once put it—and I have never been able to find out who it was who actually said this—"I don't care who writes the laws, so long as I can write the songs." There is some truth to this, and it applies to our topic today. Our songs, and songs from all over the world, express the deep human yearning for a clean world. But while the spirit that inspires the songs is a necessary part of the passion and action that can save the world, songs and the spirit that underlies them are obviously not sufficient. We also need intelligent action. We do care, not only who writes the songs, but also who writes the laws. We do need creative thinking, creative thinking by lawyers about hard problems.

This, of course, is what leads to my second point, which is that the legal questions that can be presented in courses on the environment and other courses addressing environmental problems are varied, complex, and challenging for both students and scholars.

Lawyers are not songwriters, though Hoagie Carmichael was. But advocates do use all sorts of things, such as history, literature, and songs. They use them to help persuade judges by evoking themes, hopes, ideals, or memories that are there in the judge's mind, or spirit, or even unconscious. These things are helpful in moving the decision maker to your side. For example, in arguments in circuit courts, I have used both Bob Dylan and The Rolling Stones, and won both cases. Whether this was the reason, I do not know.

(Laughter)

Now, I want to continue with this song bit to illustrate a point. I am going to make a point ultimately about the law. You may not appreciate that right away, but it honestly is. It's a point derived from Woody Guthrie. I want to use this to introduce why legal issues touching the environment are complex and challenging. This point came to me while listening to Judy Collins sing Guthrie's "Roll on Columbia" on my juke box a while ago.

Guthrie, as you all know, or I assume all of you know, was a folk singer—I'm sure Abe knows.
(Laughter)

He was a folk singer and a song writer who celebrated the down-trodden and who loved the outdoors. Almost sixty years ago, Guthrie wrote "Roll on Columbia" in which the Grand Coulee Dam is celebrated as the "mightiest thing ever made by a man." The chorus of "Roll on Columbia" repeats five or six times Guthrie's praise for the Columbia River rolling on, and by the use of its dams, to quote the song, "Your power is changing our darkness to dawn." Of course, the power created by the dams of the Columbia and Snake Rivers did just that, enriching many lives and doing so at low cost to the consumer.

But now, a little more than half a century later, unanticipated costs concern us. Our wild rivers are disappearing. The salmon, once a dominant species of the Pacific Northwest, is now at risk of extinction. The dams are now a major factor threatening the salmon. The desire to save the salmon, for economic, spiritual, and environmental reasons, now leads to campaigns to breach the dams.

But this, in turn, raises other tough environmental and economic issues. Look at the four dams on the Snake River, for example. The Snake rises in Idaho and feeds into the Columbia. Those four dams are particularly harmful to the survival of salmon, and therefore, those four dams are now prime candidates for breaching. However, those dams provide about 1200 megawatts of power, almost five percent of the region's use. That power could be replaced. I believe that it could and should be replaced by conservation. But let us assume that it was replaced, instead, by a new plant. Currently, the cheapest alternative would be a coal burning facility. But coal burning facilities are the dirtiest of all in many respects, including their disproportionate contribution to global warming.

I use that illustration not to argue for a particular solution (though I know what I would argue for). Rather, I use this to illustrate that environmental problems today not only demonstrate how one generation's themes and songs may differ from a later generation's, but also, and more importantly for present purposes, that environmental problems present complex and intricate issues with which to challenge students and inspire scholars.

The environment presents a potpourri of challenging legal questions.

A broad view of standing has been, from the outset, a linchpin of environmental enforcement. But some people are now pushing hard to trim back the standing decisions of the early years of environmental litigation. They are supported by rulings from some judges, including my classmate and law review colleague Nino Scalia. (He opposed our picketing at Woolworth's. This was not because he was bad on race; he just had complicated, logic-chopping reasons for opposing it.) (Laughter)

Land use issues involve not only understanding of zoning, but also the parameters of the Takings Clause of the Fifth Amendment. The Supreme Court is playing around on the edges of that subject, as well, in interesting ways.

The extent of executive, as opposed to legislative, powers is raised in many environmental matters.

There are many challenging treaty questions involved in the environment and trade. They exist not only with respect to classic international treaties, but also with respect to the land use and wildlife aspects of many treaties or agreements with Native American tribes, some dating back 200 years.

The unequal distribution of pollution-producing facilities and dumps in poor communities and in communities of color raises interesting civil rights questions.

Consider mergers and acquisitions practice today. I am a litigator, but I see this from my corporate partners. M & A practice today, and corporate transaction practice generally, is impossible without an understanding of environmental risks. You take over a company. What are you acquiring in terms of the environmental risk from dumps or other environmental problems?

While the common law obviously remains important on some environmental questions, as we all know, law is more and more a creature of legislation and regulations enforcing or applying legislation. Certainly, this is true for the environment. So a law student taking a challenging environmental course has to become focused on tough questions of statutory interpretation, which is something that runs through all sorts of modern legal questions. Applying a statutory mandate, a law student must understand what is or is not proper regulation.

So lawyers in the twenty-first century must understand and harness their knowledge of science and economics. Work by environmental lawyers like those at NRDC and Harvard's Ralph Cavanaugh on restructuring utilities is a good example of where environmental questions, science, and economics all come together in good, tough, analytical problems. They are public policy issues, but the mind of a good, focused lawyer can address them best of all.

Now, the complexity and interest of all of those issues, and many others, are reason enough to conclude that courses on the environment are fit meat for law students. There is another reason why I think courses on the environment are fit meat for law students. I do not mean genetically engineered meat.

(Laughter)

You know, law school is not—this law school is not—and should not be, a trade school for those who nurse or redesign our country's economic engine. Law and lawyers, particularly in this country, also have a key role in protecting those who are minorities or unpopular outcasts. You think of civil rights and the First Amendment. You should also think of the environment. Preservation of the environment sometimes represents a choice to defer or prevent action that might arguably, in the short term, benefit today's majority, to do so for the sake of future generations. Future generations are, by definition, unrepresented. So in this sense, environmental action is analogous to the Constitutional choice to trump the immediate will of a majority with the lasting values that lie in protecting the rights of discreet and insular minorities, and vulnerable or unpopular individuals.

Now to conclude with my third point, which is simple, short, and well expressed in your statement. The Harvard Law School should challenge its students and stimulate its scholars by using the environment and all the legal issues that it raises as a core part of the curriculum. This point, it seems to me, follows without any difficulty from the first two points. If, as I hope I have shown, the preservation and protection of the environment is a key issue for action and passion in our time, and if, as I hope I have also shown—and George did show—the legal questions that can be presented in courses on the environment are varied, complex, and challenging, then the implications for the Law School are clear.

We should not leave with the impression that the Law School has not done anything in the field of the environment. It has done some things. Even in 1970, the school held a two day intensive course in environmental law, having helped the newly born *Environmental Law Reporter* to create a primer for the event.

It was this kind of early enthusiasm for the environment that led our fellow alumnus, Second Circuit Judge James Oakes, to comment in 1973 that there were five case books and eighty professors teaching the new field of environmental law—though not at Harvard.

More recently, the Environmental Law Society and the *Environmental Law Review* have been making a difference in writing and in pressuring the administration to do more on the environment. Dean Clark and the students have collaborated through an environmental working group that followed from the First Austin Hall Statement. There was a symposium. There is the environmental fellow; Annecoos Wiersema is the second fellow.

All of this is good, but it seems to me it largely represented student-inspired foment rather than sufficient results from the school. It was student-inspired and an emeritus professor-inspired foment . . . (Laughter)

... rather than sufficient results from the school. So it is something, but it is not nearly enough. It is not nearly enough for this issue and this era.

So the proper question for students, faculty, administration, and alumni to ask is, "How can it be that this great school is not sufficiently making its mark in the environmental field as it does in so many others?" The rest of the university is meeting this challenge, as is demonstrated by Professor McElroy's leadership and the many course offerings on tough and stimulating environmental questions offered elsewhere in the University. Why shouldn't this law school do likewise?

Environmental questions involve many, many disciplines: science, economics, history, international relations, religion, literature, and other works of the spirit. But law is also a core discipline. Most importantly, good lawyering masters and uses all the other disciplines.

So if there is an issue that is important for the country and the world, if the issues are intellectually challenging, if good lawyering brings in all the other disciplines, if hard thinking and good lawyering can make a real difference, what have we described? It seems to me we have described an issue which the world's greatest law school should seek to capture as a signature part of its commitment to excellence.

To paraphrase the quote from Justice Holmes that I used at the beginning of this address: If a great school fails to lead on a complex and challenging issue, an issue that is vital to the action and passion of our time, and to the welfare of our children and our children's children, then that school must be judged not to have lived and not to have served its students, or inspired its faculty, or helped to lead our country and the world. Knowing the abiding greatness of this school as we do, let us go forth to challenge the school, and let us believe the school will meet the challenge.

Now, I want to conclude with a remark that Judge Hand made to me in the last year of his life. You might consider whether his words of advice are good advice to give to the Law School if the Law School says "Well, we can't get there quickly enough," "We can't get there yet," "We're on our way," or if someone says "Well, this isn't a fit subject for the school." Anyway, I was finishing up my clerkship on the Second Circuit, and I had gotten to know Judge Hand. He was just across the hall. I was making up my mind then whether to go and start right away at Cravath or go to work in Nigeria.

Anyway, I was trying to make up my mind which to do. Should I go straight to Cravath or should I go to Nigeria? A lot of distinguished, admired, New York City lawyers had communicated with me and said "You know, if you go to Nigeria, you are never going to become a real lawyer."

(Laughter)

It did not really make sense to me and I was planning to go, but I wanted to talk with Judge Hand, who I had come to like. He was obviously wise, with that big head and those big eyebrows.

(Laughter)

So I went across the hall to ask Judge Hand what he thought about this advice. I recounted the advice to him. "What do you think about the advice that if I go to Nigeria, I will never become a real lawyer?" I said, "Judge Hand, what do you think?" He paused for a while. Then he said, "It sounds like pure bullshit to me."

(Laughter)

(Applause)

AMANDA COHEN LEITER: Thank you, both. Those were really wonderful and inspirational words. We hope that those provide the momentum and inspiration that the Law School needs.

Professors Chayes and Hay and a couple of other faculty members have definitely stepped in to fill gaps in our environmental law curriculum when necessary. But I think they would be the first to say that those gaps should not exist and that we really do need strong faculty members who are committed to environmental law as their primary research area. We need professors to teach environmental law on a consistent basis and to offer the full range of courses in environmental law that a top law school should have.

Now I would like to introduce our two responders today. The first is Professor Richard Lazarus, who is the John Carroll Research Professor of Law at Georgetown University Law Center, the Director of the Georgetown University Law Center's Supreme Court Institute, and the 1999 to 2000 Woodrow Wilson Fellow at the Woodrow Wilson Center for International Scholars. Professor Lazarus is an eminent environmental law scholar and professor, and we hope that he will give us some sense of what a good environmental law program looks like. He will give us some comments on the earlier speakers' remarks.

After Professor Lazarus, Professor Michael McElroy, who is the chairman of the University Committee on the Environment at Harvard and a professor of Earth and Planetary Science, will speak. He is also the director of the Center for Earth and Planetary Physics. I am sure that he will give us some sense of the terrific program offerings in other schools at Harvard, which the Law School could both benefit from, and which would benefit from the Law School were it to develop a leading program in environmental law. Thank you.

(Applause)

RICHARD LAZARUS: I am absolutely delighted to be here. This was one of my favorite rooms, although they have wrecked the chairs since I was here. I liked it much better in the old system.

I first want to join the other speakers in congratulating the law students who put this forum together. It is really quite a wonderful event. I also want to add my own enthusiastic support for the Second Austin Hall Statement and encourage people to sign it.

In thinking about this talk beforehand, I wish I had been reminded about Justice Holmes's quote or Rachel Carson's stirring words. Instead, what was brought to my mind was when Don Young, a member of Congress from Alaska and Chair of the House Resources Committee, became Chair of that Committee in 1994 and immediately in December of that year described environmentalists in public. He described environmentalists as "The most despicable group of individuals, a self-centered bunch. A waffle-stomping, Harvard-graduating, intellectual bunch of idiots." (Applause)

Now, it took me a while to figure out the symbolic significance of the waffle. I will tell you that later. (Laughter)

But I have always been pretty proud of the reference to Harvard, although I doubt that Congressman Young intended it that way. I also believe that there is at least one kernel of truth in Young's statements. It is not that environmentalists are idiots, but that many of the intellectual leaders in environmental law are graduates of Harvard and of this law school.

If one looks just to the class of 1969, one will find that it is truly extraordinary. You have George Frampton. You have Lois Schiffer. You have John Leshy.

Just looking to the public sector, the class boasts the leading advisor to the president on environmental issues, the leading environmental lawyer in the Justice Department, heading the environment division of about 450 attorneys, and the leading lawyer for the Department of the Interior. This should be a source of tremendous pride for the Law School.

But this success has occurred not because Harvard Law School, as an institution, has provided intellectual leadership in environmental law. Instead, it has occurred in spite of its absence at the Law School during most of the past thirty years.

The challenge the Law School faces is to fill that void now and to create a program—a program consistent with Harvard's reputation generally as an intellectual leader, and a program worthy of the abilities and the aspirations of the students, the faculty, and the alumni.

With the few minutes that I have, I want to respond to or elaborate on some of what was said and speak more directly about the development of the Environmental Law Program. Then I cannot resist commenting on some things which have not been said, but should be.

In terms of elaboration, I agree completely with things that have been said, especially by George Frampton, who, I always have to mention, grew up in the same town as I did, Urbana, Illinois. I agree that there are significant issues here and have been for many years, and that these are issues rich for curriculum and scholarship, and rich in providing interdisciplinary opportunities throughout a university such as Harvard.

In developing a program, one does not need to have gobs and gobs of environmental law courses. You need a core set of courses. You need a minimum of four courses—a minimum—taught by permanent faculty. You need an environmental law survey class. You need a distinct natural resources law survey class. You need a distinct international environmental law class. And you need an advanced environmental law class, which instead of treating things at their superficial level, like the introductory classes do, takes a few discreet dives in the material, which allow for a mixing of theory and practice in a way that otherwise cannot be achieved. This course often cannot be taught without a member of the permanent core faculty with significant practical experience in environmental law.

Are there more courses to be offered and to be taken? Absolutely. There are terrific additional classes that can be taught and taken that offer great enrichment.

For example, the School could offer a water law course, as John Leshy has described. There are a host of fascinating legal issues in water law. A land use course could be offered. These courses would add tremendous richness to a curriculum.

But students interested in environmental law do not have to take more courses than the four core classes. This is especially true if you have an engaged environmental law community with the Harvard Environmental Law Society, *Environmental Law Review*, and a legal services department that works on environmental justice issues. But this takes a core faculty. It does not take one faculty member. It takes a core group of faculty.

At Georgetown, we have four. By the way, I was just ecstatic when George finally mentioned Georgetown.
(Laughter)

We have four permanent members of the faculty who are full time environmental professors. I am not playing games like law schools do. I am not counting John Jackson, who teaches International Trade and the Environment. I am not even counting the land use professor. I am talking about four core people, full time faculty who teach in the environmental law area. This is their primary area for scholarship and teaching.

We also have some very distinguished adjuncts such as Lois Schiffer, and next semester, John Leshy. I have no doubt that you could do the same here for additional enrichment purposes. We have an Environmental Justice Clinic which provides an opportunity for students for public service through the offering of free legal services in the environmental law area.

We have an Environmental Policy Project, which is essentially a think tank that bridges scholarship and policy-making, run by a former general counsel of the Audubon Society named John Echeverria. It offers Continuing Legal Education ("CLE") courses mostly directed to public sector lawyers. Actually, we are planning next to have CLE courses for judges in environmental law, to be approved by the Federal Judicial Conference, as well as sponsor a variety of activities that reach out to policymakers to create a forum at the Law School in which to have intellectual debate on issues. We would bring over members of Congress and the executive branch to debate these issues. We will file briefs in the Supreme Court on issues, such as standing and regulatory takings, to bridge scholarship and policy.

But at the margin for a law student, after the four courses and possibly some enrichment courses, it is often more important and more valuable for students, even those who just really want to practice environmental law and know that, to take other, non-environmental classes. It is important to take administrative law, legislation, federal courts, corporations, securities regulation, and law and economics.

For me, here at the Law School, the most important classes that I took were from David Shapiro and Mort Horwitz. Those were my federal courts class and my torts class.

Now, there is a reason why the four core courses are often enough for many students, but also why the others are so important. It supplies the key to establishing an outstanding environmental law program for students and for faculty scholars. A program has to convey to students and the faculty two things.

First, why environmental law is much more than an incidental context for other areas of law. In short, the question is "What is environmental about environmental law?"

That is a deceptively hard question. For most, though, the answer has been easy. There is nothing environmental about environmental law. As Mr. Schwarz said, people view it as just an incidental context. There are important concerns, but it is not a distinct, legitimate area of law. It is simply a set of concerns that arises in administrative law, federal courts, torts, corporations, or criminal law.

In fact, that easy answer, I think, is the explanation for the Harvard Law School's sorry performance over the past thirty years. The faculty here has not historically understood how environmental law is more than an incidental context. They have mistaken student enthusiasm for mere ideology, rather than evidence of the legitimacy of this subject as an area of law. That is a common mistake. But it is not the kind of mistake that should be made by a leading law school.

The best environmental lawyers understand how environmental law is much more. They understand how the nature of the problem that environmental law addresses, the nature of ecological injury, is the common denominator for understanding environmental law and its distinct vision. They understand how the nature of ecological injury explains so much about the environmental protection statutes. They understand how it provides for students and practitioners a framework and a structure for understanding the statutory complexities and for grappling with the policy choices that have been made and not made in the statutes. They understand how environmental law has changed and why it has changed the way it has over the past thirty years. They understand how sections that seemed completely and utterly absurd in the statutes actually, at some level, make sense.

But more broadly, the nature of the ecological injury also leads one to understand how and why environmental law is not just a passive player in other legal contexts, but has been and continues to be a major evolutionary force in law generally.

When environmental law disputes arise in a legal context, they affect other interconnecting legal doctrines. Environmental law has transformed administrative law. Environmental law has changed corporate law. It has changed tort law. It has changed property law. Indeed, there is hardly any area of the law that has been left untouched by environmental law.

As George Frampton explained, this is going to continue to happen in the future. It has happened continuously over the past three decades. It also affects law-making institutions because it is difficult to address ecological injury. Fashioning legal regimes and legal rules for addressing ecological injury creates conflict. It creates conflict between branches of government. It creates conflict among sovereigns and between different levels of sovereigns. These are hard issues with enormous distributional implications. It creates pressure and conflict, and, as a result, generates tremendously interesting legal issues, which are often related to the kind of injury the statutes are trying to address.

It is no coincidence that one of our leading Supreme Court cases on statutory construction, *Chevron*, was an environmental case. It is no coincidence that one of our leading separation of powers cases, *Morrison v. Olsen*, arose from an environmental controversy. It is no coincidence that one of our most controversial issues of federal constitutional law today, the Fifth Amendment Just Compensation Clause, almost uniformly arises in an environmental context.

That is also why this is such an enormously rich and promising area for curricular development and for scholarship. Environmental law is not an incidental context for hiring. It is not an opportunity to hire an administrative law expert. It is not an opportunity to hire a corporation law expert. Nor is it an opportunity to hire simply a law and economics expert. It is an opportunity to hire environmental law experts, and several of them.

Now, that takes me to my final point, which is to respond to something that is not being said. While I am extraordinarily heartened that the Harvard Law School may finally now be moving, after thirty years, I am troubled.

I am troubled by the silence from the Harvard Law School during thirty years of environmental law's formative period, when a great law school—and Harvard is a great law school—should have been at the forefront and should have been providing intellectual leadership.

I am troubled by the fact that the only way to get Harvard Law School to act is for the law students to put on this kind of effort. And even then, the Law School may act only when environmental law has aged enough, thirty years, that there are sufficient private sector alumni who are capable of raising money for the law school. Environmental law as a fundraising opportunity. We will have a program if the alumni are willing to pay for it.

Now, that may be a very common practice at many law schools. But it seems to me that it is a sad way to decide curricular development at one of the nation's leading law schools. So what is my advice? Don't give? No.

(Laughter)

I think we owe it to the students, as excellent as they are and as the school should be, to assist in the development of a program. But I also think that in fashioning this program, the alumni should insist that the program have a significant public service dimension, which includes reaching out to the local communities in this area.

This should not be simply an opportunity to extract economic rent from environmental law's growth. It should be an opportunity to do more. The mark of excellence for the Harvard Law School's Environmental Law Program should be what it gives to others, including students, the legal profession, and communities. It should not be whether it is an effective tool for alumni fundraising.

If Harvard Law School does take these steps, then I think that Harvard, as a law school and as an institution, will become an intellectual leader in environmental law. The students here will do great things, and the nation and the world will be better off. The students will act and the students will be passionate. They will fulfill Justice Holmes's mandate, and they will do so in pursuit of Rachel Carson's dream. Thank you. (Applause)

MICHAEL MCELROY: I must say it is a very difficult and daunting task to compete with the eloquence of the distinguished legal scholars who have preceded me here.

I was particularly taken with the image that George gave us of the sled and the dogs. I think it is a wonderful image. I have the sense that the Law School does have the sled. It is still here. But it appears, unfor-

tunately, that the dogs are in various other places: George in Washington, Fritz in New York, and Richard at Georgetown.
(Laughter)

But at least we have Abe, and we are fortunate at least that Abe knows where the dogs should drive the sled. If only we could get the dogs.

(Laughter)

I thought what I would like to do, though, is to give you at least a personal perspective on the way I think about some of these environmental issues. I think that we have moved into a new era in the history of our planet in the last few hundred years. If you think of the long-term, 4.5 billion year history of the planet, life has been pervasive on the earth, almost from the beginning. It has evolved in wondrous ways without any obvious, great global plan. It has evolved in such a way that organisms took advantage of niches that were opened up, including the one that was opened up when that great meteor hit 65 million years ago.

Then human beings came on the scene. We are very recent arrivals, remember. We are only about 150,000 years old. There were no human beings in the Americas in the beginning of the last Ice Age, as far as we know. Only in the last couple of hundred years, 250 years or so, have we really developed the capacity to change the planet. Undoubtedly, we are changing it on a global scale, in a way that is unprecedented in the history of life on the earth. The Industrial Revolution gave us that power. It gave us the power to move mountains, to redirect rivers, to reengineer the land. We did most of that by using fossil fuels (coal, oil, and more recently, natural gas) as an energy source.

My sense of history since the Industrial Revolution is that we have been playing catch up all of the time. It was pretty obvious that burning coal made local communities dirty. But we did not really do anything about that until about 1948 when Donora, Pennsylvania got the attention of some people in the United States, and 1952, when the London Killer Smog got the attention of people in England.

Then, what did we do? Well, we looked at the most obvious problems. We said "Let's clean that up." The most obvious problem was that you could see dirty, sooty stuff coming out of smokestacks. It made your handkerchief dirty. It made your face dirty. It made your buildings dirty. We said "That's unacceptable." So we decided we had to clean that up.

Well, how do you clean it up? In the case of London, the only way you really could clean it up was by changing the fuel. So they moved to so-called smokeless fuel, but that was just another form of coal. In the case of Donora, Pennsylvania, it was a more creative solution. There, the major problem was industry. The creative solution there was to build higher smokestacks, so they could send the stuff somewhere else.

Then we found out a little later that fish were dying in rivers in southern Scandinavia. The lakes were becoming more acidic. The same

phenomenon was occurring in the northeastern part of the United States and in eastern Canada. It did not require a great deal of elaborate detective work to figure out where the problem was. The problem was clearly increasing acidity in the rain. The acidity was caused, in large measure, by increasing concentrations of sulfuric acid and nitric acid in the rain. That was not coming from the local region. It was coming from those high smokestacks somewhere else.

Then we got involved in the finger pointing that led to the clear recognition that the solution to environmental problems was going to require inter-regional cooperation at some level. So reductions in the concentrations of sulfur dioxide produced by burning coal and oil were clearly required if we were going to deal with the problem of acid rain. But once again, we are coming along and putting a little fix at the end of the tail pipe. We are not addressing the fundamental problem. There is also the problem of ozone—not the stuff in the stratosphere, but the stuff we breathe. We spend a great deal of money to try to cut down on urban smog, ozone, but the problem continues to get worse. We have great controversies about how to write laws and how to implement existing statutes to deal with the problem of urban and regional ozone, but we are not doing a very good job there either.

In all of these cases, it seems to me, we are in the mode of trying to fix the problem after the problem has become very serious. This brings us to the big problem mentioned by several of the earlier speakers, the problem of climate change. The problem is caused by all of the coal, oil, and gas that we burn, which turns into carbon dioxide and some other stuff like water vapor. But remember that carbon dioxide is the largest single waste product that we produce as an industrial society. We produce six billion tons of carbon each year and we dump it in the atmosphere as carbon dioxide. Twenty-two percent of it comes from the United States. In the United States, it amounts to about four tons of carbon per person, per year. It does have the potential to change the climate and to change the global environment in a significant and serious way.

So, what are we doing about that? Well, we did get engaged in this global initiative to try to deal with the problem of climate change, the meeting in Rio that drew more than half of the leaders of the world's nations.

George mentioned the Kyoto Protocol. But remember that before we went to Kyoto, the United States Senate passed a so-called non-binding resolution with a vote of ninety-five to zero advising the administration not to get involved in any treaty to deal with climate change if that treaty did not engage the developing countries, such as China and India.

The second condition was that it should not enter into any treaty that would constrain the economic growth of the United States. Ninetyfive to zero? That is an astonishing sense of unanimity and a clear understanding of the significance of the problem on the part of the United States Senate!

I just came back from China. I serve on something called the China International Consulate for Environment and Development. This is a group of people from a variety of countries with an equal number of Chinese participants. This group meets as a council once a year, but with the interesting opportunity to spend two hours with China's prime minister at the end of our meeting to relay our advice.

It is a very interesting experience, I must say. First of all, it is clear that the Chinese government, at the highest level, regards the environmental issues that we have been trying to deal with here as extremely important.

It is clear, for example, that the Chinese government is prepared to and tries to do things to improve the quality of their environment. It is clear that they appreciate that they are losing somewhere between five and twelve percent of GDP due to environmental damage.

For example, you may not be aware of this, but in response to the floods in southern China of last year, the Chinese government has made it a criminal offense for citizens to cut down trees in the forests in the upwater regions of southern China. The prime minister told us two days ago that China intends to institute a national policy to double the amount of land devoted to forests over the next fifteen years. At the same time, it is clear that there are problems associated with what China is trying to do. Some of those problems are subtle and require careful legal thinking if we are going to do a better job.

For example, China is not going to cut down its forests. China still has a demand for timber. Where is it finding that timber? Well, it is finding that timber in Malaysia and Indonesia. So China becomes a major contributor to the problem of deforestation and loss of biodiversity in Southeast Asia. We advised the Chinese prime minister that perhaps there was a need at every level to integrate environmental considerations into trade policy and into every aspect of policymaking in the Chinese government.

What can we do about this at Harvard? Let me just say a few brief words about my sense of what is going on in the University. I chair, as was mentioned, the University Committee on the Environment. The University Committee on the Environment was set up, actually, as the first act of Neil Rudenstine's tenure as president. It was set up, in significant measure, in response to pressure from alumni who were bringing the news to the University that environmental issues at Harvard needed to get a higher level of attention. Harvard, broadly speaking, across its schools, had fragmented interests in the environment, but no coordinated program. So the University Committee on the Environment was asked to try to see if it could do something to make things better. What have we done? Well, I should say that the University Committee on the Environment has fifty

members, drawn from all of the schools in the University, with the exception of dentistry. We have no dentists, apparently, interested in the environment.

(Laughter)

Curiously enough, we have nobody from the School of Education, which is a striking anomaly, but we do from all of the other schools in the University.

One of the first things that we succeeded in doing, or influencing, was to develop a new undergraduate concentration at Harvard in Environmental Science and Public Policy. That concentration is extremely demanding in terms of the requirements. People who opt for the concentration must do serious science. They must do mathematics. They must do economics. They must take a prescribed course in government. And they must have an integrating experience working on interdisciplinary aspects of environmental science and policy.

The University Committee on the Environment has played a critical role in the development of this concentration and continues to be important because our concentrators, when they wish to write senior theses, must be coupled with potential advisors. So we have had concentrators in Environmental Science and Public Policy writing senior theses under the direction of Abe Chayes, for example. We draw people from all over the University to work to help this process move forward. It is a wonderful experience and a two-way street. These undergraduates are extremely smart. They are very committed. They bring new perspectives to these issues. Often, they know more of the aspects of the environmental problems that they are dealing with than the faculty advisors with whom they choose to work. After all, they have had to do organic chemistry along the way.

(Laughter)

So, I think we have had some success in that, and we hope to see that continue.

We have also had success in developing a number of multidisciplinary research topics that have engaged people from around the University. In particular, we have had work going on for the last several years on all aspects of environment and development in China. We are looking at health implications of coal use in urban settings in China, implications of energy development for agriculture, implications for social policy, and implications for neighbors. We are also looking at how one might imagine a situation in which China would become engaged aggressively in a global policy to deal with the threat of climate change.

That research program has involved people from the Law School, namely Abe. Bill Alford played a very important role there as well. It has involved people from the Business School and School of Public Health. It has involved people from the Kennedy School. It has involved people from four or five different departments of the faculty of Arts and Sci-

ences. It has involved people even from the Divinity School. It represents the example of the kind of interactions that make this university an exciting place.

I should say that we have other activities under way. We are at the early stages of trying to build a program to look at the complex issues posed by development in India, which will soon be the world's most populous country. It will focus on issues of water, health, disease, climate, and World Bank and international organization investment infrastructure in India.

We are also looking at the question of available sources of energy and centers for development of alternatives to fossil fuel. As you can imagine, these studies are necessarily multi-disciplinary if one is to make progress.

This brings me to the specific issue of why we are here today. It is extremely important to the University community that there should be a strong presence of environmental scholarship at the Law School. It has been sadly lacking, with the exception of the individuals that I have already mentioned, over the last six years.

I think that it is fair to say that the University Committee on Environment can provide a good focal point to bring the resources of the university writ large to the Law School if there is a receptive audience to use those resources. But it seems to me that we do need the dogs. While Abe is still here to guide the sled, he needs help. I believe that the University Committee on the Environment can play a role, and we are ready to do so. Thank you.

(Applause)

(The question-and-answer segment has been omitted.)

Tony Rossman: If any alumni want to serve on the Executive Council of our new section and have not already expressed interest, please do so.

(Laughter)

I just want to conclude by saying that as we start this Environmental Law section, I feel that the torch partly has been passed to us by the students, who, of course, are going to continue to help carry that torch. You know, the reason that we are going to succeed is that all students very quickly go on to become alumni and do not lose interest. I sat for three decades and watched how this project got nowhere because the students would leave. But as alumni, we have got the staying power, and we have also got the perspective that our practices bring.

I hope that this will be another part of the history of Harvard Law School when the alumni somewhat take charge. Towards that end, the very first thing I am going to do in my capacity as chair, is to request that the *Harvard Law School Bulletin* publish what was said here this afternoon so that those who were not here can read what was said. Learned Hand gave a great lecture in this hall some years ago. I honestly hope

that thirty years from now we can look back, Fritz, and think of your closing quote of Judge Hand. (Laughter)

We will also be able to share Richard Lazarus's courageous assessment of what we have got to do. So an immediate task that we have got to do is to get this word out to those who couldn't be here. We have got to keep at it. Every reunion weekend in the Fall and the Spring, one way or another, we are going to have an ongoing program on environmental law for those alumni who are fortunate enough to come back to their reunions. Perhaps it will draw them back to their reunions. We will have a standing session, if you will, that does not adjourn, but keeps at it until we reach this goal.

So please, my personal plea is if you want to help out in a leadership role, please get involved.

Now, I would like to adopt the Austin Hall II Statement. I am not sure that we really need a vote given the sentiments expressed during the question and answer segment.

NICK EISENBERGER: Can we get a show of hands? (Everyone in the room appears to raise his or her hand.) (Applause)

Thank you very much.

THE SECOND AUSTIN HALL STATEMENT ON ENVIRONMENTAL LAW AT HARVARD

Whereas on April 27, 1996, on the twenty-fifth anniversary of the founding of the Harvard Environmental Law Society, to commemorate Harvard Law School's contribution to the first quarter-century of modern environmental law, a panel representing Law School alumni, faculty, and students convened in Austin Hall and adopted the first Austin Hall Statement on Environmental Law at Harvard;

WHEREAS the Austin Hall Statement endorsed five principles that highlighted Harvard's unique capacity, and responsibility, to contribute to environmental law scholarship and education and called upon the Law School to establish a leading program in environmental law;

WHEREAS these five principles remain valid and worthy of restatement:

- Harvard Law School has significantly influenced the discipline of environmental law;
- Harvard's achievements to date have *not* resulted from a deliber ate program to seek national leadership in environmental law;
- The Law School and the University are now uniquely capable of creating a first-rate environmental law program;
- Harvard Law School should commit to the establishment within the school of a discrete, leading program in environmental law;
- The Dean should establish a coordinating committee to develop and implement the environmental law program at Harvard Law School;

Whereas the environmental program called for in the first Austin Hall Statement will complement President Neil L. Rudenstine's University-wide initiative to make Harvard the world's premier university addressing environmental problems of global and regional importance; and whereas it will also complement Dean Robert C. Clark and the Strategic Planning Committee's goal of strengthening the Law School's ability to train the leaders of tomorrow; and

Whereas the Harvard Environmental Alumni Forum, held in Cambridge on October 21–24, 1999, again brought together Harvard Law School alumni, faculty, and students to mark progress toward the creation of an environmental law program, to call for further progress, and to celebrate establishment of an environmental law section within the Harvard Law

School Association to foster alumni interaction and long-term support for this program.

THEREFORE,

The undersigned members of the Harvard Law School community hereby adopt this Second Austin Hall Statement on Environmental Law at Harvard to reaffirm the original Austin Hall principles and to urge continued concrete, vigorous and forward-thinking efforts to develop an environmental law program that both furthers the University's broader efforts and establishes the Law School as a leading center for the advancement of environmental law and leadership.

The following principles must inform and guide these efforts:

I. HARVARD LAW SCHOOL SHOULD BE COMMENDED FOR TAKING NOTABLE PRELIMINARY STEPS TO CREATE AN ENVIRONMENTAL LAW PROGRAM.

In 1996, Dean Clark established the Environmental Working Group, composed of students, alumni, and members of the Faculty and Administration, to prepare a Strategic Plan for the environmental law program. In 1998, Dean Clark adopted the Working Group's recommendation to hire an Environmental Law Fellow, whose role is to concentrate full time on program development and to work with the Faculty to expand the Law School's environmental course offerings and accelerate the search for permanent environmental faculty. In light of the success of the Fellowship, Dean Clark recently agreed to fund the position at least through the summer of 2000. This position remains essential to continued progress on the program.

II. THE LAW SCHOOL SHOULD PROMPTLY COMPLETE, ADOPT, AND IMPLEMENT THE STRATEGIC PLAN FOR THE ENVIRONMENTAL LAW PROGRAM.

In accordance with the Dean's mandate, the Environmental Working Group is drafting a Strategic Plan for the Environmental Law Program. This strategic planning process must continue to receive the full support and input of the Dean, the Faculty, alumni, and students. In addition, the Law School must promptly develop the financial, intellectual, and programmatic resources necessary to implement this Strategic Plan and to establish the proposed program. In this regard, we particularly urge the

Law School to accelerate its appointment of a permanent core of faculty members to lead the environmental law program.

III. THE ENVIRONMENTAL LAW PROGRAM SHOULD RECOGNIZE AND TAKE ADVANTAGE OF THE INTERDISCIPLINARY NATURE OF THE FIELD.

To secure a more sustainable relationship between societies and their environments, lawyers must understand both human and natural systems. Thus, environmental law is an inherently interdisciplinary endeavor that must draw on the natural sciences, the social sciences, and the humanities. This dynamic interaction among disciplines strengthens the vitality of the field. Therefore, the Law School should continue to consult with the University Committee on Environment to design an environmental law program with strong ties to other departments throughout the University.

IV. THROUGH SCHOLARSHIP AND EDUCATION, THE ENVIRONMENTAL LAW PROGRAM SHOULD PREPARE STUDENTS TO SEEK INNOVATIVE SOLUTIONS TO CURRENT AND EMERGING ENVIRONMENTAL PROBLEMS.

At the new millennium, environmental law stands at a crossroads. Thirty years have passed since the dawn of the modern era of environmental law, when the United States enacted the National Environmental Policy Act and celebrated the first Earth Day. In only three decades, environmental law has developed into a robust and multi-branched discipline that tangibly affects the way people order their interactions with the natural world. Society is still, however, in the infancy of its ability to understand these interactions. Population growth, economic development, and human needs pose increasingly complex global challenges. There is an urgent need for new and continuing leadership to confront these challenges. Harvard Law School is uniquely capable of training its graduates, through education and scholarship, to meet this need. By doing so, the Law School will make, as it has throughout its history, a beneficial impact on the real world problems we face.

IN CONCLUSION, these guiding principles will ensure that the Harvard Law School environmental program fulfills its goals of promoting environmental legal education and scholarship and preparing future leaders to use the law creatively and intelligently in service of human and natural environments.