

**AN INTERVIEW WITH
WILLIAM K. REILLY**

by

Harold K. Steen

**September 21-22, 1994
Washington, D.C.**

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Forest History Society, Inc.

Durham, North Carolina

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Introduction

William Kane Reilly was born January 26, 1940, in Decatur, Illinois. He graduated from Yale University with a bachelor of arts degree in history (1962), a law degree from Harvard University (1965), and a masters degree in urban planning from Columbia University (1971). He was admitted to the bar in 1965 and practiced law briefly, then served two years in the U.S. Army.

In 1968 Bill Reilly moved to Washington, D.C., to be associate director of the Urban Policy Center, and since then he has remained active in the nation's capital. The interview that follows begins in substance in 1970 with his appointment to the Council on Environmental Quality, where he had principal responsibilities for land use, public lands, and urban growth. He left CEQ in 1972 to become executive director of the Task Force on Land Use and Urban Growth. Then in 1973 he was elected president of The Conservation Foundation; the Foundation would merge with World Wildlife Fund, and in 1985 he was elected president of WWF.

In February 1989, Reilly was unanimously confirmed as the seventh administrator of the Environmental Protection Agency. George Bush had promised to be the "environmental" president, and the tapping of Reilly at WWF for the top spot at EPA was an important part of fulfilling that promise. Not only was Reilly able to pick his own management team, but he enjoyed good access to the president. He travelled domestically and abroad with the president, was a guest at several White House dinners, and participated in several Camp David work sessions. This sort of high-profile relationship with the president was unprecedented for an EPA administrator, and Reilly asserts that it greatly enhanced his effectiveness.

Reilly tells us what it is like to be administrator of the Environmental Protection Agency. He describes the transition process between the Reagan and Bush administrations and then between those of Bush and Clinton. Many have advocated cabinet status for EPA, and we can read why it didn't happen under Bush. Presidential access, so important to the success of any government program, is described throughout. Regulation and enforcement are included, as are clean air, coastal pollution, oil spills, acid rain, and wetlands protection. Too, we learn about NAFTA and GATT, the Rio Summit, and other international issues.

The interview took place at World Wildlife headquarters in Washington, D.C., where Reilly retains an office. He and his staff had critiqued and strengthened the interview outline, and he patiently and in good humor participated in seven hours of taping over two days. He then reviewed the transcript and clarified certain points. The World Wildlife Fund and The Conservation Fund of Arlington, Virginia, provided financial support for this interview.

Background Years

Harold K. Steen: What is your background?

William K. Reilly: I was born in the Middle West, raised in Illinois and Texas, went to Catholic schools 'til I was thirteen, then to the largest public high school in Massachusetts. I chose to major in history at Yale. History was probably the subject that interested me more than anything else. I concentrated on European history, particularly European intellectual history, and I spent my junior year in France. That all became a central part of my interest and orientation, international. I have always been interested in languages, interested in history, interested in politics, too.

I considered going on in history when I got out of college. I was invited to take a Carnegie teaching fellowship, which involved teaching two classes as a tutor or section leader, and taking two graduate courses in history. The essential purpose of that was to figure out whether somebody wanted to go on as a professional historian. I thought I might want to do that.

In fact, given that I only had three years after I took my commission as a lieutenant in the Army Reserve, before I had to go into the active Army, there wasn't time to get a law degree and also take a year off and study history. So I chose to pursue a law degree and went on to Harvard, largely to keep options open. I wasn't so interested in being a lawyer. It was just something I thought would be a good, general purpose education.

Almost all of the EPA administrators, except one, have been lawyers. The only exception, I believe, was Lee Thomas. That accounts a little bit for the excessive legalism and legalistic orientation of some of our laws. On the other hand, our culture is highly legalistic, and lawyers are able to function in that world and understand it.

New York Senator Patrick Moynihan used to encourage us to think more in terms of getting scientists in EPA positions. Had we done that, I don't know that we would have anything different by way of emphasis or orientation. But most of my people at EPA also were lawyers, though not by design. I was a little surprised at how many turned out to be lawyers in the end. That tends to be the background of people who are active in public policy in this city on the environmental issue.

HKS: Essentially all of your career has been in Washington, D.C. So when you got through school and through the military, you came here to get a job?

WKR: No, when I finished law school I went to Chicago. I took the bar exam in Massachusetts and then headed straight to Illinois, took the bar exam in Illinois and began to practice with a large law firm in Chicago--Ross, Hardies. It was the most active firm in the city, possibly in the country, in land use planning, urban renewal, zoning issues, municipal counseling.

I spent seven or eight months there doing oil and gas rate regulation, and then had to go in the Army. My active duty obligation clicked in, and on January 3rd, 1966, having graduated the previous June from law school, I went in the Army. Reported to Fort Benning, Georgia, in the Infantry Officers' School.

I served in various places in the Army: Georgia, a little bit in Indiana, Maryland, and then was assigned to Germany as chief of support for U.S. Army counter-intelligence--Europe. Then I was sent to the German Army Language School in Oberammergau. I went back as the chief of support for an Army intelligence company that was covering the German, Czech, and East German borders.

I concluded my service and went to planning school at Columbia--three semesters there and one four-month period in Turkey on a regional planning project. At the end of that, I came to Washington, working at

a group called Urban America Incorporated, which was interested in city issues, urban development, civil rights, and the city beautiful movement. It merged not long after with the National Urban Coalition. I only spent a few months there and was invited to join the White House staff on the Council on Environmental Quality. From June 1969 it's been a Washington career.

HKS: Your history background made you interested in policy.

WKR: That's right.

HKS: So you're not surprised about how your life turned out in a generic sense.

WKR: In a sense, I'm not surprised, although it was not a career course I had selected. In fact, I had not thought of myself as being interested in the environment. I was interested in land use, and I was interested primarily in development-related issues, urban issues, in breaking up suburban exclusionary rules, such as large lot minimum sizes and exclusive zoning requirements. It wasn't a straight line in terms of my choice of career, but it's a consistent set of interests.

HKS: So Rachel Carson published *Silent Spring* in '62, the Wilderness Act passed in '64. Those things were not paramount in your plan?

WKR: No, they really weren't. In fact, I can still recall in 1969 being given a copy of *Design With Nature* by Ian McHarg, the landscape architect at the University of Pennsylvania. It was a book that posited the need to relate urban development, what we do in the built environment, to the natural systems that underlie it and the necessity to keep the natural systems healthy.

I had gone all the way through Harvard Law School, real estate courses, zoning courses, land use planning, and then Columbia planning school, and never encountered that insight. It was a new idea to me, and a very exciting one. But it was novel. It came relatively late in my student career.

Council on Environmental Quality

HKS: How did you find there was a job at CEQ? What's the process that was involved?

WKR: Well, John Ehrlichman, who was an important figure in the Nixon administration, had been a land use lawyer in Seattle. The Council on Environmental Quality wanted someone to write the new national land use policy act and relate to those issues at the Council. Ehrlichman turned to the senior partner at my old law firm, Dick Babcock, a Democrat who had been the manager of the Adlai Stevenson campaign in Illinois, and asked for advice. He recommended me. I had practiced with the firm for seven or eight months, and everyone expected I would go back there. They knew me and thought well of me, and I found myself suddenly being interviewed at the Council on Environmental Quality, for a job I did not seek out.

HKS: By Ehrlichman?

WKR: No, by Timothy Atkeson, the general counsel, and by Russell Train, the chairman. In fact, I said to Atkeson, "I don't know much about protecting land. I know about how to break down restrictions. That's my orientation." And he smiled a lawyer's somewhat knowing smile and said, "It's really just the other side of the same coin."

HKS: Sure.

WKR: And I said, "Well, I suppose it is."

HKS: Now you became officially interested in the environment, and that's been the centerline, so to speak, for the rest of your career.

WKR: Yes.

HKS: Are there things about CEQ you want to get on the record, as far as the background? Our primary interest is your role as administrator of EPA. But we don't want to restrict it to that.

WKR: CEQ was the cockpit of some of the most creative concepts and ideas at what I would say was the most exciting period conceptually in American environmental history, certainly modern American environmental history. There was an extraordinary team that Russell Train assembled there, and I was privileged to be part of that.

We proposed new legislation or executive orders in land use, coastal zone management, mining law reform, toxic substances, air and water quality. The gamut of issues. The World Heritage Trust was a proposal that came out of there, to register national monuments and parks and wild places. It was a tremendously exciting period.

I often thought of the advice of Senator Moynihan that all agencies should have sunshine clauses that would cause them to self-destruct after two years. This would capture, for all of its drawbacks, the most creative period in life of a typical new agency. And I was privileged to enjoy that at CEQ. It taught me about government at the very high level. It taught me about White House and Office of Management and Budget relations. It taught me about congressional-White House kinds of concerns.

I began to see the way in which policy was formulated once politics was factored in and constraints were acknowledged. It was a tremendously important formative experience. I also was able to learn from Russell Train, who became my effective mentor for that period and after.

HKS: How many senior people were at CEQ at that time?

WKR: I don't suppose there were more than ten or twelve. I think the staff was only sixty.

HKS: So you really saw what was going on.

WKR: Absolutely. I accompanied the chairman to testimony. I wrote many of his speeches. I worked on legislative issues. I had a very broad experience there.

HKS: Did you hope that Mr. Bush might ask you to be in CEQ as opposed to EPA?

WKR: No. By the time that Bush became president, CEQ was in eclipse. It was not the influential entity it once had been. The Council on Environmental Quality is only as influential as its chairman's relationship with the president will permit. It's a little bit like the National Security Council, but without the urgency of inter-agency cooperation that international events force upon the NSC and the White House. A president cannot afford to ignore coordination problems between the Defense and State Departments, for example. That's the primary function of NSC. Presidents do find it possible to ignore conflicts between Interior and EPA and the Agriculture Department.

So CEQ has a somewhat dependent, contingent value. It has never, in my view, risen to the level that it enjoyed in influence and effectiveness as in the early days of the Nixon administration. But that's partly a function of presidents who choose to initiate, be creative, propose new ideas, push the envelope. If that's what you want to do in the environmental policy arena, the CEQ is vital to you.

HKS: Might it be in part because Nixon was suspicious of bureaucracy and CEQ was his? And he might like that better than EPA?

WKR: CEQ preceded EPA a little bit, by nine or ten months. I think that Nixon had concluded that the environment mattered. He had noticed in 1968 the polls that indicated that the environment was among the top three concerns of the American people, along with the war in Vietnam and the economy.

He was stunned by that. That was unprecedented. And he said to Ehrlichman and Whittaker and Haldeman and the others, "Get out front on the environment." CEQ and the tremendous energy and push that we had from the White House responded to that. It responded also, frankly, to John Ehrlichman's strong concern for the environment and to a very important working relationship with Senator Jackson, and to a lesser extent Senator Muskie. Jackson was important to the administration for other issues, foreign policy and defense-related issues, which of course mattered more to Nixon than environmental issues. All that came together at that time, along with a high public profile for the environment, to work to CEQ's advantage. In the House of Representatives John Dingell at Merchant Marine and Fisheries and Paul Rogers at the Subcommittee on Public Health also were important and helpful during CEQ's startup phase.

HKS: I'm reading Haldeman's diary.

WKR: I've not read it.

HKS: I'm up to 1972, and he quotes Nixon as saying, "The environment is not important. It's the Democrats' issue." Now, has he soured?

WKR: By '72?

HKS: By '72.

WKR: I think it's possible. We all saw Nixon lose his interest in the environment as it began to affect and interfere with some things he really cared about. I believe he did not expect that the environment would be used to defeat the supersonic transport. It was. And I think he thought that was a mistake. He supported the SST.

His administration proposed a nuclear test in Amchitka, an island in the Aleutians. The Council on Environmental Quality was asked whether an environmental impact statement would have to be done on that blast. As I recall, we said that it would. Important figures in Congress were concerned about the blast, concerned about what the environmental effects might be. Well, some of CEQ's analysis was classified. I can still recall Gordon MacDonald, a scientist and a member of the Council on Environmental Quality, wrote a long memorandum, most of which was blacked out. But one sentence which was retained included the very revealing and provocative phrase to the effect that, "Pacific Islands including Hawaii should be sure to activate their tsunami warning system."

Well, I think that Nixon decided at that point that "these people are not just play-acting. They're not just operating in their own sandbox. They're getting into things that really matter to me and to important national security affairs in government." He also, I believe, decided that the environmentalists looked a lot like the people who were protesting the war and smoking dope and, as he saw it, undermining the culture and the values of the country. He thought they were part of the group that was tearing down America. I believe at that point he began to turn against them.

He doesn't mention the environment in his memoirs, even though *The New York Times* columnist, Tom Wicker, has said in his recent book that Nixon's was probably the most creative period of modern achievement in domestic affairs, and he particularly mentions Nixon's environmental achievements. Nixon apparently didn't see it that way when he wrote his memoirs.

HKS: I would think it would not be hard to argue that Nixon did more for the environment except for perhaps Teddy Roosevelt. It's different times. You really can't measure objectively.

WKR: I met Nixon a few years ago at the Plaza Hotel in New York. He looked at me and said, "I know you. I see you on television." He said, "You know, I'm an environmentalist. I founded EPA. You got to keep it out of the hands of the nuts, though."

HKS: [chuckling]

WKR: "That thing in California, Big Green. That's the purview of the nuts," Nixon said.

HKS: Did you work with John Whittaker and the Domestic Council?

WKR: Yes, I did.

HKS: The Domestic Council. Does that still exist?

WKR: I don't know if it is in this administration. They have something called the National Economic Council in this administration, NEC, which is very important. Robert Rubin is director. The Domestic Policy Council in Nixon's administration was very important. In fact, one of my first jobs at CEQ was to review a series of water projects to see which ones might be canceled on environmental grounds for Earth Day, the first Earth Day in 1970.

I joined the Council right around the first of April, and the first Earth Day was around April 20th. I can still recall sitting down at the White House with a couple of White House staff people and going over a list of projects I had proposed be canceled. And one of them was the California Water Project, the peripheral canal. That's where I got my education in what's politically realistic and doable. Someone looked at me and said, "You mean this is the project that furnishes water from the north of California to all of those Republican voters in Orange County? And you want us to cancel it? What else you got?" [laughter]

Anyway, I talked about the cross-Florida barge canal and the Rappahannock Dam project. We did in fact cancel a number of them. The president was looking for five hundred million dollars in additional budget monies that he could save from those projects and channel into southern school desegregation at the time. He was going to make the fund cancellations on environmental grounds.

HKS: Was Whittaker the primary conduit to the White House?

WKR: Yes. He was the president's environmental staff person.

HKS: I'm interested in the flow of policy. Obviously, the president has a lot on his plate. How the information gets to the president, how he reacts, how much time any president could spend on something like the cross-Florida canal, the jet port, or whatever. Do you have any sense of that?

WKR: I think the president's time on environmental matters in that administration was fairly limited. I can recall that as we began to look through these various projects, one of them was the cross-Florida barge canal. A note appeared on one of our pieces of paper, "The president has made a personal commitment to the senatorial candidate in Florida not to veto the cross-Florida barge canal but rather to support it." We had no immediate, efficient way to ascertain the truth of that at the time. I think we let it go for a while, but we finally did persuade the president and the administration to cancel it after the senate candidate Carswell had lost his election.

Russell Train, as chairman of the Council on Environmental Quality, went some thirteen or fourteen months, I believe, without a direct meeting with President Nixon. That was a well-kept secret by his staff because of course access is power in Washington. But I don't think that Nixon was making himself very available on those decisions.

I believe that he was more available to Ruckelshaus, and of course EPA has more direct action issues, and you're going to have to get in more. But I know Ruckelshaus spoke to him about the trans-Alaska pipeline and about other issues, so he was seeing him perhaps more than Russell Train was.

I think in our own administration George Bush created a probably unprecedented liberal access policy on the environment and spent more time on high-level environmental issues, such as the preparation for the Rio Conference, or the issues involved with climate change or the Clean Air Act, than probably any president in recent history.

HKS: I want to go into those things in detail. Is the task force on land use still formulating your attitude on how one deals with the environment?

WKR: The task force under Laurance S. Rockefeller back in '72? The task force on land use and urban growth [reaching for document] produced a very important report. It went through three printings, and fifty thousand copies were sold. As I look back on it [thumbing through document], it changed our way of thinking about the land, and it certainly altered the concept of what was possible and desirable in the minds of a great many people, largely conservative people.

This report was certainly progressive, envelope-pushing, innovative. It recommended a new interpretation of the Constitution with respect to the regulation of private property by government. It recommended the adoption of the Brandeis position, a minority position, in the Pennsylvania coal case. He essentially said that where you do not destroy the economic value of land, the government ought to be free to inhibit certain uses of it without restraint.

That perhaps doesn't sound much like a revolutionary idea until you look at the membership of the task force and see that it had the chief economist of the Bank of America, and it had the most prominent urban developer in the country, and it had the mayor of Boston, and a number of very--the mayor of San Diego--very influential and relatively conservative people. These are people who had grappled with these problems and thought this was a reasonable accommodation of our constitutional prescriptions and our political realities.

I recently used the report to write a speech and was struck by how much was, in my view, still relevant.

HKS: Did you observe it being cited in footnotes?

WKR: It has been extensively cited, and it served to influence the design of the Coastal Zone Management Act. That act draws on the American Land Institute's Model Land Development Code to develop a new concept of areas of critical environmental concern and development of regional benefit. Originally, the National Land Use Policy Act would have applied that approach to the whole country, but finally only the Coastal Zone Act incorporated it. That came right out of this report, it was one of the publicized recommendations from it. The report did advance our legislative agenda. The report also influenced several key court cases, I believe.

HKS: I didn't ask you why you left CEQ.

WKR: There were two reasons, I guess, for my leaving. One which I think everybody knows about is that I was invited to join the task force on land use and urban growth and to be the executive director of that group under the chairmanship of Laurance S. Rockefeller. It was a task force of the president's Citizens

Committee on Environmental Quality, which Laurance also chaired. I also had just been offered the job of principal issue speech writer to President Nixon for his campaign.

HKS: Ah.

WKR: I didn't want to do that.

HKS: [laughing]

WKR: I can recall the individual, John Clark at the White House, who offered this to me, saying to me, I thought in a somewhat intimidating way as I was leaving his office and expressing his disappointment that I had declined the position. He said, "Well, I want you to go talk to the people who recommended you for this job, Leonard Garment and Ray Price, and remember one thing: when the president blows the trumpet, the loyal troops get behind and they march."

And I thought that that campaign period was not likely to be a terribly productive period at the Council on Environmental Quality, and that it was a good time for me to take a leave of absence to do something else. So I spent the next year developing the report on the use of land.

The Conservation Foundation

HKS: The Conservation Foundation, I suppose Russ Train was involved in that.

WKR: Actually, he wasn't. He was surprised when I was offered that position. He probably thought that I was a bit young for it. I remember that he encouraged me to take it when I had been offered it. I asked him what he thought, and he said, "To be offered that at your age, thirty-three, you cannot turn it down." And I didn't.

No, I think that certainly I came to the attention of Laurance S. Rockefeller and people around him and people on that task force and got a lot of nice press. Laurance, however, was also not supportive of my going to The Conservation Foundation. He invited me to head the national program of the Rockefeller Brothers Fund and was very disappointed that I chose not to do that. I think he wanted me to be available to work for Nelson Rockefeller when Nelson made his anticipated run for the presidency later.

I remember he said to me at one point, "People take these jobs, and they just think the funding is going to come automatically. If I were you, I'd want to make pretty certain that there is going to be money to support this organization." I took that as somewhat of a warning that it might not come from him, and he had been a supporter of The Conservation Foundation. In fact, in my first few years there, he was not a significant supporter, nor was the Rockefeller Brothers Fund. But I was chosen by the CF board and took the job at a young age.

HKS: It's an elective office, literally.

WKR: Elected by the board of trustees, yes.

HKS: But there were other candidates. You were in competition.

WKR: Yes, I was. I was in competition, I know, with Russell Peterson, who was then the governor of Delaware and was considered. They were also interested in a man who is now the president's science advisor, Jack Gibbons, who went on to the Congressional Office of Technology Assessment. Back in 1973 he was a physicist from Oak Ridge, Tennessee.

They did have a list of candidates. Tim Atkeson, my old boss, the lawyer at the Council on Environmental Quality, was also a candidate for the presidency of CF.

HKS: Do you go for an interview, and the search committee or whatever listens?

WKR: That's right. Yes.

HKS: I read somewhere that you succeeded Sidney Howe who was in this book described as a social justice advocate. The implication was that it was a little bit too far afield for The Conservation Foundation. Is that a fair assessment?

WKR: Sid I think antagonized some of the associates of Richard Mellon Scaife, Pittsburgh financial supporters of The Conservation Foundation. But so did I. My association with *The Use of Land* so upset them that they withdrew all support in my first year. That was a consequence of my being chosen. They were a hundred thousand dollar annual donors. That was a lot of money in those days.

HKS: Sure.

WKR: And it was just not money we could have held, I suspect. I think that problems that the board may have had were otherwise. The financial situation was terrible. I wasn't smart enough to be able to read the books and figure it all out when I got there. I think I was there eight or nine months before I really figured out that the more money I raised for restricted projects, the more quickly we were going into the hole. The reason for that was we didn't understand indirect costs. We were failing to assess projects enough to support the full operational load.

HKS: Sure.

WKR: I ended up my second year there with thirty-four thousand dollars in the bank. Six months before the end of the fiscal year we were seriously in the red. It was a close call.

HKS: Of a total budget of how much?

WKR: Well, the budget probably was about a million five in those days. And we ended up having to get rid of a number of people, twenty-six people, as I recall, in my first year or so. It turned out to be good discipline for the institution, but it was a bit of a bloodletting at the time.

It taught me a lot about taking the disciplines of management and accounting seriously. There were serious financial and management issues there at that time, and I think nobody realized the perilous condition of the organization.

HKS: This may not be in your mind the proper sequence, but I've always been fascinated by Bosselman's book, *The Takings Issue*.

WKR: It's an excellent book.

HKS: Because you certainly hear about that now.

WKR: I commissioned it, you know, when I was at the Council on Environmental Quality working under Boyd Gibbons. I then left to join the Task Force and, subsequently, The Conservation Foundation.

HKS: Oh, is that right?

WKR: Yes.

HKS: Somehow I thought that was a Conservation Foundation book. I mean, it came up in the chronology. You were at Conservation Foundation, working with Bosselman.

WKR: Yes, that's right. But when I got to the Council on Environmental Quality in early 1970, I brought in my old law firm--and Fred Bosselman had been a colleague at that law firm, Ross, Hardies--to do a report called *The Quiet Revolution in Land Use Control*, which analyzed a number of states' innovative approaches to land use policy. And he followed that up with a book, *The Takings Issue*. Both were CEQ-sponsored.

It expanded, essentially, on the chapter in *The Use of Land* on the takings issue, which Bosselman had also drafted. He had been my consultant for that piece of the work, and it was in my view a very professional, very academically sound approach to the issue. It got a great deal of publicity at the time, and I think it's been very influential. It was used against me in my EPA senate confirmation hearing by Idaho Senator Steve Symms.

HKS: There was a fairly recent case. I think it was in South Carolina.

WKR: Oh, the issue has never really been resolved, the balance never definitively struck by the courts.

HKS: The concept of takings. Is this a conservative viewpoint? Can you label it that way?

WKR: Yes. You can say that certainly the wise use movement and the people who cluster around it tend to regard any restrictions on land use with a great deal of suspicion and concern. They tend not to understand that zoning is itself an agreed-upon set of restrictions on land use, designed to protect property values. In other words, these restrictions are entered into for conservative reasons.

Zoning in New York in the teens evolved to prevent the expansion of the garment trade and the garment industries into residential areas. Nevertheless, now we're confronted by great suspicion of any restrictions that are imposed on land for purposes of environmental protection, historic preservation, wetlands, conservation, and things of the like.

HKS: I read that you were invited to but you didn't bring The Conservation Foundation to what was called the Group of Ten. Was that a problem for The Conservation Foundation that you weren't a part of that, or was that good for The Conservation Foundation?

WKR: Oh, I always thought that our distinctive niche was to be apart from the pack. We were probably more analytic, more moderate, perhaps some would say more conservative than most of the environmental organizations. The consequence of getting involved in these group affairs is that you're presented with letters that everybody is encouraged to sign, joint positions that people are asked to take. If you run a research organization, I think it's good policy to confine your positions to issues on which you've done your homework. That was my view.

I recall once getting a telephone call from a group that was opposed to recycling requirements for bottles. I guess it was the deposit requirements for bottles. I said that we had not done any research on that issue and didn't have a position, and the individual who was representing a trade association let me know it might be worth our while financially if we did have a position. I said, "My advice to you, fellow, is to leave well enough alone. We might look into it and decide it's a great idea, too. I'll tell you and I'll tell anybody else, we haven't researched this issue. It's not something we've done our homework on. Therefore, we don't have a position."

HKS: I see.

WKR: That was my attitude, to maintain the reputation and integrity of the operation.

HKS: You often insisted that you're not an environmentalist.

WKR: That was my habit, going to EPA. I gave up on it, frankly, because everybody in the press referred to me as an environmentalist, and certainly Bush referred to himself as an environmentalist, so I thought well, it wasn't worth it. But prior to that, I had avoided the name because it had a certain connotation to a lot of people as being negative, anti-growth, anti-developmental, anti-industry, anti-technology. A whole range of associations that I just didn't think applied to me.

HKS: You were quoted as saying--I thought this was during your Conservation Foundation years--that you saw that environmental concern was entering the public's core values.

WKR: Yes.

HKS: That's pretty soon, in the early '70s or mid-'70s.

WKR: I don't know if historically pollsters would agree with that. Bob Teeter, who was President Bush's chief pollster, commented that the environment certainly was in the core values by the mid-1980s. My basis for believing it got there earlier was the astonishing persistence of high-level support for maintaining or even strengthening the Clean Air and Clean Water acts, throughout the 1970s, even in the face of oil shocks, inflation, recessions, and tremendous backlashes against those costly statutes.

Eighty percent of the electorate, throughout that entire period, stayed with those laws. There are very few laws where you get four out of five voters saying we think these things ought to be maintained or even strengthened, particularly laws that create all of the difficulty and cost, expense, delay, inconvenience that those laws entail. That's why I believe that something fundamental had changed in the late '60s, early '70s, and that it wasn't about to reverse.

HKS: The Conservation Foundation conducted a business-environment dialogue on wetlands and groundwater. I'm not sure how you characterize who business is, CEOs or the trade associations. Do they usually agree to enter into such dialogues, or do they figure they have nothing to win?

WKR: Business under certain circumstances has been quite prepared to enter those dialogues. I think they have done a calculation that essentially concluded, made a judgment, about whether the laws that they might have problems with or the costs associated with them were permanent features of the landscape or could be disenacted.

In the case of the Toxic Substances Control Act or some of the other controversial issues of the day, where we had dialogue projects, I think they judged that they were going to have to deal with these things, and they could make them function more effectively, more cost-effectively and efficiently, if they were allowed to help design the regulations.

I, frankly, agree with that. I think their having been left out of the early design of some of these statutes made for unrealistic provisions, milestones, and requirements. However, they chose to leave themselves out. They chose to fight so hard they had no credibility.

In the early Reagan administration, one company withdrew from a dialogue project of The Conservation Foundation, saying to us, "We no longer need to have dialogue projects. Our people are running EPA now. They're going to deregulate all of this stuff." Well, within two years, they learned how reliable that kind of calculation was.

And then I think the more sophisticated leaders of major companies confronted environmental problems, made their peace, recognized that they had to operate in a different way. The public has new expectations of them, and to the extent that they accommodate those expectations, they'll do better economically, better financially. They'll get permits. They'll be rewarded with more public esteem and credit.

HKS: There are other, in my mind, similar programs, like American Forestry Association's Area of Agreement Committee.

WKR: Yes.

HKS: Natural Resources Council of America. They work a little bit differently. Different casts of characters? Or was there overlap in these dialogues?

WKR: I think ours were the first, back in 1974, that started on these. We had one on toxic substances control. There was another one on strip mining, as I recall, and energy that the president of the Sierra Club was co-head of, along with a Dow Chemical official.

People tended to move among the different dialogue groups, depending on their areas of expertise, interests. And some groups were more wary and reluctant to participate than others. But we gradually legitimized the concept of sitting down and negotiating with the enemy, so to speak, to serve common values.

I can remember one good forest example--it did not work, in fact--to try to deal with road-building in the national forests. The industry, of course, has to build the roads on the concessions it gets. They cost money. The wider they are, the more money they cost. Environmentalists don't like to see roads built at all in many areas, but if they're going to be built, they want them built as narrowly as possible to not foster excessive clearing or access for tourism.

So both groups had a common interest. The Sierra Club and major timber companies came to an agreement that we should not use federal highway transportation designs and standards for these forest access service roads. The Forest Service wanted nothing to do with the proposals. They calculated that a collaboration between the two warring groups that they had formerly played off one against another was a big threat to them. Congress was too ready to embrace joint proposals from industry and environmentalists. And the Forest Service managed to frustrate the concept. It was a good lesson to us.

HKS: I worked for the Forest Service in the early '60s, and roads are the name of the game, especially out west, where they wanted road systems in. It was a part of their long-range plans.

WKR: Yes.

HKS: I'm not surprised that the Forest Service--

WKR: Has committed to those roads.

HKS: That's right. I remember in 1978, the Natural Resources Council of America had on its agenda something about liberalizing green cards for Chicano labor in California. I mean, do some of these groups kind of stray away from what we might consider conservation issues, or do you--

WKR: I never did. We never did. I think that's a little bit risky. Greenpeace strongly opposed the war in Kuwait and the U.S. intervention there, and that is now associated, in retrospect, with a major falloff of thousands in membership of Greenpeace. It's not obviously an area of environmental expertise. It ran counter to the patriotic impulse of most of the public, and I suspect a lot of people couldn't understand why

Greenpeace was out front on that. It's wiser to just stick to your thing in the environmental field. There's plenty of controversy even if you confine your activities to the environment.

HKS: The major environmental groups are membership organizations, and they're tugged and pulled by their membership, the crisis of the week. But The Conservation Foundation didn't have membership. Is that one of the differences?

WKR: The Conservation Foundation didn't have a membership, and its founders and board were quite clear that it should not. They did not wish it. Perhaps they had an excessively exalted notion of its function and independence, but they did not wish it to be subject to the vagaries of current popular concern. They wished it to take a longer-term view of the relationship between resources and people.

World Wildlife Fund

HKS: I'd like to move on to World Wildlife Fund. The two organizations merged, and The Conservation Foundation lost its identity.

WKR: We affiliated in my time, and the groups fully merged after I left for reasons of financial convenience. The vice president for finance and administration, Paige MacDonald, always wanted to put the two organizations together completely. I did not, frankly, think that a good idea. I liked the idea of two separate and distinct entities, with their different focus, staffs, orientation, and subject expertise.

It is a little bit messy to administer two distinct groups, to have two 501(c)(3)s, different financial statements, reporting requirements, annual reports, and the rest, in the same house. And for reasons of convenience, they were finally put together. You see at the bottom of WWF stationery now a statement that WWF includes the former Conservation Foundation.

HKS: Did the work of The Conservation Foundation ever get lost in the shuffle? World Wildlife is the one that survived.

WKR: There are still things going on that are done by former CF staffers here, such as the work on estrogen-like receptors and hormone-inducing chemicals. Work on Russia and the Great Lakes. There are still things here that are policy-relevant and are appropriate to The Conservation Foundation, but probably, honestly, less and less.

HKS: You wrote about the World Wildlife Fund--its flagship program is Wild Lands and Human Needs.

WKR: Yes, one of the flagship programs.

HKS: Talk about that. What does that mean?

WKR: Well, historically we approached species, back in the '60s and early '70s, one by one. We had the year of the tiger, or the cause of the rhino, or the plight of the elephant, or the panda. We tended to do that without regard to context. Gradually, an awareness grew that the problem isn't the elephant or the rhino. It's the habitat that's being destroyed, the environment for the animal is disappearing. So conservationists would do best to pay attention not just to species but to a whole web of animal and plant relationships necessary to keep the species in being, especially one that requires a large amount of territory, as the so-called charismatic megafauna do.

We then began to understand that we should emphasize parks, and there was a whole period in the latter '70s, early '80s, which was taken up with building new parks, defining parks, conducting surveys, doing analyses of the soils and of plants and wildlife characteristics, supporting anti-poaching activities, etc.

However, in many countries, most colonial countries in Africa and developing countries in Asia and Latin America, irrespective of the fact that there were boundaries on a map that delineated a park, the governments, which were strapped and poor, could not hire agents to protect the parks. People began to invade parks. To mine the gold in Corcovado National Park in Costa Rica, or to take timber from Manu in Peru. Manu is one of the greatest parks in the world. In terms of bird species, there's no park anywhere that has more. It doesn't have a single ranger assigned to it.

Gradually, wildlife experts began to realize that punching holes in a map, putting fences around places, doesn't do it. It isn't sufficient. You've got to pay attention to the social and economic context in which these properties lie if they're to have any long-term future. And you have to make them work in the eyes of local people.

It has been a matter of great controversy that Anapurna and some of the parks in Nepal, for example, excluded locals. People who had formerly gathered firewood were no longer allowed to. People who had formerly hunted were excluded. This doesn't win you a lot of friends in the local culture. The Masai Mara in Kenya are similarly concerned, anxious about the consequences of establishing a park in their former cattle-grazing lands. You simply have to take into account these realities and recognize that the long-term future of conservation depends on satisfying economic expectations of local people. That was the essence, the wisdom behind the Wild Lands and Human Needs project.

HKS: When they created the Shenandoah Park during the New Deal, we bought up the private lands, tore their houses down, moved the people out. Do you think that was part of the influence in Africa? A national park needs to have no one in it?

WKR: Yes. I think we started with a concept that was very peculiar to the United States. In fact, I'm not aware of any other park system in the world that tends to define itself so purely as American parks. We do permit grazing in some of our parks, but we don't permit much else. We do tend to have a concept which is moving more and more not toward wilderness, because we do have highways and that sort of thing, but certainly toward the protection end of the spectrum.

That's just not realistic where you have settled populations, ancient cultures, and functioning economies. You cannot always move people out of parks. You've got to find a way to protect the values that make an area worthy of park designation at the same time as you make sure that the population's economic expectations and needs are recognized realistically. Ultimately, they will win out.

HKS: I was in a conference in Australia in 1988 that dealt with the environmental history of Southeast Asia. And one of the papers was about Indonesia. He was a European talking about Indonesia, and he really took off after the World Wildlife Fund and Prince Philip in particular as the bad guys. This is the first I had heard of that. You heard similar things at the time--

WKR: Sure.

HKS: That you cared more about pandas than you did about the people. That's what we're talking about on this Wild Lands and Human Needs?

WKR: That we cared about the people, at least as much. You can push that too far. I can recall one time having a group to my house that included a number of high-level officials, including the interior minister from Madagascar. There was some concern raised about the excessive interest Americans seem to have in lemurs and in some of the species of trees and plants in Madagascar.

It fell to me to say, "I fully understand and sympathize with the poverty and the developmental aspirations that you have in Madagascar. However, you must recognize as a simple, indisputable fact, that many parts of the world have those problems. But Americans tend to be highly interested in Madagascar for its unique flora and fauna. You can turn that to your advantage and try to promote ecotourism and conserve these species which attract money, or you can disregard it, in which case Americans will not feel they have any reason to go to your country."

It seems to me you have to grant the interests that cause a donor to distinguish one country, one place from another and to favor it with his or her gifts. So, to the West, places which harbor elephants and pandas and gorillas are of great interest. That sometimes bothers people in the developing world. However, I think the more thoughtful of them now recognize that if that's why money is coming into their country, why hard currencies are available to them, they should find ways to make sure their local people enjoy the benefits of those expenditures and investments--rather than simply to fight them, or to destroy the goose that could lay a golden egg.

HKS: So population growth, the Paul Ehrlich type of stuff. Is that a core interest of World Wildlife Fund?

WKR: It's a relevant interest, and World Wildlife Fund is becoming more involved in population, but not as a central proposition. WWF does not go out looking for groups to give population assistance to, or technical advice. When an indigenous non-governmental organization that it cooperates with, a conservation organization, expresses an interest also in population control, then World Wildlife Fund is happy to facilitate connections, advice, other groups getting involved, or even helping finance some kind of population assistance. But it's not a central thrust.

HKS: World Wildlife Fund is what? It's primarily concerned with the tropics? I don't recall too many seals on your calendars.

WKR: Well, it does deal with seals and marine mammals. But it mostly deals with endangered species, and its orientation is toward biological diversity. The maximum concentration of flora and fauna is in the tropics. Something like 6 percent of the land surface of the Earth is in the tropical forest. And 50 percent of the flora and fauna are thought to be there. So there's a wholly disproportionate richness of things natural in those areas.

HKS: How do you work with Greenpeace?

WKR: Greenpeace and World Wildlife Fund have worked very well together on whale conservation and recently achieved a great success by getting the International Whaling Commission to declare a large area in the Antarctic off limits to whaling. I can't think of too many other issues on which the two organizations have cooperated.

Greenpeace can be a difficult partner for World Wildlife Fund because they break the law. They engage in civil disobedience, stop up factories' outfalls or smokestacks, invade properties to make a point, things that World Wildlife Fund would not do and has to maintain its distance from. On certain issues where our policy interests coincide, however, World Wildlife Fund has worked with Greenpeace and done so quite effectively.

HKS: What's the primary budget outlay for World Wildlife? Research?

WKR: Its primary outlay is grants and support for non-governmental organizations working in the developing world to train officials, to pay them to do anti-poaching work, to educate the public in the values of parks and conservation. In some cases, more limited cases, to buy land. But I think mostly working through non-governmental groups to increase the capacity of local indigenous organizations to protect their environment.

HKS: I was looking at your newsletter, and it had a list of grants. I don't know if they were all the grants or just a sampling, but one was ten thousand dollars to Malawi for improvement in bee keeping. So that's a grant to the local bee keepers in Malawi?

WKR: It would be to a group probably that is looking for an economic return from an area without destroying the plants and trees, and bee keeping has been one of those economic activities in the Wild Lands and Human Needs program that functions that way.

It's interesting to me that in California bees have to be brought in to pollinate a lot of fruit. There just aren't enough around.

HKS: Sustainable development. There's a debate in the circles I run in, whether or not that's a new term, because foresters have had sustained yield since the nineteenth century. Is that the same philosophically, or is there a whole layer of new thought?

WKR: In concept, I think it is the same. It simply is applied to a vast array of economic activities, whereas sustained yield historically applied only to extraction of timber from the forest. It's the same idea. The notion is that you want a bank account that you're relying on only for interest, not principal. To the extent that you are taking out what can be grown for you annually, you are not depleting your capital, and that's fine. To the extent that you do deplete your capital, you're impairing the ability of future generations to get the same kind of sustenance from that resource.

HKS: I went to dinner with Marion Clawson last night, who sends his regards to you. Another guest was a British geographer from London College, who is here in Washington attending a World Bank conference on sustainable development of urban areas. Is this a universal term that applies to all of human activity now? You're an old urban planner. Does that concept fit? Sustainable development?

WKR: Of urban areas?

HKS: Of urban areas. He said there's nine hundred people in the auditorium down at the National Academy of Sciences.

WKR: I'd love to hear the concept explained. I don't know what it means. I tend to think of it as a natural resource kind of concept that's applied to a renewable natural resource, such as timber, or such as the whole collection of uses we make of farms and forests for food and fiber. I don't know how you would apply that concept to a sustainable urban area, unless to say you will not impair the natural systems to the extent that they begin to create pathologies or disease or make it impossible to use the air and the water. I frankly don't know enough about it.

HKS: My first thought was that it's like everyone's an environmentalist.

WKR: Run it into the ground.

HKS: Just plug it in.

WKR: Could be.

HKS: I'd like to get a couple of samples of the kinds of conservation projects that you had at World Wildlife. One of your staff here went over the draft outline I sent and wrote in "ivory trade." Was this a major issue?

WKR: Yes, it was. We had a long-standing concern with the tendency of poachers, particularly in east Africa, in Kenya and Tanzania, to deplete the elephant herds there, in order to get their ivory. This was really proceeding on a basis that would have resulted finally in the extermination of the species in those areas.

I used to propose from time to time that we try to get the ivory trade banned. Experts in African elephant conservation were against that because they said the one value that the elephant has to many African countries is for the ivory. If you eliminate the ivory trade, you eliminate the willingness to put up with all of the destruction that elephants cause. And it is considerable. My father would not permit it on his Illinois farm very long, I can tell you. You may have seen areas after elephants have gone through. They wreak a lot of damage.

We listened to those concerns but finally became persuaded that the poaching was so out of control, that trade was so unmanaged, that we had to take extreme action. Before I left WWF, I made the rounds of African countries. I can recall talking to Environment Minister Chitepo in Zimbabwe and explained to her that the United States was likely to ban ivory imports if poaching didn't come under control. She said to me, with some feeling, that there were more elephants in Zimbabwe than they could manage, that they were doing a very good job at elephant conservation. They had to cull their herds, and the ivory sales supported conservation in the country. That was true in Zambia, South Africa, and Botswana, too. She said, "It would be outrageous and counter to our conservation interests to ban the ivory trade."

Well, that's exactly what my professionals on elephant conservation said. She said, "We don't have a problem. Botswana, South Africa, Zambia don't have problems. The problems are up in east Africa." I said, "But we can't distinguish between the ivory. So why don't you African leaders take it upon yourselves to influence the governments of Kenya and Tanzania to get them to crack down on poaching?"

She was dismissive of that idea, and seemed contemptuous of the governments' policies and problems in Tanzania and Kenya at the time. Not long after I went into government, and I had more than a little to do with this, I encouraged President Bush to ban imports of ivory in the United States. Shortly thereafter, the European Community followed, and that has been a very effective policy at stopping the poaching, at reining it in in east Africa.

Healthy herds are coming back very nicely there. They're proliferating again. Honestly, over the long return, I suspect that there will have to be some culling of elephants, and probably ivory ought to be marketed from those elephants in those countries where the herds are sustained. We haven't come to that point yet, but I believe we probably will. If we do not, I fear that some African countries, at least, will act to really reduce their elephant herds and protect their farmers against any further depredations, as they just don't see the advantages.

HKS: Are there other animals that are threatened or endangered that pose a threat to human population?

WKR: I don't believe that--

HKS: The tigers aren't killing that many people someplace.

WKR: No, they're not. There are some conflicts when people migrate and encroach onto traditional wilderness or tiger habitat so that the tigers suddenly find in their scope among the subjects they prey upon, human beings. Habitat shrinkage always leads to conflicts around the edges but the dynamic typically at work is human incursion into areas animals have come to think of as their turf.

Rhino conservation is very seriously compromised by the search for the rhino horn. An experiment was tried not long ago of cutting off the horn, on the assumption that that would lead to a reduction in killing. It didn't work. Poachers concluded long tracking of a rhino that turned out to have been dehorned by killing it to ensure they didn't repeat another fruitless hunt.

HKS: Can there be solutions with anything other than local? It has to be part of their culture, in a sense, in order for it to work?

WKR: It's certainly possible on the international level, but even for the national level, you have to get a buy-in. You have to get local support. That's one reason you have to accommodate economic interests. Those tend to be the driving anxieties and concerns and interests modern men and women have.

HKS: I was at a conference in Costa Rica. There was a debate in terms of the Costa Ricans: Was it better to have their tropical woods on the international market or the local market? For the local market, they cut these beautiful trees down and made fruit boxes out of them.

WKR: And they burn a lot of the trees.

HKS: By having the international market, they had a real value and could get involved in the economy and improve their livelihood. They have money, so they can pay their taxes. But it put pressure on the logging operation.

WKR: Ninety percent of the hardwoods, the trees in Central America that are cut down, are burned. They're not even harvested. A researcher on The Conservation Foundation staff once said that the best thing you could do for preservation of forests in Central America would be to create a serious timber industry there, with roads, with trucks, with sawmills, and with export possibilities. As you did that, you would begin to see, for the first time, a longer-term interest in sustaining production and development of the resource. That, of course, was anathema to a good many conservationists, but in fact I suspect it may be true.

No conservation organization could establish a timber industry in a place where it hadn't been. But it's a good insight. In effect, it makes the point concretely that I made a little while ago, that the best conservation is very often thoughtful development.

HKS: Sure. Are there other issues that World Wildlife participated in when you were there that to you was a learning experience?

WKR: Yes, indeed. It certainly taught me a lot about the intersection of economics and conservation, and of the fundamental constraints of African governments and their budgets and their dependency on deriving economic benefits in order to be able to sustain conservation. Nor is that insight confined to Africa.

Administrator, EPA

HKS: Let's get you into EPA. You were told that you were going to be recommended to the president, and he's going to be hard to turn down.

WKR: Yes.

HKS: Would you talk about that a little bit? What it's like. We civilians can't quite imagine the dynamics of getting a phone call and sitting down with the man.

WKR: Well, I had some warning. I knew that Bill Ruckelshaus was going to recommend me as administrator of EPA. He talked to me the day after the election and asked if I wanted to serve in the new administration as Interior secretary or EPA administrator. I remember I said, "No, I don't." I wanted to complete this affiliation, the merger of WWF and CF.

He said, "Well, you know, you've had a long-standing interest in these issues, and if you really want to affect them, you can hardly do better than to run one of these agencies." He said, "Would you at least agree not to turn the offer down until you get in front of the president, himself? Don't tell his associates or representatives that you're going to say no." Bush, Ruckelshaus said, doesn't often get to talk to conservationists.

So I agreed with Ruckelshaus to do that, and I think he suspected that once in front of the president I would not say no to him. And I didn't. As Russell Train put it to me, "I don't know how, given the career that you have had, and no matter how you think it's going to turn out if you go to EPA, how you can decline it, the offer to take on those responsibilities." I came to the same conclusion.

HKS: Why was EPA obvious as opposed to CEQ or to be secretary of the interior? What's it about EPA that made them think of you?

WKR: When I sat down with Bob Teeter, the co-chairman of the president-elect's transition team, he said, "We're going to tilt one way at Interior and another way at EPA." They had already decided that Interior would have somebody who was a westerner, who was considered sympathetic to the development concerns of western Republicans, and would play well with western senators.

At EPA they wanted to make good on their commitment, the president's commitment, to be the environmental president. They wanted to have somebody who would be received well by the environmental community and to be seen as a movement in an unexpected direction for the successor to Ronald Reagan, for the man who had served as his vice president.

I represented that kind of choice. I think that President Bush had also understood, based on what he said at my swearing-in, that I was a conciliator, that I believed in mediation, that I was sensitive to economics, that I had good relations with the business community. I believed in bringing together things that had been estranged and antagonistic. So that had a role.

He also mentioned my international background and experience, and obviously President Bush had a profound interest in the international situation, and the environment happily was part of his orientation. So all of those things, I think, attracted him to me.

Inherited Situation

HKS: To the extent that it's proper, talk about the Ruckelshaus-Thomas heritage, and Burford and all that at EPA. That must have given you some hesitation right there, to go into EPA.

WKR: It did. I mean, I watched what happened to EPA in the early Reagan administration. In fact, we finally, at The Conservation Foundation, took the fairly unusual step of issuing a very strong report on the state of the environment in 1982, which criticized strongly the Environmental Protection Agency leadership and the Interior Department leadership.

It said basically that these departments were abandoning important commitments, were abdicating their responsibilities, were not carrying out the laws in some instances. As I recall, I was told by a reporter, I think, for the *L.A. Times*. She said when The Conservation Foundation weighed in, that began to be the basis for editors deciding to allow strongly critical or negative stories to be printed in their papers about EPA, because we were thought to be that objective, that disinterested.

I had a lot of inside information about that period. I had good friends at the agency. Some of the best people came to me looking for jobs. I remember thinking if people like that, who are loyal, who are

professional, who don't leak, who do a good job, can't function in this administration, the agency is in trouble, because it requires such people. I told President Reagan that directly. I had lunch with him, along with a small group of conservationists in 1984. That, however, began to change, the minute that Bill Ruckelshaus took over the agency in 1983. I believe it was '83. He represented a wholly different orientation. He re-established credibility with professionals. He opened the lines to the Congress again, which had become very much antagonistic and frayed.

He began to explain to the country why the environment was important and why you could, with integrity, apply risk assessment to the whole range of concerns that the country had. He did the things necessary to re-establish public acceptance and trust in the agency.

His successor, Lee Thomas, was less well-known to the public, was a thorough-going public-spirited figure, with a long history of public service, a civil servant, professional, knew the issues.

When I got to EPA, it was very common to say that an environmentalist finally had come to the agency, that perhaps the lights would go on again, and the long darkness was over. In fact, the agency functioned very effectively, in my view, in most of the 1980s in the Reagan administration with Ruckelshaus and Thomas at the helm.

It made the regulatory calls that statutes required. It made them generally with consistency and, I think, always with integrity. It made them late. It missed a lot of milestones. But that's partly a consequence of fairly unrealistic requirements being given the agency by the Congress, excessive requirements. That's one reason risk assessment is so important, to try to separate the broken bones from the abrasions, so that you focus on the important things.

But Ruckelshaus and Thomas, particularly Thomas, never got the credit they deserve for running a good, clean shop, without much public support from the president, merely with a sense of tolerance on the part of the White House, that, having been burned by the Watt-Burford period of excessive deregulation, they would simply stay away from some of the regulatory calls that were so explosive.

Morale was very low at EPA when I arrived there, however. The agency had been in the wilderness for a long time. It had not been associated with anything that mattered or was thought to matter to the president. It was a backwater. Certainly in Republican politics it constituted one of the least interesting places, probably along with the Department of Housing and Urban Development.

People used to say that Kemp and I had the two most impossible jobs in a Republican administration, of running HUD and EPA, because the constituencies for those agencies are generally pro-spending, pro-tax, pro-regulation, the things that Republicans historically oppose. However, both the agencies respond to very serious problems in the society, to which Republicans have to have answers. In my view, we did have answers and important new answers in our period, and President Bush supported our developing them.

James Watt

HKS: Did you know Watt or Burford?

WKR: I never met Ann Burford. She's the only administrator of EPA I never met. She never invited me to meet with her, and I did not, honestly, go out of my way to get to know her. I did work a little bit with Watt. Invited him to dinner once at my house with a group of conservationists, and met with him a couple of times at the Interior Department.

I admired some of the things that Watt was concerned about. I thought he had a genuine concern, a populist interest, in making recreational resources available to low-income people, for example. I thought he had the appropriate concern with building up the infrastructure of the national parks, which had long been neglected. He's never gotten credit for doing what he did. The sewers, the roads, fire maintenance. Things that had just been ignored for a long time he paid attention to, and the budgets increased a lot for that.

On the other hand, he invited acrimony. He courted controversy. I think he just dined out on negative press and conflict, and he made it impossible to work with him for most environmental organizations. He said he would have a limited tenure because he would be so controversial, and he was as good as his word. It seemed to me he unnecessarily attracted lightning and enraged people who could have been helpful to him. But that's the way he chose to educate the public.

HKS: Does the White House think that's good? He's the lightning rod for the administration? The environment's over there, and the White House is clean?

WKR: The White House can think that for a while, but it finally got to the point where he was too much of a burden on the White House. You may recall the president had to invite him over and give him the Silver Foot Award for what was it? For disparaging as degenerate a rock group that was going to sing on the Mall July 4th, a very popular group the president happened to like.

HKS: Rolling Stones?

WKR: No, it wasn't. It was the Beach Boys.

HKS: Beach Boys.

WKR: They were going to sing at a Fourth of July ceremony or something, and it turned out they were friends of the president.

HKS: [chuckling]

WKR: I think he carried his agenda a bit far. He did favor deregulation of mining lands and public lands generally, in a way that seemed to me squandered our resources and offered to give away the assets for less than their value. I never understood why that had to be part of his logic and why that made sense to him. Or why, frankly, that should be seen as a conservative priority.

It is not conservative. It's not conservative of the country's money and the taxpayers' interest. It's not conservative of the natural resources. It's not conservative of the traditions of public stewardship of public resources. Why is it conservative? What it is is a favorable treatment of economic interests. That isn't conservative, in my view.

HKS: The Sagebrush Rebellion hit one of its peaks about the same time.

WKR: There was a disenchantment with government, a belief that government had intruded into the lives of people. It had imposed excessive burdens, was too tangled up in people's affairs, had imposed a labyrinth--the permit explosion.

Some of that was true. I think the administration misread it. I think the country felt that economic regulation had gone too far, but that social regulation, that is, those regulations designed to protect health, needed protection, needed to be maintained. There was no groundswell of support for eliminating those. Eighty percent of the people supported the Clean Air and Clean Water acts throughout that whole period. Administration people lost sight of that.

As they began to deregulate in those areas, the public's concern grew. The Congress became more upset. You had special hearings, contempt citations, and all sorts of things that finally called that era to a halt.

You have to, I think, in public life, be attentive to the concerns of people to maintain their freedoms from excessive government. It is a continuing theme of American history that we distrust government. We try to rein it in. We control it, constrain it, limit it with checks and balances.

We don't have so much confidence in government that we want to see it do great things at the expense of our liberties, and we believe that often, when it does attempt grand deeds, that's the price. Nevertheless, we have arrived at a social compact that assigns collective responsibility for things we care about that individuals cannot effect themselves. One of those is protection of the air and water and groundwater and natural resources. One has to keep in mind those two values, that resulting tension. And I think the early Reagan administration lost sight of the dividing line and began to err on the side of excessive deregulation.

Transition Process

HKS: Did the transition team brief you in some way, so you had some sense of what the issues were that the president hoped you would say?

WKR: You know, it's extraordinary that you don't get an awful lot of guidance when you take, at least in our administration, a big job. Things start coming at you awfully fast. I got some advice about ethics and had to file some reports with regard to my financial management. I sold all my stocks. Severed all board relationships. Took a big bath on that. Part of the first cost of doing the public's business.

I was given a book that included all the president's key speeches in major areas, so that I knew what he was on record for having promised. That was an important book. I was always very aware of the half dozen promises the president had made on the environment and was determined to make good on the them, to the extent I could.

I didn't succeed on all of them, but I did most. Beyond that, no, I did not get a great deal of advice. I was allowed and even encouraged by President Bush, who trusted me, to appoint my own people. Not everybody got that deal. I asked for it. I said I would like assurance of access. He said, "You've got it." I said I wouldn't abuse it, but when I needed to see him, I had to be able to see him. He agreed to that.

I said, "I'd like assurance that I can appoint my own people." He said, "We will not appoint anyone you don't want." What that meant was that both he and his White House and I had a veto. That's fine. That's the best you ever get from a president.

I had my own team. My successor does not have her own team, and I think the strained relations between administrator Browner and her first deputy reflected that to some degree. The Clinton White House decided the Carter administration had given too much authority to cabinet officers to select their own people, and therefore they didn't have enough White House loyalty. Well, you can err too far in that direction, and that doesn't make for a collegial operation.

HKS: How many appointments are there to make that theoretically you would be involved with?

WKR: In terms of presidential, senate-confirmed appointments there are about twelve. They're all the assistant administrators, the general counsel, the inspector general, and the deputy administrator. Then there is a large number of political appointments and some non-political appointments that are open to an administrator as well. I suppose maybe thirty or forty of those.

I had effective control over all of the non-presidential level appointments and senate-confirmed appointments. And the White House was as good as its word, though I had to fight to resist some appointees and to make sure I got the people I wanted for those key jobs.

HKS: Did you fill the majority of those positions, or did most of the people stay on?

WKR: Most of the assistant administrators were new. The deputy was new, the assistant administrators for water, air, waste, toxics, international, general counsel. Virtually all of them were new. In one or two cases, they were people who had served in the agency before or in other parts of the government before, but they were all new to the positions I put them in.

HKS: So you started to search immediately.

WKR: Yes.

HKS: Even before you were confirmed.

WKR: Yes, I did. There was a huge body of work that I did between the time, the third week in December, when I was named, to the first week in February, when I was sworn in. That was one of the most busy and creative and productive periods in my life.

I must have had fifteen or twenty two-hour briefings by people in the agency. I got ready for my confirmation hearing. I developed a strategy for my period at EPA. I decided I would have a science advisory board review our priorities and tell me what were the major threats to the environment and the United States and the degree to which EPA's programs and priorities and budget outlays conform to those priorities. I selected a couple of major interests at the beginning that I would emphasize. I decided to have a new assistant administrator for international and give a high priority to international environmental issues. All of that was decided before I even went there.

HKS: What budget pays for this cost?

WKR: World Wildlife Fund essentially subsidized a lot of those expenses. They were paying my salary then. I could have gone on the government's payroll as a transition consultant, probably paying less than I was making as president of World Wildlife Fund. But I simply kept my office at World Wildlife Fund.

Some of the people advising me were my World Wildlife Fund staff. Terry Davies, who later became assistant administrator for policy, one of the most knowledgeable people in Washington about EPA. Dan Beardsley, who was on loan from EPA at the time, became deputy to Terry. Gordon Binder, my executive assistant at WWF who was to become my chief of staff at EPA, played a key role in the planning and preparations. I didn't take transition monies. I could have done that but chose not to do it at the time.

HKS: It gives you more flexibility?

WKR: Yes, and we could operate faster and more freely. Also, you get people who are prepared to help you without being paid in that situation. They want to have access to an administrator. They want to influence the direction of policy. Maybe they want a job. But there's no shortage of people coming in to give you advice.

HKS: There's got to be a lot of buying of plane tickets to bring people in to be interviewed and all the rest.

WKR: I didn't do that. People did it. They took care of it themselves.

Confirmation Hearings

HKS: You had your staff here sent me the confirmation hearings. How many of the senators did you know before that? I was impressed during the hearings when each made a little speech before you got to your message. At least half of them said, "Good luck, Bill." Was that based on one meeting the day before, or did you really know most of those people?

WKR: I knew a good many of them. I knew Senator John Chafee and Senator Dave Durenberger quite well. Had worked with them on groundwater issues, on air pollution issues, on water quality issues, wetlands issues. I knew Senator Warner, who was my senator from Virginia, quite well. I did not know Senator Lieberman, who became a good friend later. I got to know Senator Symms only at the hearing. Senator Simpson I only got to know at a pre-confirmation meeting. It was a wild success. It was the most interesting and engaging and rambunctious conversation I think I've ever had with a senator. We hit it off instantly.

My meeting with Senator Moynihan elicited several advisory aperçus I still recall, like "Don't let your agency become transported by middle class enthusiasms." I had a good meeting with Senator Burdick. I got along well with his staff. I recall things went well in those conversations, partly because I knew the issues and knew the town and, to some degree, knew the committee.

HKS: Does the committee know the issues? When you're one-on-one, when the home constituents are not right there watching, is it a different person?

WKR: It's a very rare senator who can know the technicalities of the major EPA statutes. If they had negotiated them recently, if they had been involved intimately in the reauthorization, they will know parts of the law quite well, and some of the senators do. But on the whole, things have gotten so complex, environmental policy is itself so esoteric and layered with historical accretions and nuances that very few senators are completely familiar with them. Very few administrators are completely familiar with them, certainly at the beginning.

HKS: In their statements, each one expressed concern for the environment, and they hoped there would be a Clean Air Act and all this sort of thing. Recently I was within earshot of the new chief of the Forest Service, Jack Ward Thomas, and he said when he went around to Congress and met all the people, "Not one of them asked me what I'm doing to protect the environment. Not one." He said, "They want to know are you getting out the timber? Are you building the roads? Are the campgrounds okay?"

Is it because, do you speculate, that the Forest Service's job has very specific goals, while EPA deals broadly with the environment? Because they expressed a lot of concern with the environment in your confirmation hearings. Is that for the public consumption?

WKR: Well, Congress speaks with many voices. Let's remember a couple of things. First of all, I was in front of the Environment and Public Works Committee. You don't volunteer for the Environment Committee if you're not interested in the environment, typically. That's going to channel a certain kind of senator your way. Senator Simpson and Senator Symms, I think, over various times commented that one reason they remained on that committee was to try to rein in what they saw as excessive, ascientific environmental policy-making.

The Environment Committee has had the reputation of being more environmentally oriented than the Congress as a whole, or than the Senate as a whole. But I'm surprised that Jack Ward Thomas had that experience in the House, if that's where he had it.

HKS: I don't remember which it was. But he was kind of surprised, too.

WKR: Clayton Yeutter told me that when he went back to the Agriculture Department as secretary in 1989 and began to make his pre-confirmation hearing rounds, the biggest surprise to him was the degree to which attitudes on the environment had become important. He said that so many people asked him questions that would never have been asked five years before about his environmental orientation. One, of course, was Senator Leahy, the senator from Vermont, the new chairman of the Senate Agriculture Committee, who is very interested in the environment. The Senate Agriculture Committee has developed those interests and cultivated them.

The House Agriculture Committee, which could have been the locus of Jack Ward Thomas's experiences, has always been more negative on environmental initiatives, has resisted reauthorization of the pesticide law in a way that I think would have been useful to even the economic interests but certainly important to the environment over the years. And it may be that they have become more concerned about resources and timber extraction than protection, over time.

It may be also that Jack Ward Thomas, having come to the position with a reputation for being an environmentalist, was being cautioned by people who were concerned about any excesses. I don't know.

Cabinet Status for EPA

HKS: How about cabinet status. You're on record in *EPA Journal* of being in favor of that. Tell me what EPA is. It's not in the cabinet. It's an independent agency. But it's not independent like the Federal Reserve Board.

WKR: No, EPA is just like the CIA or NASA. In the sense that it responds to the president directly. There's no one between the EPA administrator or the CIA director and the president of the United States. He is subject to confirmation by the Senate.

It is different from CIA and NASA in that it is a regulatory agency, and that it shares with the SEC or the FCC. And many of the statutes that I administered as EPA administrator conferred upon me, and not the president, the authority to make regulatory calls. This is something the vice president didn't always understand. It was not enough for the Competitiveness Council just to decide what the regulation ought to say. The EPA administrator had to concur.

There was no power in the White House to prevent the EPA administrator from selecting a regulatory course that they might disagree with, short of firing the administrator. The president certainly had that power. Which he does not have over the FCC chairman, say, or the FCC members.

HKS: Okay.

WKR: So it's not an independent regulatory entity in the sense that the SEC or the FCC is. It does not have people who are confirmed for a term and not removable except for cause during that period. The EPA administrator works for the president, as a political official.

HKS: Members of the cabinet can be co-opted by the agencies. That's their job. And so they have a Kissinger in the White House as opposed to the secretary of state dealing with foreign affairs. To the extent that that's true, what's the advantage of having a cabinet level job, where you're now co-opted by your agency, as opposed to answering to the White House?

WKR: It's fairly common that the closer you get to problems, the more you tend to see them the way the experts and technicians in an agency see them. They, after all, are your source of information, your primary briefing agents, and they have the history and the background and implement the laws and programs. So

it's fairly common for Washington agency heads gradually to begin to reflect more and more the views of the agency and perhaps to forget who they work for, and for a president's staff to want to rein them in.

HKS: But you favored cabinet status for the EPA.

WKR: I favored cabinet status for EPA because EPA has a responsibility that is worthy of cabinet status. It has received that status in most other developed countries. There is more power in the Environmental Protection Agency than there is in virtually any of the domestic agencies of the U.S. government. It deploys a very large proportion of the gross domestic product, 2 percent right now, moving to 3 percent by the end of the decade. I think health care is what, 7 percent? That's a significant piece of change. EPA ought to be on a level of parity with the Energy Department, the Commerce Department, the Interior Department, the Agriculture Department. There are so many occasions when the agency is required to negotiate, as a matter of its responsibilities, with these other ones.

Perhaps the best example is federal energy facilities. It's not really appropriate that an assistant administrator of EPA should be having to deal with an opposite number who outranks him or her, when EPA is charged by law with making sure that these facilities are cleaned up. That in fact is the state of things right now.

Protocol doesn't mean everything, but it does mean some things. And the administrator now should rise to the level that we acknowledge for other significant national interests in the society, if we genuinely want to integrate environmental concerns equally with agriculture and energy and housing and transportation and the rest.

HKS: Did you have an experience where a cabinet member would tell you that you weren't his equal?

WKR: I never had that experience, though you have the sensation of sitting against the wall when you're invited to cabinet meetings, not at the table. You are not, therefore, encouraged to speak except when called upon. That's not a large constraint, honestly, because not a great deal happens in cabinet meetings. But those characteristics that go with lower protocol do have some influence on the way people approach an agency. The quality of the building that EPA was in, which was a bit of a bad joke. It was a sick building that we needed to get replaced. That certainly caused the agency to suffer a status and stature loss in the eyes of many people we dealt with.

Essentially, an EPA administrator is trying to get a policy taken very seriously. The job is simpler to the degree the agency has some status. We have not yet, I think, matured in the area of the environment to the extent that we continue to deny cabinet status to our main instrument of environmental protection nationwide.

HKS: President Bush, if he were here, probably wouldn't debate your analysis, but he just didn't want a larger cabinet.

WKR: He wanted a smaller cabinet. He wanted, if anything, to remove some agencies from the cabinet. I understand that, in the sense that it makes for a more cohesive little group. On the other hand, my observation is that the cabinet doesn't do anything as cabinet anyway. It doesn't make decisions. The cabinet meetings that we had once a month or so were largely show and tell sessions, or opportunities for the president to convey a common perspective for his cabinet officers, his chief political instruments and spokespeople, to see what the president's own explanation for the recession, or his own expectations of our revival from it, or his own attitude toward the Kuwait war and how he was communicating that, to get a common line out among his top lieutenants. That's what a cabinet meeting is for. It certainly was in the Bush administration. I don't think it differed, really, from the way it had been in the last several administrations.

Decision-making groups tend to be much smaller, a more cohesive group of people who are directly concerned with an issue or policy or an event. So it doesn't, in my view, matter that you have a few more cabinet members than are comfortable around that table.

Presidential Access

HKS: Maybe the size of the table is the limiting factor. Let's talk a little bit about access to the president. You read that members of the cabinet lack access to the president.

WKR: Well, that's right.

HKS: Which to a civilian sounds strange as hell. I mean, why do they bring somebody in and they give up their job wherever it is and then they can't talk to the president?

WKR: They can't get through. It's very common that some cabinet officers complain of access limitations, they don't have it. Or it's more common that they don't have the access, but they don't complain of it because they don't want anybody to find out!

HKS: Sure.

WKR: If it's known that they don't have access to the president, their clout in their agency and outside is reduced. I did not have that concern nor problem. The president could not have been more gracious and accommodating and open to me. I didn't abuse it. The president did communicate that he didn't expect issues to be brought to him very often. He didn't particularly like to get conflicts raised to his level. He wanted things resolved lower down, and we tried to resolve them. But when I needed to see him, as I did from time to time, I always got in.

He also was quite inclined to call me on issues. He made sure that I was the one who always briefed him before the G-7 economic summits. In fact, I can remember one day learning just about forty-eight hours before a meeting at the White House for which I was to do the briefing on environmental issues, that it had been planned that the under-secretary of the State Department would brief. But then when Bush found out about it, he said no, he wanted Reilly.

That happened frequently in our administration. When something like that happens, people tend to pay attention to the EPA administrator. They realize that the president does.

I remember Ruckelshaus telling me once. He said, "You know, when you go into a cabinet meeting, if you get invited to cabinet meetings, because it's not guaranteed you will, because you're not a cabinet member, but if you do,"--and I did--"you will go to that meeting, and you will find that the Interior secretary and the Agriculture secretary typically get along, and the HUD and the Transportation secretary do okay, and everybody's doing fine, until you come into the room. You'll probably be fighting with the Interior secretary about western lands or water rights, and the Agriculture Department about pesticides or chemicals or wetlands, and HUD about lead removal from public housing, and the Energy Department about everything. And they'll look at you and wonder what is it about him. Whose team is he on? I mean, why are we fighting with him all the time? He's really a problem."

He said, "If, at that moment, you don't have a president who makes it clear to everybody that's the nature of the environmental job, he's got to be in everybody's hair, otherwise, he isn't doing his job, then you're in trouble. If you do have such a president, you'll do fine."

I did have such a president.

HKS: So if EPA were a cabinet rank, you would automatically be at that table.

WKR: Always.

HKS: No matter what.

WKR: Yes.

HKS: And so in that sense the president would be a little less important to the success of the organization?

WKR: I'll tell you a story. I got to EPA. I knew the president wasn't supportive of cabinet status, so I didn't want to make a lot of noise about it either. I was supportive of it, but I thought I could downplay it. And I was quoted somewhere as saying that it was not an important priority of mine.

My predecessor, Lee Thomas, who didn't chide me or advise me on much, unless I asked for his advice, told me that was a big mistake. EPA vitally needed cabinet status. He said, "You don't think you need cabinet status, as you said in your quoted remark, because you have no difficulty getting your phone calls returned. Everybody takes you seriously and returns your phone calls. They didn't return my phone calls. It is precisely because you do have a good relationship with the president that you must draw on that access and relationship to make sure that your successor, who may have a less good relationship, enjoys the benefits of enhanced status."

HKS: The term "access to the president." Does that mean literally George Bush, or does it mean the Domestic Council?

WKR: Oh, no. It means the president. An EPA administrator has no problem getting access to the Domestic Council. You're making decisions that vitally affect the economy, every week if not every day. And the Domestic Council or whoever is handling White House environmental relations will be dealing with you. No, it means you've got to be able to get in to see the president because you will not always like the advice you're getting from his people.

HKS: You were invited to White House dinners. I'm assuming those are largely social, but there's a certain status in being invited there.

WKR: Yes, there is.

HKS: But when you're invited to Camp David, is that for work?

WKR: We were at Camp David, I think, two or three times. Once it was simply as a social event involving the entire cabinet. And interestingly, I was always included in any cabinet gathering the president had. I think the only one where I was not included was the formal cabinet photograph. So, you know, Baker and Cheney and all the rest of the cabinet were there, including the CIA director and the FBI director, who were also, for that purpose, treated as part of the cabinet, and the UN ambassador.

Later, I was there for a meeting with the president and a briefing prior to the Rio Conference summit. That was work. We had lunch as a part of our visit there. Those things are important in the way that social events are. They cement relationships, give you a better understanding on an informal basis of another person, and, as you suggest, to the extent that you show up on the president's calendar, either at a state dinner or for having a private luncheon with him, it kind of warns off people who wonder, "What's Reilly doing having lunch with the president? I wonder what he talked about." Maybe it keeps the budget director off your back for sixty or ninety days.

In Washington, I always thought it important that people know when I had lunch with the president. Of course, they do if they read the president's calendar in the newspaper. But that was definitely a very important part of my strength. People knew I had a relationship, a personal relationship with Bush, that some others didn't have. That was one string to our bow.

HKS: Is some of this for the convenience of the president? He's going to Camp David, or he's on Air Force One going someplace, so you're invited to go along just as a way of fitting you into a series of meetings he's having?

WKR: He invited me to go on environmental trips to various places. I remember I went with him once to Montana and Washington on an environmental trip primarily, and we had dinner with the speaker of the House and his wife in Spokane, Speaker Foley.

I went to Sequoia National Forest with him, in California in 1992, for a major environmental speech. He invited me to go to the G-7 summit in Paris in 1989, and then to go to Italy with him to meet the Pope and the prime minister and the Italian president.

HKS: That's a photo of the Pope on your bookshelf?

WKR: Yes, indeed. That was a later, private meeting I had with him. The president invited me to go on his Eastern European trip. There were major environmental issues there. I had to decline because I just had too much to do at home.

He also invited me to go on his major South American trip, five countries, and I was awfully unhappy to have to skip that one, but I had a major symposium of all of our agency personnel scheduled for that period. So I didn't go on that, either. But President Bush was very open to me and included me in a lot of things, and I did travel with him fairly often.

White House Access

HKS: Explain the difference--and this may sound absurd to you, but I couldn't figure it out. The Domestic Council's function in the White House and vice president's Council on Competitiveness.

WKR: Well, the Domestic Policy Council functioned to resolve most new initiatives that were proposed, whether the president would phase out ozone-depleting substances, for example, was something I put on the agenda that went before the Domestic Council. The Clean Air Act was run through the Domestic Council and numerous meetings of council staff and then several meetings of the full membership. Three attended by the president were held.

The Competitiveness Council formed after our administration was a year-and-a-half to two years old, largely in response to President Bush's anxiety about the press he was getting in the *Wall Street Journal* and other places to the effect that he was re-regulating the economy, abandoning the deregulatory commitments of the Reagan administration. As I understand it, he brought in Vice President Quayle and pointed out that in the Reagan administration it had been the vice president's job to rein in the regulators, and he encouraged the vice president to do that. Vice President Quayle then set up his Competitiveness Council, with most of the domestic cabinet on it, and began to look for targets of opportunity to make the point that we were in fact deregulating.

Regulations we proposed pursuant to the Clean Air Act were a prime target, and I think, over the course of Quayle's tenure, there were three clean air issues that went before the Competitiveness Council, two where

I simply contested their advice, one where I acquiesced. So this was a way a costly rule could be raised to the highest level, or one short of the highest level.

There was the wetlands issue. The delineation issue was one he took on. We were not the only agency that the Competitiveness Council engaged, but we were probably the one where there was the most acrimony and conflict.

HKS: Are there a lot of regulatory agencies in the government?

WKR: Yes, there are. But the Competitiveness Council could not have brought in some of the others because it has no effective influence over them. In fact, they are by statute distinct and separate and are not supposed to be that directly influenced by the White House. EPA is different in the sense that I did report to the president in a way that the heads of FCC and SEC and FAA did not.

Relations with Other Agencies

HKS: Is EPA the largest agency? I mean, the Forest Service has about a two and a half billion dollar budget. EPA was seven billion or something like that.

WKR: EPA has eighteen thousand people and seven billion dollars. The Transportation Department, though, I think, has something like a hundred and twelve thousand people and many more billions.

HKS: Oh.

WKR: But that's all the air controllers and the Coast Guard and so forth. The Treasury Department is large. It has all the Customs and Immigration officials. And the Justice Department has all of the FBI. So there are several other agencies that are bigger than EPA. HHS, including the Social Security Administration and the Food and Drug Administration, is a behemoth.

HKS: The members of the cabinet didn't like you making their lives more complicated. How about the head of the BLM or the chief of the Forest Service? You're an agency, and they're an agency. How did they view EPA?

WKR: I think the attitude that exists certainly in the Agriculture Department is skepticism toward EPA. Yet, during the first two years of the Bush administration, we had, by everybody's account, the best relationship with the Agriculture Department that any EPA had ever had.

That was largely a tribute to Agriculture Secretary Clayton Yeutter. He told me early on that the environment was a concern of the committees to which he reported. He invited me to share in the design of the Farm Bill of 1990. He said, "I'll give you complete and open access to all our deliberations," and he did. "The only thing I'll ask from you is that once we've resolved these questions, you defend the bill with me on the Hill. I think that would be very valuable to me."

That was an honest game. We all worked very well together. We worked well together, he and I, on the spotted owl issue. And very well with the chief of the Forest Service, who got somewhat marginalized out of John Sununu's concern that he was becoming a little too environmentalist.

Clayton Yeutter was fine on that issue. We dealt frequently with Clayton on pesticide issues. You remember the alar issue. I was under pressure then to declare the food supply safe in the country, which of course it is.

HKS: My brother-in-law raises apples in Yakima. I heard about alar.

WKR: I bet you did. I said, "Look, I'm in a very difficult position as a result of the pesticide law. I'm asked to tell people that the food supply is safe, to quell the panic and say it's safe to eat apples. But EPA has initiated action to cancel alar. And the reason we moved to cancel it is that it causes cancer, in excessive concentrations. That's a bifurcated message. And when people ask, 'Well, how soon will you get it out of commerce?' we're able to say, 'Four, six, eight years maybe. That's how long it will take.' That's not reasonable." The law is intentionally designed to ensure long administrative procedures, hearings, and duplicate findings before a cancellation takes effect. So EPA is obliged to speak out to initiate a cancellation, explain the threat, then defend leaving the chemical in commerce for the years it takes to ban it. So I told Clayton and the White House that I wanted cancellation authority that would allow me to drop the curtain on chemicals that we decide to cancel, much faster than we could then do it.

Clayton Yeutter said, "Well, then, what I would like is uniform pesticide registration requirements. I would like us to have federal preemption to make sure that California or some other state doesn't have wholly different testing and labeling requirements." I agreed that for new chemicals that passed the whole panoply of modern scientific testing, there would only be one label, one test, and a state couldn't second-guess it, unless the state could show it had special characteristics of ecology or excessive use of this chemical.

We made a deal, in other words. That was the pesticide law reform that we proposed. Together. And worked on jointly. Unfortunately, the House Agriculture Committee never accommodated us. The liberals wanted more environmental protection, and more protection from risk, the so-called "Delaney Clause," or zero risk; and the conservatives feared any strengthening of EPA's authority. So, unfortunately, we didn't get it. But EPA's relationship with the Agriculture Department was excellent. I had an agricultural advisor, too, on my staff, who was very helpful to that relationship.

HKS: I don't know if you can generalize, but are the scientists that work for, say, the Soil Conservation Service and the scientists at EPA in general agreement about the science of the issue, what the facts are? Are the facts themselves being debated?

WKR: Most of the scientific community outside of EPA and some of the other agencies tends to take a less cautious, conservative approach to issues of health protection than EPA does. EPA's default assumptions are highly conservative. Its exposure assumptions are, many people think, unrealistic. But partly it's because EPA is dealing with a lot of unknowns, chemicals the effects of which we're not familiar with, possibly interactive chemicals. And their force is conservative. That has been the history of our treatment, our administration of environmental law.

The Nuclear Regulatory Commission takes a very different approach toward radiation. They know that subject very well, and they are less conservative in issuing standards. But they don't allow any deviation from standards. EPA tends to issue very conservative standards, but to allow extensions of deadlines, *de minimis* violations, and to be somewhat tolerant of failures to accommodate those standards in a reasonable time. Different approaches resulting from different histories, and from the difference in situation between an agency responsible for regulating one pollutant, versus an agency concerned with a whole constellation of often unfamiliar pollutants.

HKS: One of the senators on your confirmation hearings said that when he was attorney general in the New England state--I can't remember which one--

WKR: Connecticut, where Joe Lieberman had been attorney general.

HKS: --that he had to bring suit against EPA to enforce the law, or to obey the law, some such thing as that. Was that a Reagan administration problem, or was that just an ongoing problem? Is there so much going on you can't possibly do that?

WKR: I think it tends to be a consequence of both the large amount of things on EPA's plate, or in some cases perhaps a policy difference on what deserves priority. EPA can't equally enforce every regulation of every law. The public sometimes thinks you should, but you don't prosecute every violation. You prosecute the major violations, the symbolic ones, the ones that will make an important case, to show that you can get the big guys, to deter a certain kind of behavior that flouts the law. But you cannot, under any circumstances, hope to prosecute every malefactor, every lawbreaker around.

Air Pollution

HKS: I'm assuming it's one of his favorite stories for Ruckelshaus, because he said it twice in my hearing about how he was in contempt of court for not shutting Los Angeles down, so he flew out to the airport, got off the plane, read a proclamation, got back on the plane, and flew home. So he obeyed the law, but--

WKR: Nobody paid attention.

HKS: Nobody paid any attention to that. Is that an unusual kind of a thing?

WKR: Prior to that story Ruckelshaus has told is a call he made to Senator Tunney, the senator from California, reminding Senator Tunney that he had been very supportive of this provision of the law when it was enacted and therefore he would look to Senator Tunney for support when he implemented it. Senator Tunney was nowhere to be found when Ruckelshaus read his proclamation. He ran from it.

That, unfortunately, is not uncommon. Congressmen will pass laws, the consequences of which they abhor. They will then beat up on an administrator for carrying them out. In some cases, the Congress, unable to resolve a conflict, will incorporate two somewhat ambiguous references in a preamble or in the operating section of the law, which the administrator then has to essentially make work together. What he will do is to select one or the other to give emphasis, for which he's hauled up before Congress and beaten up by the people whose view he did not take.

That happened to me on the case of the onboard canister to capture refueling vapors from automobiles. In refueling a gasoline engine, a lot of vapors escape. What should we do about it? Should we build something into the cars that sucks the vapors back into the cars? That's what the oil industry thought we should do. And that's what environmentalists and EPA thought we should do. Or, as the auto industry preferred, should we make the oil companies put devices on the fuel pumps that trap the vapors?

Well, there are arguments for and against each position, but Waxman and Dingell could never agree on what they wanted, Dingell wanting it to be on the oil pumps and Waxman wanting it to be in the cars. So some ambiguous language came down to me. EPA had taken the position, as part of the administration, that we favored putting it on the pumps. This was the jointly-developed position of the Bush administration. The theory of that is that it will be immediately effective. You won't have to wait until the cars all turn over in seven or nine years, when a fleet turns over. And secondly, it will obviate the need to have cars that are located in Montana, which has no air pollution problems, put these costly controls on them.

Well, based on that, when I saw language which said the administrator shall require the onboard canister (on the car) and shall consult the secretary of transportation with respect to the safety thereof, I did consult the secretary of transportation. He reported back. Or, rather, his Federal Highway Transportation Safety Board reported back, that these canisters were unsafe under certain circumstances. I therefore chose not to require the onboard canister.

I remember Mr. Waxman was very upset. Senator Baucus was very upset and had me up for a hearing at which he expressed some anxiety and said, "You have deliberately flouted the obvious requirements, the clear requirements of the law." I finally said to him, "If it were obvious, we wouldn't be having this conversation. It's because you never resolved it here that you kicked it down to me, and I had to make a choice. In leaving the case ambiguous, you shouldn't be surprised that I chose the course that we had previously espoused. Now it's up to the courts to figure out what the law requires."

The courts, incidentally, concluded that Senator Baucus was right, and I should have required the onboard canister. My question to Senator Baucus was, "Why was I supposed to consult the transportation secretary about safety? What was I supposed to do if he said, as he did, that it was unsafe?" Well, this is the kind of thing that you get into when Congress doesn't speak with a clear and distinct and unqualified voice. It happens all the time.

HKS: It's a way of getting something passed.

WKR: It's a way of getting something passed, and it invariably results in dissatisfaction with the EPA administrator. But look more deeply into the case, and you will find that the problem is ambiguous language.

HKS: If the Bush administration wants a Lujan to tilt for the west, and you at EPA to tilt for the environment, how about the Department of Justice? They're essential to your success. Was that a factor? Did the Department of Justice cooperate with you?

WKR: You're quite right. The Justice Department has to bring the actions that EPA recommends, the criminal and civil referrals. They were good in our administration, under both attorneys general, Thornburgh and Barr. We did, in fact, set records for environmental criminal and civil referrals and convictions in our time. We sent more people to jail for more time in our four years for environmental crimes, egregious violations of law, than in the whole previous eighteen-year history of the agency. We also fined polluters more, and we could not have done that without the Justice Department and U.S. attorneys and all of the people associated with them feeling the environment mattered.

HKS: Why wouldn't that have happened under Carter or Ford?

WKR: I think partly we had new laws to administer. Partly, the laws had been stiffened. The fines and penalties under the Clean Air and Clean Water acts were strengthened. U.S. attorneys were prepared to take seriously, as judges were, laws and violations that previously they had not been interested in. That represented a change in psyche and attitude.

I daresay, too, that the president's own espousal of the environment as a priority meant that his U.S. attorneys were more alert to environmental problems. They were held to account also by the newspapers, the press, by others, for their stewardship of the environmental laws.

White House Staff

HKS: Talk a little bit more about the White House. I read accounts by political scientists of what goes on. The White House staff always come out looking a little bit smarmy, no matter who writes about it.

WKR: [chuckling]

HKS: If you read Haldeman's diary, he doesn't advance the cause. Is that because it's so politicized? These people you dealt with all the time, they're not idealists, apparently. But what else are they?

WKR: I think the people who operate in the White House have a very difficult assignment. The chief of staff probably has the worst job of all. First of all, he takes the job and he has the responsibility to make good on the president's campaign commitments, to keep his lines to Congress open, to have good relations with the Congress so that the president's legislative initiatives pass, to ensure that the cabinet officers are generally hewing to the line, and to produce quality staff work on a timely basis out of the White House, to make sure there's a common explanation, a common line on foreign affairs and national security issues and environment and transportation and whatever the crisis of the moment may be. He has to do this, however, with a team that is not his own, with staff that have histories and special relationships with the president, with cabinet officers with egos bigger than the White House itself, very often. And who are chosen to mollify different constituencies, as Lujan and I were. And so to some degree his influence has to be by subterfuge or somewhat private in effect.

I remember reading once that Haldeman was asked about his job. He was asked what the nature of it was, and he commented, "Every president needs an SOB, and I'm Nixon's." Well, to some extent that is the function of a chief of staff in a nice guy's administration. And certainly in a conflict-avoiding person's administration. George Bush needed somebody who could crack the whip and be tough, as John Sununu was.

White House staffs tend to come out badly very often because the nature of what they're doing involves so much compromise. They are rarely permitted to be spear carriers for the good and the true. They rather are dealing to reconcile the necessary and the unpleasant. They have to deal with the reality that if the president gets too far in one direction or another, a key group may get off the train, and he may not get reelected. That's the sort of thing that the White House staff is supposed to pay a lot of attention to. A cabinet officer doesn't lose sight of the president's political interests, but frankly, in the fray, is more oriented toward the problem of the moment, which may be getting the Clean Air Act reauthorized or getting a specific initiative accepted.

I think it's because of that large collection of responsibilities that require so much compromise, balancing, a necessary accommodation of interests, that White House staffers make an easy target for people who want to accuse them of being somewhat impure. Their loyalties fundamentally are political.

HKS: Budget directors are especially bad, it seems like.

WKR: Budget directors have a thoroughly thankless task. We have created a budget reality in this country where there is very little effective control that you can assert on expenditures. What that does is force any cuts or restraints that we want to place on the growth of the budget to be inflicted on domestic discretionary spending. Well, that includes really all the environmental expenditures and so many expenditures on things like Head Start or the Peace Corps or popular programs of one sort or another that are not funded by entitlement. There is no way that a budget director who is constantly saying "no" is going to look very good or be very popular. But that's the job of a budget director.

HKS: So they really are good people.

WKR: It depends on who they are. I think that some budget directors are actively interested in accomplishing things and in managing the government better and pay attention to those kinds of priorities. Others have more narrow interests, or, in some cases, ideological interests that preclude their being discriminating about what's in the national interest.

I tend to think that budget directors would do well to pay more attention to management in the government. It is, after all, the Office of *Management* and Budget. But it's the rare budget director who concerns himself with management.

HKS: Is the Office of Technology Assessment germane to this interview?

WKR: Well, the Office of Technology Assessment is an arm of the Congress, which carries out studies at congressional direction. It has, I think, produced some good reports and some that are less good, and certainly judged some EPA programs from time to time.

CEQ or EPA

HKS: I'm President Bush, and I get up in the morning and read in the paper there's some environmental issue. Do I automatically know if I should call CEQ or EPA? Is it clear?

WKR: If you read about a new issue that you've not been informed about before in the environment, you probably call EPA because EPA is the bigger agency which is more likely to have specialized people covering some breaking event or problem. CEQ may or may not, given its small size, have a history on the question. If it's in the paper, EPA has probably [laughing] done something to put it there, and if you don't get a call from the president about it, you'll get a call from some member of his staff if it's a controversial issue.

I used to get calls regularly from John Sununu as he got into his car at quarter to seven in the morning. He had immediate access to the newspapers and would begin to raise with me whatever issue upset him for the day, and often I'd get annoyed because I didn't have the newspapers yet. I couldn't get the *L.A. Times*, for example, which was made available to him as part of the White House. But there's a lot of communication.

HKS: Is there a turf issue between CEQ and EPA?

WKR: There is not a serious turf issue between the agencies, because they just don't have complementary resources. I mean, CEQ had something like forty people, and President Clinton chose to eliminate it altogether. You can have the CEQ, or you can get along without it if you decide to put some of its statutory functions, which are limited, somewhere else.

EPA has huge statutory implementation obligations for seven or eight major statutes and probably another thirty less significant ones. There may be on a specific issue a certain turf question: who gets to chair a conference, or who's going to play a certain role in taking the lead in explaining a public policy or something of that sort. I must say Mike Deland and I never had any turf conflicts, and we tended to be allies on most of the issues of the day.

In the Ruckelshaus EPA administration, he freely delegated or deferred on all international questions to the CEQ chairman, Russell Train, who was very interested in international issues. When Russ then went to EPA, he took the international issues with him, and kept them over there. So there can be some tensions, but they haven't been serious. It's nothing like the conflicts between the secretaries of State and Defense that have marked our history.

Reporting Progress

HKS: EPA does not prepare an annual report.

WKR: EPA does not prepare an annual report, but it does something like eight hundred and seventy reports each year, required by law, on the implementation successes and milestones entailed with various laws. But there's no one place where it puts everything in perspective, no.

HKS: When you want to get your budget to the OMB, there must be some kind of summary that you do. As a historian, I go into libraries and look on the shelves, and agencies have annual reports.

WKR: Sure.

HKS: And some are good, and some are not.

WKR: The budget reports tend to be one occasion for putting everything together comprehensively. They really do. There is the EPA budget which is put together, and before that, the budget submissions to OMB. Those are pretty comprehensive. They tend to discuss the areas which are proposed for further investment, and why that is, and what successes we've had, and what may not have worked and therefore we're going to cut back on. That's about as good as you get.

HKS: So even though they aren't made public immediately, they are somewhere in the national archives and eventually people could look at the budget.

WKR: Sure. You could look at the budget from the moment it comes out. The president's budget includes a large section from EPA. Then, when the administrator testifies before the budget committees of the House and the Senate, those documents are prepared, and they're publicly available, and the testimony, and all the supporting materials.

HKS: But you said the Committee on Public Works and Environment, that's--

WKR: They do not formally have budget authority, but they do--or did in my time--ask for an annual committee hearing on the budget of EPA. So they got their licks in. They got their views heard. This is very good, because one of the anomalies in our congressional system is that we have members of authorizing committees, which write the statutes, who pay very little attention to the appropriations committees.

As Senator Barbara Mikulski, the chairman of the Senate appropriations subcommittee with oversight on EPA, once said to me, "Those authorization committee people never talk to me. If they think I'm going to fund any of these new ideas they may have, they're mistaken, because I don't have enough money to fund even the things you've been doing." She said, "I don't mind that they don't talk to me, because it relieves me of a certain pressure. But it's one-stop shopping for you here," she said. "This is where we pay the bills."

I don't know how many times I found myself in front of the Public Works and Environment Committee wanting to say to a senator who was encouraging us to do a lot more in a specific area, "To do it with what? Have you talked to Senator Mikulski? She says there isn't any more money. There isn't even enough money to do the things we're currently required to do. Why don't you two get together?"

That was a frustration in my job. Again, the EPA administrator and the agency would be criticized in one forum of the Congress for not supporting something that the other element of Congress, the appropriations committee, under no circumstances would provide funding for.

HKS: Is that unique to EPA?

WKR: No, it's quite common.

HKS: Quite common.

WKR: Authorizing and appropriations committees are distinct.

HKS: When I sent a draft of this interview outline to your WWF address, the staff came back with a question of why I had included the National Environmental Policy Act.

WKR: It's because I didn't administer NEPA. It was administered out of CEQ.

HKS: It affects EPA, though. Some of the things. Or does it?

WKR: Not significantly. Historically, a lot of the environmentally protective actions which a regulatory agency like EPA would take are exempt from NEPA's environmental impact statement requirements. So that's the reason.

Public Health or Environment

HKS: When EPA was set up, was it a public health organization or environmental protection agency, in terms of wilderness and that sort of thing?

WKR: The Environmental Protection Agency was set up to be just that, to concern itself with the broad environment. We already had a health department then, now known as Health and Human Services. It was then known as Health, Education and Welfare.

EPA was supposed to be concerned with the environment broadly speaking. Some of its major actions were taken in defense not of health but of the environment. When Ruckelshaus in 1972 banned DDT in the United States, it was not for reasons of human health. It was because DDT was thinning the egg shells of birds, so that they could not reproduce. That was a straightforward ecological rationale.

In my view, in the Carter administration, the Environmental Protection Agency began to lose its balance and became much more oriented toward public health protection, in the public mind, as in the minds of its own professionals. It made a great deal of cancer. It talked a lot about hazardous waste, and some of those issues came to the fore, toxics. All of which are important. But by the time I reached the agency, I thought they had been emphasized, over-emphasized, to the detriment of ecological protection, of natural systems, of estuaries, groundwater, of things that are not so directly related to human health but very much a part of the whole environment.

I tried to correct that imbalance, as I was encouraged to do by the Science Advisory Board, who said, "Raise the priority for ecology." I certainly did that. I ran the budget up from forty million to some seven hundred million, just for the Great Lakes Policy Office and the National Estuary Program and some of our wetlands regulatory work. I think that is a very important part of the EPA brief.

Frankly speaking, I think the threats to the environment of the United States, the impairment, the degradation of the environment, are more obvious and compelling with respect to natural systems and their circumstances and conditions, than they are with respect to human health, which has been improving for many years.

HKS: Did it make sense, in the context of the Carter administration, that there would have been that shift?

WKR: To some degree. I think that the shift was a consequence of just growing public anxieties and concerns with health and with toxics. To some degree also, frankly, I think the agency put itself on the map at a period when there were recessions and high inflation and energy costs that threatened to obscure the

environmental message and priority. That was a way for the agency to keep its mandate and to keep its profile before the public.

HKS: But the Congress has something to say about all this.

WKR: Congress went along very well, sure. And the press did, too. You remember Times Beach or before that, Valley of the Drums and Love Canal. They got a great deal of publicity, and that resulted in a lot more concern and finally in laws being passed to protect against hazardous waste.

Risk Assessment

HKS: Just this morning, I was reading Haldeman's diary, and this was in late '71. Nixon says, "Let's increase risks for the environment and create jobs." So I'd like to ask you about the risk assessment and why it was difficult. It seems logical to me. Why does Congress engage in overkill so often? The zero tolerance to any pollution and that sort of thing. So tell me about risk assessment.

WKR: The history of EPA's legislative responsibilities is one of episodic alarms on the part of the public, Congressional response, enactment of a new law, and maybe, if we were lucky, some new money to address it--most often not, though. Most often, statutes did not come to EPA with new financial largesse. This responded well to the burgeoning American concerns about the environment, which was relatively unfocused and diffused in the early 1970s. We got the Clean Air Act in 1970 and the Clean Water Act in 1972, and then throughout the decade Endangered Species and the Toxic Substances Control acts. Toward the end of the decade, the Resource Conservation Recovery Act, and the Superfund Law.

These didn't add up to a coherent whole. They were typically the product of different perceptions of problems. They came out of different committees in Congress, reflected different attitudes and views toward the environment. The agency itself began to need a principle for setting priorities, for making itself cohere.

I should back up and say EPA itself had difficulty cohering, because the agency is the product of four different entities that all were grafted into one agency, whole, from other agencies, when Nixon created the agency by executive order in 1970. So they came with their separate legislative histories, their separate congressional committees that they responded to, and their distinct statutes.

The effort of EPA to get coherence resulted in a focus on a common approach to determining what the nature of a threat is. How serious the threat is, what the exposure is to the public. "Risk assessment" is the term we generally give to that. Risk assessment was fairly primitive in the time that we speak of, in the early 1970s.

It has never fully been accepted as legitimate by the environmental community or by elements in Congress. It is, in my view, however, the only way to discipline our expectations, husband our resources, and make some sense of the world we're responsible for. The critics of risk assessment say it is really a justification for triage to decide some programs or problems may not matter very much, or some may matter less than others.

My answer to that is to say that explicitly or implicitly we will engage in risk assessment. We do it every day. You did it on the way to work this morning. You decide you're going to walk, you're going to ride, you're going to play a sport, this sport or that sport. You're going to hang glide or ride a motorcycle [chuckling] or skin dive or scuba dive. That is the nature of life. It's choices about risk that we are willing to take, and Americans are willing to expose themselves to many more significant voluntary risks than involuntary risks.

Risk assessment must be the mode of organizing EPA's priorities, and I think the country's priorities for environmental protection. The simplest reason for that is that we're spending so much on the environment. We simply have to have a way to make sure that the money we're spending is well-spent.

HKS: Some risks were fixed by statute. I mean, you couldn't really deal with that. Actually, there was a lot of opportunity for risk assessment.

WKR: That's right. Sometimes Congress, in fact, increasingly in recent years, has specified the precise parts per million that can characterize, say, emission of hydrocarbons from an automobile, grams per mile, and things of that sort. Congress in that sense has conducted its own risk assessment and declared its result. In other cases, that function is left up to the agency.

HKS: New technology allows us analytical techniques to detect smaller and smaller amounts of stuff. Is there a tendency as you become more sophisticated in detecting it, to keep lowering the acceptable levels, even though there's no scientific change on the cause of cancer or some such thing?

WKR: I think the country's capacity for detection has outstripped its capacity for control. We are finding things and will find in the future, in the parts per billion or parts per quadrillion level, that do not pose serious risk, that are negligible at most. Nevertheless, it is disturbing to some people to find that these pollutants are so widespread in the environment. When you prescribe a zero risk, as the Delaney Clause of the Food, Drug and Cosmetics Act does for cancer-causing chemicals in processed foods, you arbitrarily assign exclusive concern, or primary concern, to one set of problems related to cancer.

Very often, the consequence is you're going to be left with substitutes, alternatives, that may create different problems. Neurotoxins could contribute to mental problems. You may find that the foods that are made expensive and can no longer be developed and provided economically as a consequence of your policy are quite nutritious and themselves perhaps protect people against cancer, much better than whatever substitutes are found. That is not good science, and it's not good policy. But it is the law.

Science at EPA

HKS: Roughly what is the percentage of EPA employees who are scientists as opposed to lawyers or social scientists?

WKR: Of the professional EPA staff, I would guess that probably two-thirds are scientists and engineers by training. That's an interesting question, though, and I'm not altogether certain of that.

HKS: Does EPA job out a lot of its research to university types?

WKR: Yes, it does. In fact, the total amount of EPA funding that goes out of the agency is in the range of about \$1.5 billion out of a \$7 billion budget. So roughly a little more than 20 percent of the total expenditure of the agency is on outside researchers and scientists.

HKS: So there's a material amount of science in the agency. What does the Science Advisory Board do?

WKR: The Science Advisory Board is a group of scientists and engineers, independent all, from universities typically and some think tanks, that advises the administrator and the agency on the quality of the science, on the adequacy of risk assessments, on the soundness of scientific analysis that results in regulatory proposals by the agency. I used them to do something quite different in my first year at EPA. I asked them to assess the threats, across the spectrum, to the environment of the United States and to go further than that, to assess the adequacy of EPA's programs and policies in response to those threats.

They essentially gave me my template for much of my own priorities at the agency. They said, "Raise the priority for ecology." They said, "Some of the most significant problems are international in scope." They said, "The waste on which we were spending, waste and oil spills, probably a third of the agency's budget, was overdone, relative to other problems." They said that problems like indoor air pollution on which we were spending virtually nothing were top-priority concerns for health. They were marvelously helpful to me, and that's the role they can provide. They had independent credibility and did an outstanding job.

Growth of Regulation

HKS: *Science* magazine, which to me is not a radical magazine, had an editorial along about your time. Too much regulation. There's supposedly one hundred statutes and nine thousand regulations. Is there a practical way of coming up with how much is enough? Or is new knowledge the driving force for additional legislation and more regulations?

WKR: Yes. I tend to think that if we were to concentrate early on important problems we could allow some things to assume a lesser priority and perhaps have less intrusive regulations for them. That in essence was the recommendation of the Science Advisory Board. But obviously you don't do that overnight.

Of the statutes that are up, the Clinton administration has not been able to get Congress to reauthorize a single environmental statute in this congressional session. Many are very important: Safe Drinking Water Act, Clean Water Act, Superfund, Resource Conservation Recovery Act, Endangered Species. Not one of them was reauthorized. They didn't even come close. When it's time to consider the complaints of the governors and the mayors about unfunded mandates, or of the business community about excessive regulation, or some of the more arbitrary and indefensible prescriptions in those laws, one has to recognize that status quo is hard to change, and we seem to be stalemated in the Congress on things environmental.

HKS: You commented elsewhere that there is an enormous burden on the small communities. In the town that's barely large enough to be incorporated, you basically have a volunteer government except for the police department. How are they to handle nine thousand regulations?

WKR: We did a publication, a substantial publication, that tried to put all of the regulations applicable to a community, particularly a small community, together in one book. And it's daunting. The New England congressional delegations were concerned about it. Many of those small towns in New England have volunteer city engineers or health inspectors or officials of one sort or another. They are now obligated by law to sign statements assuring that areas are not impaired, that drinking water has been tested and is adequate and healthful, that waste is being properly managed and disposed of, that underground oil tanks and gas tanks have been checked and removed.

One has to ask why anybody who is volunteering his or her own free time would want to take on those responsibilities with these kinds of burdens? Some of them I think are excessive and unrealistic, and many are just ill-suited to small units of government.

That is the area where I think the unfunded mandates have hit the hardest. There are no funds provided to these communities to get professional help for many of these problems. I would have thought that might have been addressed in some of the laws that were up for reauthorization this year, particularly the safe drinking water area, where the Safe Drinking Water Act requires an arbitrary twenty-five new standards for contaminants be prescribed every three years. It doesn't say what they're supposed to be. It just says do another twenty-five.

There are some contaminants that are very significant--and we ought to worry about them--but others that are not likely to even be found in the state because of agriculture and chemical characteristics. Nevertheless, the law is indiscriminate about both the prescriptions and the testing that is supposed to be done in various states.

I think it was Carol Browner, who was then commissioner or secretary of the environment in Florida, who told me they had to do eighty thousand tests in Florida in one year, many of them for things that weren't in Florida water, weren't used in Florida. That kind of thing needs revisiting, and it's not anti-environment to acknowledge it.

Enforcement

HKS: Enforcement. I'm affiliated with the Duke School of the Environment, and I talked to some of the students about what they want to be. They want to go to the EPA and enforce the law. They want to be cops. Is that a common position in your experience with new employees?

WKR: That's interesting. I hadn't been aware of that. I would have thought that lawyers and people in law schools might more likely take that approach.

Enforcement is vital to the integrity of the environmental enterprise. If the agency is not enforcing the laws, it isn't clear that much else it does will matter. It's got to do that at a minimum. All of my voluntary programs, my cooperative programs, the incentive-based approaches, were built on the premise that your competitor will gain no advantage by our laxness in applying the laws. You will be recognized and applauded for not just complying but in some cases going beyond what the law requires. But certainly everybody will have to do what the law requires.

I already told you that I'm very proud of our enforcement record. We put more people in jail for egregious environmental crimes in our four years than in the previous eighteen. And we also assessed more fines in our four years than had been assessed in the previous eighteen.

But it's not enough. If you look at the kinds of problems we have now, I think the image is of EPA smiting General Motors. Well, it's the general public now that really is the source of most of our remaining environmental problems. The corporations are under control, or getting under control. They are no longer the big issue. We have brought them into compliance, largely.

But getting people to have their cars smog-checked, or getting landowners to take wetlands protection seriously, or getting people to stop throwing their waste oil away, which they do in numbers that exceed by about sixteen times the total amount of oil spilled in the largest oil spill in American history, in Prince William Sound--these do not yield easily to enforcement. These don't yield that well to prescription. I think, frankly, that we have about run out the string on command-and-control regulation in this country.

HKS: Southern California is banning gasoline-powered lawn mowers, and propane grills, and so forth, so the state started stepping in.

WKR: Some states have always led the way. Most of the laws that we have are based upon some states having gotten out and proved that something works or looks promising. California in air pollution, New Jersey in waste, Wisconsin in wetlands protection. And so it goes. That's one of the good things about our system, I think, that we have these laboratories out there, the states, and they often pioneer. Southern California, of course, has a horrendous air pollution problem, an order of magnitude worse than that of the next nearest cities.

HKS: Typically, would EPA go to a violator and give him a warning ticket, as it were? And then prosecute?

WKR: It depends. It depends on how serious the crime is, or the offense. It depends on the degree of negligence, the question of who knew about the problem and whether he chose to disregard it, look the other way. There are a lot of considerations that enter into that. Context, motive, circumstances all matter.

Political and Career Employees

HKS: I read something in an article about you or by you, and I hadn't thought in this regard--the distinct difference between the political and the career employees and the role they play and the perceptions they have and how you dealt with them. Would you comment a bit on that?

WKR: The career people, obviously, are the ballast and main crew of the enterprise. Many of them have been there quite a while. They're quite professional. I was surprised when I got to EPA to see how balanced and savvy they were.

There's a stereotype of EPA employees. They're tree-hugging zealots, not mindful of the condition of the economy or the impact of their policies on business and the economy. That's the business stereotype. There's an environmentalist stereotype, which is almost the reverse, which says they're risk-averse, hunkered down, fearful to make decisions, tend to play out decisions over-long and miss milestones. I found that they have many more responsibilities than they can effectively shoulder, as a consequence of the statutes that EPA administers.

They need to be more accommodating to the changes in the government, in the federal system, in the country, since some of the first laws were passed. Much of that is the consequence of distrust of the states, which can be eliminated, should be eliminated, in the time when we're so concerned about economies in government.

I tended to treat the political and the career people similarly. As someone said at one of my farewell receptions, we didn't have a large gulf between the two. I don't think there was any serious distrust on the part, certainly of the political people for the career people, or vice versa. It was a relatively congenial, I think, professional operation.

HKS: The political people take the heat in Congress, ordinarily. Because a career person would jeopardize their tenure.

WKR: Yes. I wanted to increase the number of political people and add a new political deputy in each of the assistant administratorships, precisely because I had seen that. In the long hiatus between the departure of one political appointee, an assistant administrator, and the confirmation of another, it was the career deputy who had to step up and carry the water and defend the agency's policies in Congress, and often alienated people in the White House. I remember seeing on the resumes of some of the career people who wanted to move up to political appointments, notations in White House personnel files that he or she is particularly cozy with Waxman, or seems to be awfully close to the Baucus staff. Things of that sort.

Well, typically, the reason for that was just that somebody had to represent the government with the Congress, and the career people, when they did it, didn't have the full confidence of the political enterprise, the White House, OMB. And they suffered. However, when I proposed to add political deputies to the assistant administratorships, the roof blew off EPA, and the professionals were deeply anxious about what that portended. They didn't believe it came from me, though it did. I backed off it, leaving it up to each assistant administrator.

HKS: I saw a comment somewhere that you had lunch with Ruckelshaus after he was in the private sector, and the whistle-blowers got on your case for that. Is a whistle-blower somebody who just decides to be one?

WKR: There aren't too many whistle-blowers. I had the misfortune not to have encountered in my career in government someone I considered to be an effective civil servant and government employee who was also a whistle-blower. There certainly are some, but there also is a breed that recognizes that he or she may be at risk for malfeasance or incompetence and quickly tries to claim the mantle of a whistle-blower by reporting something to Congress or to the press which makes them relatively invulnerable to disciplinary action, or to dismissal. I'm afraid we confronted some of that.

It's a consequence of our protections for whistle-blowers, which are very strong. I had one whistle-blower who consistently caused senators and congressmen and governors fits, as he would travel around the country saying that waste sites were unsafe, or EPA was incompetent if not fraudulent in the way it was administering certain laws. When I would get telephone calls, I would delight in reminding the senator or the congressman that the kind of protection under which this individual operated had been provided by the Congress and that therefore he belonged more to them than he did to me. There wasn't anything at all I could do about that.

Voluntary Programs

HKS: The voluntary programs struck me as a pretty good idea. Maybe I'm a conservative, as you are. Were they controversial? Who would be opposed to that?

WKR: The voluntary programs, I thought, were based on a simple premise: that is, the laws are here to stay. The public wants the environment improved, has expectations of business and everybody else that they will be improved, and we all swim in the same sea. So business has not only to comply with these laws, but to be seen to be complying. And that it would be an advantage if business were seen to go beyond the laws to help solve environmental problems.

I also thought, frankly, though I didn't say, that successful cooperative programs with industry would change the culture in EPA, would cause EPA professionals to realize that we can both enforce the law and also cooperate with the regulated sector. There are statesmen out there in the economic sector.

The environmental community was wary of these proposals. Their reaction was, "Don't you realize it's your job to kick ass and take names? What are you doing getting in bed with these folks?" And the press explicitly had some of those reactions. At the press conference at which I announced the 33/50 Program, the toxics reduction program, my answer was to say, "Look, I expect to be around when the first milestone comes along, 33 percent reduction in these toxics by 1992. Suspend your judgment, and let's see if we can get there." Well, we did. We exceeded the goal by quite a lot and reached the 33 percent goal a full year ahead of schedule. We in fact got 33 percent reductions by 1991.

I think the heat was off then. The criticism had abated. Industry was wildly successful and very positive toward these programs, and people in the agency began to look for more. So, by the time I left, we had half a dozen such voluntary programs.

HKS: When I was at Marion Clawson's the other night, he commented he had a new air conditioner installed, and his electrical bill dropped by 50 percent.

WKR: Yes.

HKS: I'm sure EPA is somewhere behind that.

WKR: That's right. We had the Golden Carrot Refrigerator program, which was designed to do that for refrigerators. Americans have never been willing to buy very energy-efficient refrigerators because they cost more, at the initial sticker, though they cost much less over the life of the refrigerator, and refrigerators last about nineteen years.

We got the utility industry to put up a thirty-million-dollar pool to fund, to guarantee, the purchase of a refrigerator that met certain environmental criteria. Whirlpool produced one, and it's now on the market. Those are win-win opportunities. Everybody gains.

Cross Media Attention

HKS: What's cross-media attention?

WKR: The approach the country has had to environmental protection--partly because of the history I described, where we have had separate entities for water pollution that came from the Interior Department, for air pollution from Health, Education and Welfare, for radiation that came from the Atomic Energy Commission, and toxic pesticides which came from the Agriculture Department--was to act as though the agency has done its job when it gets a chemical out of the medium of concern to that law.

In fact, we discovered in the early 1980s that the largest single source of air pollution in the greater metropolitan Philadelphia area was--what would you guess with all those refineries, petrochemical plants, industries? It was the wastewater treatment plant! The wastewater treatment plant was stripping--that's what it's called--creating water pollution by aerating polluted waters. And I guess it shouldn't have taken a rocket scientist to figure out well, that's going somewhere, all those hydrocarbons, volatile organic compounds, everything else, going into the air.

It raised the problem and the specter of just playing a shell game in the environment, moving the stuff around rather than dealing with the problem. The air pollution law wasn't regulating wastewater treatment plants then, wasn't even aware this was a big source of air pollution.

The largest source of toxics in Lakes Michigan and Superior, something like 90 percent, turned out to be air deposition. Well, the water people couldn't get at that, and the air people hadn't even recognized it, weren't even trying.

So the cross-media insight says, "Let's ask a different question. Let's not ask, 'How can we get this pollutant down in this stack or this emission or this effluent from this medium?' How can we address the totality of the environmental problem? What is the best place to intervene in the environment against this pollutant. Or, with respect to a particular plant, rather than looking at this stack or that effluent, what is the best thing we can do to improve the environmental contribution or performance of this plant?"

HKS: Sounds like ecosystem management.

WKR: Well, ecosystems do operate on the concept of a total environmental concern, of a comprehensive concern.

EPA Structure

HKS: You said that EPA was created by bringing four basic agencies together. Did you ever wish that there had been a fifth? Did you see something that was missing in this?

WKR: I personally am very interested in land use. But I don't harbor any illusions that we're going to address land use effectively from Washington.

HKS: What other agency might have been brought into EPA that would have met some other need?

WKR: I think that the National Oceanic and Atmospheric Administration would be an ideal complement for a lot of EPA's strengths. EPA's regulatory strengths, its legal skills, its enforcement capability need to be, I think, supplemented by a more scientific orientation, perhaps a broader perspective on atmospheric problems.

We're discovering the importance and complexity of climate change and ozone depletion. Some of these problems are vital environmental health concerns. NOAA would make a very useful addition, I think, to EPA, and probably work to the advantage of strengthening science in an agency that has seen itself as essentially concerned with getting out regulations.

HKS: Has that been discussed seriously that you know?

WKR: It's been discussed in the agency, but I don't think it's a near-term possibility in the Congress. It's something that President Clinton might have done early in his term. Those things get more difficult as time goes on.

The Nixon administration proposed reorganization. They were going to have a Department of Natural Resources, you may remember. And that didn't go anywhere. Those things run up against a very entrenched committee structure in the Congress.

HKS: Carter had proposed a reorganization, too.

WKR: Did he? I've forgotten.

HKS: And he ran into the same problem. Congress wasn't interested.

Transition from Bush to Clinton

HKS: The last general question, or topic, I have is the transition to the Clinton team. The election results are in. You know you're going to be involved in transition. Is it voluntary on the part of all agencies to provide a transition book, or do you just wait for the coming administration to contact you for cooperation? How does that work?

WKR: My transition was arranged by Lee Thomas, and the people he appointed to oversee it. They prepared briefing books, really at their initiative, because they knew what a new administrator needs to know better than I did. I had never been there.

In the course of, I suppose, almost two dozen long briefings that took place in the WWF offices, they both gave me an exposure to the kinds of concerns I needed to be aware of early in my term, the kinds of

questions I should be prepared for in my confirmation hearings, but even more important, the quality of the people and the diversity of the contributions that they could make at EPA.

I viewed the transition to my successor in that light. I remember saying to our people, "I want you to make a maximum possible effort to ensure a classy transition. I can tell you from my own experience, this is the first sustained impression of the agency that an administrator is going to get. Make it a good one." So we did. I appointed somebody to run it. Our people prepared the books and had the briefings ready and everything.

She didn't take advantage of a single one. She chose to employ a different strategy than I did. She proposed to be able to say to the Senate committee, "I'm not informed about that issue. I've not gotten into it. I've not been briefed on it yet. I'll get back to you. That's certainly an issue that I'm interested in, concerned about, and will take seriously."

I didn't do that. I chose to try to show the committee where I thought priorities in the country ought to go in the future. I laid out, as you've seen in my confirmation statement, some new directions. My hearing, however, was five hours long. Hers was about two [chuckling].

HKS: [chuckling]

WKR: We both were unanimously confirmed. So you can't say her strategy failed. It worked fine, to get her confirmed. Honestly, I think I had something of a different concern. I was dealing with a committee controlled by the Democratic party, and I therefore was treated, I guess, more in an adversarial way than she. She knew she would have friendly people controlling the agenda.

But I also was able to garner a great deal of attention for what I said and to get my hearing on the front page of *The New York Times* and other such places. It established a new direction. I thought it established me as a player. It laid out the early initiatives that the Bush administration would be associated with. I committed us to propose a new Clean Air Act and to phase out ozone-depleting substances, a whole range of things.

In not doing something of that sort, I think she forewent an opportunity to put her stamp on things from the start. But those are different styles.

HKS: Did you look at Clinton and Gore's environmental promises and structure your briefing books around that? With the assumption that that would be the candidates' primary concern?

WKR: Well, the promises weren't so explicit with respect to statutory changes that that was always relevant. But where they were, we made sure that those issues were well-covered in the briefings, because obviously they would be interesting to senators.

So the issues likely to arise were covered but, as I said, the briefings never took place. But they were prepared.

HKS: I saw the Forest Service briefing book. It was maybe an inch thick.

WKR: I doubt you saw the only book prepared. You mean for a new chief of the Forest Service?

HKS: No, it was for the transition team.

WKR: I see. Okay. Well, there would be one for the transition team, because then, when the administrator comes in, lord, I must have had twenty books for all the different programs.

HKS: I was surprised with the candor when laying out the future. It assessed members of Congress, what side they're on, and pending legislation. And I thought certainly this is not a secret document. If I had a copy, and Congress could get a copy of that, and it would raise hell in the confirmation hearings.

WKR: It was produced by the outgoing transition? The outgoing party, is that it?

HKS: It was a Forest Service publication.

WKR: Congressional relations?

HKS: The chief signed off on it. Dale Robertson signed off on it, presumably. His assessment of the situation. These are the strengths, the weaknesses. For the incoming administration. Assistant secretary, I guess, would be the one who would be looking at this.

WKR: That's interesting. I included in EPA's transition briefings for my successor material about the specific interests of congressmen and senators.

Clean Air Act

HKS: During your confirmation hearings, you and essentially all the senators agreed that the Clean Air Act was high priority. How was that arrived at out of this long list of potential things?

WKR: The Clean Air Act had not been reauthorized since 1977.

HKS: So what does that mean?

WKR: That means that the air pollution problem as it was understood in the late 1970s and reflected in that statute had not been revisited, despite the availability of a lot of new information. The law did not adequately address air toxics. We just weren't controlling them. And it was widely agreed that that provision needed fixing.

There was no effective control for acid rain. Bush had committed to deal with acid rain. The smog problem was still out of control. More than a hundred cities in America were not in attainment for their health standards, primary standards, for ozone smog. More than forty cities were out of attainment for carbon monoxide.

It didn't take a genius to say that this act needed substantial overhaul. Bush, himself, of course, had committed in the campaign to address acid rain, on which he said, "The time for study alone is over now. Now is the time for action." Bush had also committed to propose a comprehensive new clean air act.

Senator Mitchell, who was a member of the Environment and Public Works Committee, had worked throughout the 1980s to try to get some attention to the acid rain problem, which particularly concerned the citizens of Maine. Other senators on that committee were invested heavily in the whole clean air issue and had tried to move clean air legislation. They had confronted Senator Byrd's opposition and Congressman Dingell's in the House, throughout the 1980s, so there was some excitement at the prospect that environmentalist Democrats were going to be able to ally with the administration Republicans to achieve something that had eluded the Democratic majority in the Congress throughout the 1980s.

HKS: You've answered my next question. It really took the initiative of the administrative branch to get something going. Congress, itself, wasn't going to get a bill out.

WKR: You never would have gotten a bill without the administration's support. No way. Everybody understood that by then.

HKS: For that particular bill. There might be other bills that would go through, but--

WKR: There had been other laws that had gone through without enthusiasm on the part of the administration. Superfund is an example of that. But certainly nothing as expensive and controversial and divisive as clean air. Regionally divisive, and divisive in terms of industries and impacts. Pervasive in its effects on the economy and the society. Intrusive with respect to enterprises that had not previously been affected, like dry cleaners and big bakeries and gas stations. It was a tough law, and for that you really needed heft, a White House alliance, to do it.

Capitalism and Pollution

HKS: I was a graduate student during the late '60s. I was quite a bit older than my fellow students, who tended to be more radical. Maybe if I had been the same age, I still would have been less radical. But I kept hearing that capitalism was causing pollution, and go to Europe if you want to see clean air. Are we the world leaders in dealing with environmental issues?

WKR: I can recall Barry Commoner used to make the case that socialism was the answer to environmental problems. That is not something I've heard anybody say in the last ten years. The widespread environmental degradation in Russia and Eastern Europe totally discredited that line of thinking.

HKS: Yes.

WKR: The free market economy turns out to be very good for the environment. It creates problems for the environment, externalities, that obviously are shifted to the rest of us from industries which are not made to pay for them. But these things can be corrected, and market economies generate both the information and the technologies and also the resources to manage the environment.

You have, in a place like Eastern Europe, or had, the worst possible combination of no growth, no money, and governments that lied to their people, so you often had people suffering high rates of premature death or infant mortality or emphysema, without knowing that their factory was making them sick. Totally uncontrolled for pollution. Something that wouldn't have been conceivable in a democratic system.

The United States does lead the world in terms of environmental achievements. Our air is generally cleaner than that of many of Europe's cities. An illustration of the disparity in approach is that there exists now in the whole of the United Kingdom, I believe, twelve air pollution monitoring stations. That was increased from eight at the time of the Rio Conference a couple of years ago. And the secretary of state for environment of Great Britain took great pride in announcing that they had achieved a 50 percent increase in the total number of air pollution monitoring stations. We have more in Washington, D.C.

We invest much more in pollution control. We were the first to eliminate lead in gasoline, by ten years or more. We were the first to prohibit non-essential uses of ozone-depleters as aerosols in deodorants and hair sprays, back in the late 1970s. The United States has really written the book on how you control pollution from automobiles. The catalytic converter was developed in the United States, and our air pollution standards for automobiles today exceed those of any other country in the world.

We brought back the Great Lakes and many of our river bodies, and we have fish returning to rivers they hadn't been seen in for a hundred years. This is a marvelous achievement, and it is a measurable

achievement. Now, it's an extraordinary thing because, first of all, government isn't supposed to work, be good at anything, right? Second of all, the environment is going to hell in a handbasket.

These are tenets that are believed by extremely bright students. I teach at Stanford. I tell them that in terms of the objectives of the laws that we passed back in the early 1970s, the country has succeeded on the environment. It is the single most successful public policy enterprise of our time. You can measure it. Particulates in cities are down two-thirds. Carbon monoxide, sulfur dioxide down about a third. And lead is down around 97 percent.

These are magnificent accomplishments. They weren't easy, and they weren't cheap. But we have done them. You can't dispute it. You can say there are problems that remain to be addressed, but you can't say we haven't made terrific progress. Even Los Angeles today is vastly less polluted than it was twenty years ago.

These things are forgotten. We somehow don't take enough pride in our environmental achievements in the United States. Partly, environmentalists don't like to talk about our achievements because they fear it will be used as an excuse to do no more, to baptize the status quo. Mark Shields said not long ago that it was extraordinary that the country had achieved so much in the environment, but neither Republicans nor Democrats talked about it. He said there's a reason, there's a conspiracy: Republicans don't want to admit that government, and particularly regulation, works; Democrats don't want to admit that most of this progress occurred under Republicans.

HKS: John Whittaker's book, *Striking a Balance*, unfortunately is out of print now--I used that as a textbook. It's amazing how much happened under the Nixon-Ford administration. It goes against all the stereotypes.

WKR: As I said earlier, read the Tom Wicker book that came out on the Nixon administration. He says that it was the most creative in domestic policy of any recent presidency, and mentions the environment among its major accomplishments.

HKS: There must be something about the way we're raised, our expectations for our country. We're so hard on ourselves about race relations, and rightly so, the way the natives have been treated and the blacks have been treated. But go around the world, and we're not the bad guys. We've been progressive in a lot of ways, and yet we refuse to accept that.

WKR: The rest of the world has difficulty, holds us to a high standard, because we're rich and powerful. It was popular in Rio to bash the United States, although nobody there, I think, could ever have argued that we were a greater malefactor on the world environment than some of our trading partners, like Japan.

Total Quality Management

HKS: Totally quality management. TQM. How does that differ from cross-media attention, or are all these different aspects of the same--

WKR: Cross-media is a concept about regulatory focus and implementation of laws. Total Quality Management is an approach to the work force that suggests a different mode of addressing problems: greater attention to possibilities of delegation, sharing of information, more respect for relationships among employees, less compartmentalization, encouragement of risk-taking and the development of new ideas and proposals, creating an atmosphere in which it's safe to suggest all kinds of ideas.

It's a style of management that the federal government is very slow to see and accommodate. It's been accepted and promoted in some industries very successfully for some years. In government, it's a little harder, where the measures of progress and performance are more imprecise.

But I thought it was important to introduce at EPA. My deputy, Hank Habicht, was passionate on the subject, and I went through Total Quality Management training, as did many of my top people, a very large number of them. I think that, by the time we left, it was more than a fad. I think it was catching on. I think our people were realizing that there is something to this.

One of the principal advantages it ought to have is to get more productivity out of the work force by reducing second-guessing, oversight, and duplication. It allows you to assume the guy making the decision is qualified, trained, and is doing the right job, without your constantly looking over his shoulder. It also promotes a customer-focused concept of service.

Forests

HKS: I want to ask one specific question about forests. The G-7 summit at Houston and Forests For the Future. Are forests an important part of the environmental issue? A full third of the United States is forest lands.

WKR: That initiative came from me! So I'm particularly familiar with it and very proud of it. I was asked to brief the president on the G-7 meeting in Houston. We ascertained that Chancellor Helmut Kohl of Germany was going to press him very hard to make commitments to stabilize greenhouse gases. I knew that Kohl felt passionately about forests and proposed a deal, that in the president's own home town of Houston Mr. Kohl not embarrass President Bush on climate change or try to get him to make a commitment he was not prepared to make to stabilize greenhouse gases. I suggested instead that he let President Bush propose a world forest convention.

As the German environment minister said to me, "Well, the chancellor feels strongly about climate, but he's crazy about trees." [chuckling] He took that deal, and we proposed a forest convention. I had long felt that forests were extremely important, not just for the climate-regulating contribution they make. Tropical forests particularly, which are a very small part of the world's land surface, harbor 50 percent or more of the flora and fauna in the world, and many of them are going fast, in Madagascar and Thailand and Brazil and Guatemala and Costa Rica and many other places. So that made a very useful dovetailing, I think, of interests and concerns we had.

It also conformed very directly to President Bush's own interest. I hardly took a trip with him for a long period, like that first year or so in office, when he didn't plant a tree. Everywhere we went, it seemed we were planting trees. In fact, I remember we introduced the gypsy moth to Montana on one of our saplings.

HKS: [laughing]

WKR: I joked about that in a speech one day, and someone asked me at the White House to please not reiterate that. It was discovered after we brought the tree out, so we got the tree and brought it back. It was something of an embarrassment.

HKS: Was that the thousand points of shade joke we used to hear about, that Bush had planted a tree?

WKR: No. [laughing]

Global Warming

HKS: About 1962 I was in school and took a course in climatology. The first edition of that book came out in the mid-'30s, by a German, and described the greenhouse effect. So the concept was well-known in the '30s.

WKR: Yes.

HKS: Global warming. I don't know if it's a buzzword. There's a lot of controversy. Well-trained people who are skeptical that we really know.

WKR: Yes.

HKS: And they have no vested interest that I can determine. They're challenging the popular view. Is that one of the areas where the science is a little bit murky?

WKR: Yes. Science can tell you that the carbon dioxide component in the atmosphere has increased about 30 percent since the 1700s. That is indisputable. Science can tell you that within the last hundred years, the temperature of the Earth has increased by about one-half degree Centigrade, one degree Fahrenheit. The global mean temperature. That's about all scientists consider established and not subject to disagreement.

I don't think there's any other scientific information on which a consensus exists among the scientific community with respect to climate change having been confirmed as caused by human actions. There are hypotheses. Historically, periods of high carbon dioxide concentration in the atmosphere have been associated with warming. We know this from having sampled ice cores laid down millenia ago, and from archeological discoveries.

There is a great deal of attention and money being allocated now in this administration, \$1.8 billion, trying to get answers to the climate change questions--a lot of it committed to expenditures by NASA on observations by satellite. Probably within the next ten years we will get some more definitive signal from nature, from the environment, from this research about whether climate change is occurring.

But the dispute is raging about what to make of some of this data. There are computer models which project global warming based on atmospheric loadings of carbon dioxide and methane and nitrous oxide. However, those computer models, when re-run with data from the last hundred years, do not conform to observed experience. Moreover, of the half-degree Centigrade increase that we have seen in global mean temperature, most of it occurred prior to 1940, whereas most of the industrial emissions that presumably should have made the largest contribution to warming, have occurred since then.

There are disputes about the role of water vapor in clouds and so-called "feedback mechanisms" and regulation of climate. There are uncertainties with respect to how much carbon dioxide is being taken up by the ocean. There's actually part of the carbon dioxide budget that cannot be accounted for. That is, we are emitting much more than we see sequestered in the known uptake, both on land and in the sea. So constantly we're revising things. Recently we have revised our understanding of how much vegetative uptake of CO₂ is going on. Scientists are concluding that it's more than had been believed, which may suggest the forests are even more important than we had thought. But all of this is somewhat murky, tentative, and inconclusive.

My own approach to this problem, throughout my EPA tenure, was not different from what I just described. I was aware of most of this information, was well-briefed by my own people, by the National Academy of Sciences staff and others. My judgment was that the president should have embraced this cause. He had said in his campaign that he would apply the White House effect to the greenhouse effect.

He did embrace it to the extent of putting substantial monies into research on climate change, \$1.2 billion a year in our last year in office, and I thought he should propose voluntary programs of the sort that we were doing at EPA to promote energy efficiency, and ideally a substitution of pollution taxes for other taxes to try to reduce the country's dependency on fossil fuels.

I used to tell him this is in the national interest, in terms of our national security concerns, our balance of trade, and our economic interests, as well as, it would appear, possibly, our environmental interests. Certainly reducing the pollutants associated with current fossil fuel use would benefit the environment, apart from its role in affecting climate change. I believed, in other words, that there was nothing we were likely to do, or that I would ever have proposed we do, to deal with the possible problem of climate change that was not otherwise in the interest of the United States.

I thought politically it was important for him to be out in front on the issue, and I thought that it was the better part of caution to take some of these measures as well. Climate change came to serve as the measure of political commitment to the environment during the Bush administration. It was to us what the acid rain issue was to the Reagan administration, the defining, emblematic test of how serious we really were. When the Gulf war came along, I was very disappointed that we didn't propose any energy conservation measures, because I think that could have mobilized the public around Bush at that time. It's easy for me to say that, however. In retrospect, we see what happened to President Clinton's proposed BTU tax. It went nowhere.

We saw when President Bush and the congressional leadership did propose a gasoline tax, our head was handed to us. I was one of the people trying to publicize and popularize that around the country, and I can remember I was on talk shows in New England where people were livid about the idea of seeing their heating oil costs go up. In the Midwest people were worried about tractor diesel fuel taxes, and then down in the oil patch they said, "We've had a better part of ten years of depressed oil prices, and here it comes again. Under an oil man as president." The western senators wouldn't have it because they said, "We spend more, just because of the extensive land areas westerners have to cover, on gasoline than any other part of the country. This is regionally discriminatory."

In other words, the gasoline tax is the third rail of American politics, and a politician doesn't touch it. One has to respect that. Bush tried and later settled for something much less than he originally set out to get. Clinton tried and got nothing like what he wanted.

HKS: So on global warming we're doing a lot of research to find out really what it is?

WKR: Yes.

HKS: And we're doing logical things, also of a broader benefit to balance of trade and so forth.

WKR: We called it the "no regrets policy" in the Bush administration.

Non-Point Source Pollution

HKS: Explain what non-point source pollution is and why it's so significant.

WKR: Non-point source pollution is diffuse pollution. It's pollution that does not come from the end of a pipe. It's pollution that rolls off farm tracts and city streets and roofs and parking lots that often contains petroleum or pesticides or herbicides in large concentrations and gradually works its way into the groundwater or into the streams and rivers, lakes, and estuaries of the country.

It's a serious problem and it's unaddressed as a matter of national policy. There is no effective control in the Clean Water Act for non-point source pollution. There are regulations now in development that are supposed to control runoff, but they're relatively new and still untried. There's great resistance to any of the associated land use controls that typically are necessary to control runoff, even though non-point pollution is the cause of more than 50 percent of the nation's water pollution problem.

Now, partly that's because we've addressed so many other water pollution problems. We've gotten the wastewater treatment plants up and relatively efficient. They continue to spew out excessive nutrients, in many places, but the fecal coliform and some of the other problems associated with untreated wastewater have been largely addressed. Non-point source pollution, however, remains to be faced in the Clean Water Act. I had hoped that it might be faced this term.

HKS: In the city of Durham for the past several months, all properties, even churches, have been assessed a runoff fee based upon the square footage of the roof and the parking lots, paved parking lots, and so forth. It's been blamed on the feds. For our home we pay, I think, nine dollars every three months.

WKR: Is that right?

HKS: And that goes into a fund to deal with runoff.

WKR: What do they do with the money?

HKS: It's not clear what they're going to do. They lack the infrastructure, but they have to implement something. This is federal pressure brought to bear, and I figured that EPA must be involved somewhere in this.

WKR: Well, it is. We did propose those regulations, but EPA has not been able to get a strong handle, particularly on farm runoff, to date. These measures are going to entail some cost and expense. Plans are required of the major users of land, and parking lots are definitely included. And they're necessary if we are to get on top of the problem.

HKS: Of course, farm lands are exempt, as are lawns and our home gardens, and so forth. It's just the blacktop and the roof.

WKR: Yes.

HKS: So that's a way of easing into it, I suppose.

WKR: Probably.

HKS: I was interested that they emphasized that churches were not exempt from this assessment. Churches don't get hit on too many things.

WKR: No, they don't. [chuckling] You can say they only get used Sunday mornings, too, most typically. But when it rains, whether their people are there or not, water is running off those parking lots and washing the accumulated oils and greases with it.

Superfund

HKS: I don't understand the Superfund very well. The publicity about it is generally not good, at least of what I've been reading. We spend a lot of money cleaning up very few sites. Is that because we started at the very worst sites?

WKR: Partly. We have about twelve hundred and fifty National Priorities List sites. There are some three thousand that have been surveyed in detail, and the number of priority sites will probably go up to over two thousand that are finally listed on the National Priorities List. About a fourth of those sites are federal facilities. Those are particularly complex, many of them. The energy facilities sometimes contain nuclear radioactive and hazardous waste combined, and we don't honestly have the technologies to address that problem adequately.

The law never prescribed the precise cleanup standards that the agency should achieve with respect to sites, so the agency set standards very conservatively. It did that particularly in light of what happened to the assistant administrator for waste in the early Reagan administration, who went to jail for sweetheart deals and lying to Congress about them in her term.

It is possible, however, to address these problems, I think, without giving up on Superfund. In my last year in office, we cleaned up a Superfund site every five days. That didn't get much publicity. People continue to want to talk about how many sites are still out there and how many didn't get cleaned up.

HKS: I've read that number, one per week, and then that didn't jibe with what I'd been reading in press.

WKR: I know. EPA for a long time, I think, created its own problem by not counting a site as clean until it had been clean not just once but had remained so for five years. Kind of like a patient with cancer. They wanted to make sure they'd gotten it all. So if it hadn't recurred for five years, EPA was willing to certify it and take it off the list.

That was silly. I remember Senator Chafee, a good friend of Superfund, said to me once, "You simply have to report the progress in this program." Well, the really great progress was the removal from more than three thousand sites of barrels or leaking drums, all over the country, emergency removals typically. That's the biggest risk reduction in that program.

Another great contribution of that program is that the strict liability it carries means that there isn't a corporate chief anywhere in America with half a brain who would look the other way while waste was trucked out of the back gate of his plant. People know that it's your problem and you've got to address it, and just because you don't know what happens when a transporter carries it off, is no defense against liability for a site which took your wastes and which may get on the National Priorities List. That's been a constructive response to Superfund's liability scheme, that people behave much more responsibly toward waste today. They are minimizing their waste in corporations, minimizing what's taken off-site, minimizing their use of products that create toxic chemicals as residuals, as waste.

There are some reforms that need to be acknowledged in the re-authorization of Superfund. I wrote a piece in the *Washington Post* a few weeks ago about that, and the Clinton administration has a bill that incorporates a lot of those ideas. Once again, it's not going anywhere in the Congress, and I don't know the degree to which the administration has made a priority of it.

HKS: Does something become a Superfund site based on some magnitude of stuff?

WKR: There is a Hazard Ranking Evaluation that's done, and if you get above twenty-eight point five points on that so-called "HRE," you've got a Superfund site. That's measured according to persistence in the ground and soils and water of certain kinds of toxics, of nearness to human beings, to habitation, and threats to drinking water, and so forth.

HKS: So all these abandoned service stations.

WKR: That's not enough to get them on the Superfund.

HKS: The EPA is involved.

WKR: Oh, yes. That's also part of the waste program at EPA, to clean up leaking underground storage tanks. That's right. But that's not, strictly speaking, part of the Superfund program.

HKS: Just about a block away from our office there's an abandoned service station, and I guess there are various options. You can monitor it for five years to make sure it's not spreading, or you can dig it all up and cart it away. So it's the owner's option. The government doesn't say how you deal with it, but.... North Carolina is a port of entry for some nuclear waste that's coming in from Europe. Some of the local--we'll call them environmentalists, I'm not sure who they are--are picketing the military entry point near Wilmington. And it's going to be taken by train, with helicopter escorts and all that, into South Carolina. Does it make sense for us to accept European waste?

WKR: It may well. We now see hazardous wastes going all over the country, according to its character and constituents and size and the appropriateness or availability of certain kinds of cleanup technologies, remediation technologies, high-temperature incinerators and cement kilns, things of that sort. There's no reason for every state or even every country to have a full panoply of waste treatment capacity. That would be wasteful, itself. So there is specialization in waste treatment. And South Carolina, of course, has radioactive waste disposal capability, and it may make sense. I'm not familiar with the specific waste that's coming in, but it may well make sense for it to do so.

The other side of that coin is in the exporting states. There's just no way you could get certain kinds of waste disposal facilities, God help us, a nuclear waste disposal facility, in a state like Massachusetts. Nobody thought that Harvard's medical school and Massachusetts General or other fine hospitals there should dispense with radioactive isotopes in dealing with cancer and other health problems that they do. That generates waste.

Hazardous waste is an unavoidable, though reducible, consequence of the way we lead and organize our lives in a highly technological society.

Coastal Pollution

HKS: Coastal pollution. Is that an issue, because the sources of pollution are from off-shore.

WKR: Coastal pollution is typically the consequence of runoff from farms and fields and what's flowing from the rivers and the mainland. It's much less often a consequence of pollution at sea.

HKS: It's not ships pumping out their bilges?

WKR: Not typically, no. No, there's something like 40 percent of the shellfish beds in the Gulf of Mexico closed at any one time because of the pollution in the Gulf, a serious problem. But most of that is a consequence of what's flowing out of Texas, Louisiana, Florida.

HKS: Pesticides. I can remember growing up, it must have been in the late '40s. We had an aerosol can of DDT. We used to spray flies. There were absolutely no warnings.

WKR: "Quick, Henry. The *Flit*."

HKS: You kill a fly and you watch it die. So we've come a long ways since then. We have the cheapest food of any country in the world, in part because of pesticides.

WKR: And can continue to have pesticides. I think we simply know a lot more about these chemicals than we used to, and when we subject them to the rigorous testing of modern science, discover that some of them create problems we never anticipated.

My science advisory board did not rank pesticides in the top tier of health threats or concerns to the American public, at least as a consequence of food residues. But it did rank pesticide risks high for the applicators, the people who apply them. For the applicators the scientists concluded that pesticides constitute a major risk. In that area, we have hospital admissions every year. That's the area I would emphasize. Protective clothing, rules for applying pesticides--that I think is very important.

HKS: Does that overlap with OSHA regulations?

WKR: Yes, it does. In fact, OSHA should increase regulation, but wouldn't or didn't. That was why EPA chose to step out on the issue.

Wetlands

HKS: Living in North Carolina, this was a major issue for us. No Net Loss of Wetlands. How does that fare? Was that difficult from the Washington vantage point?

WKR: We have about a hundred million acres of wetlands in the United States, according to the latest surveys I've seen, roughly half of what existed when America was discovered. And they are falling to all sorts of uses, to impoundments and reservoirs and highways and developments of one sort or another, golf courses, draining.

Probably the wetlands protection program was the most unpopular I administered. Nobody really likes to be told they can't do what they want to do with their land. Even ardent environmentalists tend to balk at keeping their wetlands intact. The problem, I think, is going to entail a change in expectations. If you buy land that is wet and you understand that that will affect, constrain what you can do with that land, you'll pay less for the land, you will not be surprised later when permission is denied for much development.

We have not yet reached the point, however, where expectations have been altered. People look at wetlands and they think they're flat, easily drained, and developable, and often at lower costs than alternative lands. The No Net Loss of Wetlands commitment by President Bush was based upon an attempt to try to conserve all of the important values that wetlands have.

Ninety percent of the wetlands in Illinois and California are gone. That's true in many important states. The ducks are crowding into the remaining farm ponds and getting sick and diseased in some of those places because they have restricted habitat possibilities. I think we've lost 60 percent of the black ducks.

So it is a problem. The way we address it, if you're talking about controlling land use, is going to be controversial. What's unusual about that law is it is one of the few areas where you have direct federal regulation of land, and people aren't used to that, don't consider it quite legitimate, and resent the Corps of Engineers or EPA getting into it. But the more we learn about wetlands, the more we discover how effective they are at buffering floods, at controlling pollution, at taking up heavy metals and lead into wetland plants. One experiment, done north of Chicago, showed that something like 90 percent of the toxics can be removed in just a few acres of wetlands. What flows in as a polluted stream flows out as relatively clean

water. All of these functions are important, and therefore justify a vigorous attempt to keep our remaining wetlands.

HKS: How about the science? I remember seeing someone on television, professor so-and-so, an ecologist. "If it's wet at any time during the year, it's a wetland under the law." And then there were other definitions that were less stringent.

WKR: We went round and round in the Bush administration on delineating wetlands. I think the rule that we have at the moment says that if an area is inundated more than fifteen days of the year, if it has hydrological soils, soils that show that it is basically saturated much of the year, and if it has vegetation associated with wetlands, if more than 50 percent of the vegetation is hydrophytic or water-loving vegetation, then it's a wetland. That delineation became very controversial and was submitted by the Clinton administration to the National Academy of Sciences, which has a panel that is supposed to make a proposal on delineation of wetlands.

HKS: During this time, I was interviewing a family in south Georgia, near the Okefenokee Swamp. They own something like two hundred and ten thousand acres of forest land. Third generation of a family business. And by their definition of what a wetland ought to be, a full third of that land was wetlands.

WKR: Yes.

HKS: They were very concerned, partly about the uncertainty, but whether or not they'd be able to continue silvicultural practice or logging, whatever anyone wants to call it. Were they ever really jeopardized?

WKR: Well, there was a proposal made just at the end of the Reagan administration to change the delineation for wetlands that would have included vast areas of the country that had not previously been included. I backed off, abandoned that proposal, and came up with the one that I just described a minute ago that is now under review.

In point of fact, you can harvest in a wetland. People do all the time. Rice is grown in wetlands. You can cut trees in a wetland. What you cannot do is fill the wetland. You can't, in other words, eliminate the wetland. But you can even dredge it, as long as you're not filling it. So it's possible to get trees out of wet, forested areas. A lot of that has happened.

Converted wetland that had already been put into agriculture was, by the proposal that I issued, clearly excluded from regulated status. We did not attempt to regulate agricultural wetlands that had been converted prior to 1985.

HKS: Were you under a lot of pressure from the environmental community to be tough on wetlands? Was this a major environmentalist issue?

WKR: I used to wish that it had been more of an environmentalist issue. I used to wonder why is it that, when you have one point six billion privately-owned acres in the United States, only one hundred million of which are wet, this has exacerbated, excited so many people? And why isn't the environmental community succeeding in communicating to the country better than it has the values of these resources? Because we've known about wetlands functions for twenty, thirty years.

I was probably under less pressure from environmentalists to protect them than I was to develop them, or allow their development, from the business community and from realtors, home builders, golf course developers, the vice president's office, the Competitiveness Council, and groups like that.

HKS: Do you have any interpretation of that? I figured that was an important environmentalist issue, but you said it wasn't.

WKR: I don't want to say it wasn't an important issue to environmentalists, but I used to wish for more public education on the wetlands front than we had. There are so many people in the country who still look at an area and say "swamp" and wonder if it can be made productive, when in fact it is very productive! Something like two-thirds of all the commercial fish species in the sea depend on wetlands for some part of their life cycle or on other species' prey that do. I thought that a major effort at public education was warranted in this area. I didn't feel that it was taking place.

HKS: That's interesting. I'm surprised.

Exxon Valdez

HKS: Exxon Valdez. If there ever was a case of I-told-you-so, it was that. You've acknowledged your dismay over the lack of preparation. Are we better prepared now?

WKR: Yes, we are. We have plans for every major harbor in the United States that the tankers use. The oil industry has pre-positioned response equipment, booms, skimmers, things of that sort. In many parts of the world, we are much less prepared. Some oil companies, like Conoco, are committed to fleets that will be double-hulled, and already have some double-hulled tankers. We are much more aware, and I think industry is much better prepared, as is the Coast Guard and EPA generally, for an oil spill.

As a result of the Oil Pollution Act of 1990, plans have been submitted by the thousands to EPA by virtually every plant or company or enterprise that has oil on its property, as to how that oil is stored, managed, transported, segregated from contact with the environment, and the like.

HKS: When I was living in California, in Santa Cruz, there was a proposal to put a supertanker port in the so-called Salinas Trench, a very deep area right off the coast, so you could bring in the biggest tankers. Local opposition was, "Not in my backyard." Does EPA get involved in site selection for these sorts of things?

WKR: EPA's role is usually in setting standards or perhaps reviewing an environmental impact statement, but not in prescribing a specific site. That goes beyond EPA's responsibility. Those typically are state and local responsibilities.

HKS: If an oil line is authorized, as it was, logic says, "Well, it's got to go someplace." Is planning a complete package? In other words, you authorize the pipeline and also what's going to happen to it when it gets to the states?

WKR: No, no. Our "disjointed incrementalism," as Dahl and Lindbloom described our system some years ago, tends to be a little hit or miss, I think.

HKS: It's just too much to expect that you could--

WKR: No, we knew that the Prudhoe Bay oil would be delivered by pipeline to Valdez, but where it would go from Valdez was unclear except that it could not go to Japan. Obviously, it would come down the West Coast and go primarily to California, but that was not all planned or certainly regulated as a whole.

HKS: It can go to the states and then go to Japan?

WKR: No, it cannot go to Japan. That was one of the conditions laid down for the construction of the pipeline. That's in the law.

HKS: Were the Japanese upset about this?

WKR: Yes, the Japanese, you remember, supplied the pipe and were expecting to get the benefit of that oil. But I think it was the environmentalists originally who said, "We're not going to risk our Arctic environment and our Alaskan environment and coastal waters nearby to provide oil to another country. So we will force the opponents of this development to make the case only on U.S. need." And that essentially was done, so the oil was to be brought to California, largely, for refining.

HKS: I think Russ Train was involved with the approval of the pipeline.

WKR: He was on the Council for Environmental Quality when the pipeline construction first was enjoined. I was a member of his staff, and I got the action on that. We were startled when a federal judge enjoined the granting of the right-of-way permit, on the ground, the new ground, of failure to prepare an environmental impact statement.

So the Interior Department developed I think it was a sixteen-volume statement, most sophisticated and complete, acknowledging the possibility of a multitude of environmental problems down the line. The statement was more than adequate for purposes of the law, for the law required only analysis of environmental impacts. In the course of preparing the analysis, a number of things came to light. Environmentalists criticized the river crossings and their vulnerability to seismic shock, and so all of them were redesigned. But unfortunately preparations were not adequately taken for Valdez, the harbor and the sound.

HKS: How about some of the other concerns? I remember, the pipe is going to physically prevent reindeer from migrating.

WKR: The structure was elevated so that that would not happen, and there are crossing points that coincide with the paths that are typically taken by the migrating caribou. And those worked. The animals are doing fine.

HKS: So the pipeline itself has been successful.

WKR: Yes, it has.

HKS: How much longer is oil going to last, will the pipeline be used?

WKR: Well, if no new discoveries are made, I believe that the oil supplies taken out of North Slope, Prudhoe Bay, will tend to decline around 1997. They have already begun to decline. The peak has been reached. There is a very large amount of natural gas that's been reinjected into the North Slope, underground areas, and it may be that the pipe will be redesigned to accommodate transport of gas.

HKS: Will the pipeline be removed when the supply is exhausted?

WKR: I doubt it. Given all the oil that's thought to be under the Arctic National Wildlife Refuge and the outer continental area up there, I imagine that it will be left.

Two Forks Dam

HKS: The Two Forks Dam. I was in Colorado at the time that your decision came down. I was working with the Justice Department, and there was general approval by the government lawyers that this thing was stopped. That came early in your administration. The sixth week or something like that.

WKR: That's right. About five weeks in. The same day, by the way, as the Exxon Valdez. March 24th.

HKS: That's a pretty strong statement you made at that time. Did you see a ripple effect in other areas that we've got to get our act together?

WKR: I felt very strongly that we should raise the priority at EPA for ecology, that this was the biggest ecological decision that I had on my plate. The decision could have been made by the outgoing administration. They planned to approve it. My first briefing after I was sworn in as administrator of EPA was on Two Forks, and I asked for more information.

Not long after that, my regional administrator saw that I was getting rather deeply into the issue and began to suspect that I was thinking of a veto, and he said, "Your timing is not the best." Because so much planning had gone on, some forty million dollars had been spent on designs and lobbying and one thing or another by the Denver Water Board. My answer to him was to look him in the eye and say, "Your timing is not the best." I didn't need such a controversial decision as my first big call at EPA.

I also thought that a veto of Two Forks would strain my relations with the president and the White House. Certainly there was little sympathy there for that decision. The president's son, Neil, who lived in Denver, was very critical of the decision. The Denver, Colorado, Republican establishment was negative, highly negative. Colorado Republican Senator Armstrong was livid about the decision and was very public about his criticism.

In fairness to them, expectations had been created, plans had been under discussion, negotiations had taken place, and there was no federal money in this project. The idea that I would kill a billion-dollar project which contemplated no U.S. outlay struck them as excessive, intrusive, and wholly unjustifiable. On the other hand, I clearly had the authority under the law. The Clean Water Act gave me the responsibility to look at the condition of the South Platte, to worry about whether the cranes would survive in Nebraska, and whether wetland losses were adequately mitigated and whether fish populations would be impaired. That was a very significant environmental resource.

HKS: So you had downstream support.

WKR: That's about all I had at the time. Yes, I did. I had Senator James Exon of Nebraska. I later received a nice letter from Gerald Ford, who lived on the other side, the west slope of the Rockies, from which water had historically been taken to feed the growing appetite on the Front Range.

I simply thought that, as I looked at it, there were a couple of things wrong with the Two Forks proposal. One hint that there was something amiss was that the proponents wanted an eighteen- or twenty-year permit. EPA historically didn't do that. I think eleven years is about the maximum that EPA typically granted a permit for. You had to wonder, why did they need so much time if there was such an urgent need for the water? Well, there was no urgency. There was no near-term water need or crisis. Denver wasn't even metering all of its water. Water conservation efforts had not been very extensive.

The resource they were proposing to destroy was a magnificent one, a top-quality, four-star trout stream, of which there are only two or three in the state, and it was located less than an hour from Denver. You

didn't have to be rich to go there and throw over a line, either. You could just pull up your pickup and fish. I visited the place and saw ordinary folk using that resource.

There is a real question for me how long we can go in the West with water development, just taking more and more exquisite resources to accommodate a basically undisciplined, growing water demand, water thirst. I did believe that there were other alternatives available to Denver that had not been pursued, water management options.

HKS: I have read that some of the water that comes out of the Rockies is used to irrigate surplus crops. Did you get involved with Agriculture and other agencies?

WKR: I didn't on that one. Senator Armstrong and some of the Colorado congressmen acknowledged that the suburban water providers were going to be the primary beneficiaries of Two Forks water. The suburban jurisdictions would have to add to their water supplies to accommodate their growth. Armstrong and others said that they would go to Weld County and begin to dry up that county by buying up the agricultural water there.

Of course, in such a situation they would obviously be dealing with willing sellers who were freely choosing to sell them that water. It wasn't, on the face of it, clear to me why that would be a less advantageous approach than destroying Cheeseman Canyon. I don't know whether they have begun drying up those areas. But in some of the areas that were allegedly slated to be dried up, the water was in fact used for crops that are in surplus.

HKS: Can a municipality, a city, use eminent domain to condemn land to supply water?

WKR: Yes. Typically, water authorities do possess that authority. They're not always given it extraterritorially, that is, to operate outside their area, although the Denver Water Board has very extensive extraterritorial power under state law. I recall many years ago being in Denver and looking at a cartoon around the time that the first moon landing took place, and it showed an astronaut landing on a foreign planet and planting a flag, and the flag said, "Claimed for the Denver Water Board."

HKS: [laughing]

WKR: That was a measure of the power that was thought to reside in that agency, which, like a lot of western water agencies, was the primary determinant in whether or not you had a city, whether you could have a culture, whether you could have a civilization in the desert.

HKS: I flew into Denver about once a week during the same period, and I was always struck, driving in from the airport, that the underground sprinklers that watered the parking strips were all malfunctioning. Water was running down the streets every place. I thought, now, these people are claiming they need access to all this water. I don't know what it would cost to clean the dirt out of those sprinkler heads, but bad PR for all the visitors.

WKR: My assistant administrator for water, LaJuana Wilcher, went out to Denver prior to making the final decision about the veto, which under EPA rules were delegated to her. While she was being briefed at the Denver Water Board, it was raining. And the sprinkling system went on. It was just timed to go on.

HKS: [chuckling]

WKR: She looked. Everybody smiled nervously, embarrassed. On it went.

Amoco Project

HKS: What was the Amoco project?

WKR: You're well-informed. The Amoco Yorktown, Virginia, refinery was proposed by Amoco to some EPA people as a place to do a demonstration project to test the concept we had often heard expressed by engineers, that there are cheaper and more effective ways to control environmental problems associated with a large plant than merely paying attention to every jot and tittle of EPA regulations. The agency and Amoco cooperated in developing a research proposal and finally producing several volumes, which concluded that the engineers were right, that if you took one pollutant, for example, one substance, benzene, and did what the agency required, you would control much less pollution at much greater cost than if you simply did what the company engineers were willing and proposing to do, and that is to try to control the water vapors, the pollution vapors, at the point of transfer, which was not yet required under the Clean Air Act. It made a very important cross-media point, that there are efficiencies to be gained from looking at an enterprise as a whole, rather than just working piecemeal through the different statutes that control it.

Management Style

HKS: You were accused by one of the, I guess, career EPA types that you were less accessible, to them, than your predecessors, because you were always up in your office talking to the bigwigs. That's the way the word "bigwig" was used in this. I thought, well, what did they expect you to do, walk down the hall each day and say, "Hi, Sam, how's it going?" Is this a problem with an occasional career employee who feels left out of the action?

WKR: I think that some EPA professionals had developed the habit, particularly under my predecessor, who was a thorough-going professional, a lifelong civil servant, and something of an inside operator, of dealing regularly, face-to-face, with the administrator. He ran the agency very well, but delegated little, travelled less than I did, and generally kept a low profile. He headed the agency at a different time for a different president, with different opportunities, than I had. The Reagan White House had told him, "Hunker down. Don't attract attention to these issues. We're not interested in environmental publicity." The Reagan administration did not encourage EPA to propose important environmental initiatives.

I worked for a man who wanted to be the environmental president, and he was very interested in international affairs. I worked on things that involved a lot of foreign issues, and one of my priorities, encouraged by President Bush and welcomed by Secretary of State Baker, was to inject the environment into our foreign policy. We succeeded to a good degree in that, thanks to the president.

I also traveled more. I think my predecessor told me he traveled one day a week, 20 percent of his time. I probably traveled twice that much. That just meant that I would be relating to the White House and to Congress and the country and foreign ministers more than, perhaps, he had. And that gave me less time to spend within the agency.

But I think we managed the agency very efficiently. I had an excellent team with me. My chief of staff, who is still with me, Gordon Binder, was awesomely effective. My deputy, Hank Habicht, was outstanding. And I daresay any reasonably objective EPA observer would say that if not the best, we had as good a team of assistant administrators as any administrator had ever fielded to run that agency. So the inability of some civil servants to get access to me was not a serious problem.

I also did something else. I tried to husband my resources. I had a fear that I would spend four years in the agency and then walk away and wonder what the hell I'd done with my time. It's not an uncommon problem

for a senior government official. You are pulled a hundred different directions at once. You're doing five minutes of this, ten minutes of that, a phone call, a congressional hearing, and a press conference, and pretty soon the day is over. So I used to say, when proposals were brought to me to testify, for example, "Why me? Is this, number one, a priority of mine? You know what they are." I had about ten of them. "Or, number two, is this something that only the administrator can do?" There are some of those things, even though something may not be a priority, that nobody else can do. It had to be the top guy. My position often was to say, "If it doesn't fall into either of those categories, have my deputy or an assistant administrator do it."

Even so, I testified oh, I think, on the average about twice a month the whole time I was at EPA, so I did my share. But I didn't do it indiscriminately. I certainly was less available for the long in-house briefings on regulatory decisions, things of that sort, than my immediate predecessor had been. I just was unwilling to give quite as much time to that part of the enterprise, and delegated more than he had. I was involved in so many cross-cutting initiatives, and also working consciously to change the public's thinking about the environment, which entailed a heavy schedule of media time. But I have to stress, I think Lee Thomas did the right thing for his time and for his president, and I think I did the right thing for mine.

HKS: Bill Ruckelshaus has made an oft-quoted assessment of being administrator, "The sun shines only twice: the day you arrive and the day you leave."

WKR: Yes.

HKS: I know him slightly, so I don't know how much hyperbole is in that observation. Did you feel in any way that way, or did you really enjoy it?

WKR: I was aware of that remark, and I remember there were times it would seem true to me. But in fact the sun shone on me fairly often. I had a good run. I had a better relationship with my president than any of my predecessors had had. One measure is state dinners. I think I was invited to five. I'm not sure an EPA administrator had ever been to one before. I know my predecessor, Lee Thomas, never went to any.

I was at Camp David a couple of times, three times or so. I was at Kennebunkport, the president's private summer home. I traveled with him internationally, regularly. I was consulted on foreign assistance and on the Enterprise for the Americas program and was allowed to come out with debt-for-nature proposals and to influence the banning of ivory imports in the United States, to initiate and negotiate a forestry convention, to develop proposals for environmental commitments in the North American Free Trade Agreement (NAFTA), to build a center for the environment in Eastern Europe, to assess the environmental consequences of the war in Kuwait, to head the U.S. delegation to Rio--things that went well beyond usual prerogatives of an EPA administrator.

To a significant degree, I had EPA playing at the big table, and most of my people understood that, and they appreciated it. I was on television probably more than any EPA administrator ever had been. I don't know how many times. Early one morning I was to do a TV interview about the Great Lakes in Chicago. Charlie Gibson said, "I believe this is your third appearance in the last two months on this program. I think we're going to have to get you in the Actors' Equity union."

That was all a measure of more than my impact. It was that the moment was good for the environment. The country was concerned about the environment. Bush had made a lot of noise about the issue. And I was his guy. And I was an environmentalist, out of the non-profit community. That made for excitement, too.

So I loved it. I thought a lot of the pain and criticism and negativism was more than worth the price. The director of the National Endowment for the Arts came to see me because he thought that I could give him some advice about how to weather the storms affecting that agency. Senator Simpson had recommended he consult "the guy with the thickest hide in town."

Well, that wasn't true going in. Maybe it did become true after a while. You have to develop a thick hide and keep a sense of humor. But I thought that I was dealt with very fairly by the White House and the president. It somewhat bugs me that I'm often introduced now by sympathetic observers as someone who deserves the Purple Heart for having stuck it out and taken the arrows I took in the back in Rio and that sort of thing. That's a very limited perspective on what we did, and it's basically unfair to Bush.

Social Obligations

HKS: I remember reading years ago that in Washington there is some sort of a social register. Is this true? Is there a register?

WKR: Yes.

HKS: You must have had five options a day of things, receptions, you could go to.

WKR: Yes, but we didn't typically do that much of it, largely out of a concern that my wife had that we protect our family life. We still had a child at home, and I traveled a lot. So our general approach was to do two a week, and that was it. So we turned down a lot of invitations.

Debt for Nature

HKS: I was surprised when I heard this because I had assumed that it was a private initiative, the debt-for-nature you talked to President Bush about very early, maybe before you were confirmed, even. He thought it's a great idea.

WKR: Exactly.

HKS: The government has been specifically involved in debt-for-nature?

WKR: Yes, it has since then. We just did a couple, I think, recently in Madagascar, was it? At World Wildlife Fund, before I went into government, I did some debt-for-nature swaps in Ecuador and Costa Rica, buying discounted debt on the private market, but we had not succeeded in getting the government to do it with any public debt. There were twelve billion dollars owed the United States in public debt, seven billion of it, I think, by Latin America. Bush agreed that it would make sense to renegotiate that debt from the point of view of the United States, but it was more easily said than done. To do that, you had to write off debt that was owed the United States, and even if you practically speaking thought that that debt would never be repaid in full, you nevertheless had to take the full hit against the budget, adding to the deficit.

Well, we couldn't always do that. It took the administration the better part of two years before we actually did a serious public debt-for-nature deal, but we then did it. We did it in the context of the Enterprise for the Americas initiative in Latin America.

HKS: Somehow that escaped me. I mean, Russ Train talked about debt-for-nature that really came out of World Wildlife, the concept.

WKR: Yes. I personally negotiated the second one that was done, with Costa Rica. Conservation International, I think, did the first, with Bolivia.

Non-Attainment

HKS: It struck me as a strange term, but as sort of government jargon, the "non-attainment issue." It took me a while to figure out what that was.

WKR: It's so important when people like you tell me that. I used it all the time, and I try to avoid jargon. I made a real effort at EPA, told my people to avoid jargon. Finally, reporters would want a dollar from me if I used jargon. They talked to my press guy and they said, "Ah, he did it today." Well, I didn't do it very often. But I tried not to do it at all.

"Non-attainment" is something I would probably use, and forget that that's a specialized term. It's so important not to do that, you know, here in government. I used to say to our people, "Many of our terms here are impenetrable. They're esoteric, they're arcane, they're derived from our history, and the public doesn't get it. When the public hears you use these terms, they not only get frustrated that they don't understand them, they think they're not supposed to understand them. You know, sometimes I think they're right. I think it's part of the Washington game to keep it all under control here, and I never wanted us to communicate that way." So I always tried to simplify and be very clear when I talked to the public about the environment.

HKS: What's the issue in non-attainment, failure to meet the law?

WKR: There are primary and secondary clean air standards. The six criteria pollutants, which are oxides of nitrogen, ozone, sulfur dioxide, carbon monoxide, particulates, and lead, each has a prescribed primary or health-based maximum ambient level, above which an area is classified as being in "non-attainment" for that pollutant. There are also secondary standards. Visibility, for example, is an example of a secondary standard. If you exceed the permissible ozone level, which is one point two parts per million for a stated period of the year--I think it's three exceedances over a twenty-four-hour period in the course of the year--you are technically in non-attainment of the health standard for ground-level ozone smog, photochemical smog.

If you are in non-attainment, some unpleasant things happen to an area. It discovers that it cannot have a new industry that will pollute at all unless it eliminates an equivalent amount of pollution from an existing source. Or, in some cases, if an area is seriously in non-attainment, it must eliminate as much as one point three for every one increment of pollutant that it permits a new industrial source to introduce.

HKS: This is the state--

WKR: Part of the Clean Air Act. It's imposed upon states and comes to the federal government as part of a state implementation plan. It's not anything that the state can decide to forego. It's required. I spoke to a Dallas business group not long ago, in a city which is doing everything to keep out of the non-attainment category, sending people home, telling them not to come to work, to come to work later, to use car pools, not to drive on days of maximum weather vulnerability to an exceedance--all to try to get that problem under control so they can continue to grow, attract industry, and compete more effectively with Houston, which isn't even close to being in attainment.

HKS: In the counties around Raleigh-Durham, I think just last year, our annual state-required inspection for cars, the cost jumped from nine dollars to fifteen dollars because of smog requirements.

WKR: Yes.

HKS: We have a second home out on the coast, and that's still only nine dollars out there. There's not an air pollution problem, because Durham has been violating the ozone requirement.

WKR: Yes.

HKS: And so apparently we're not in gross violation. They want to prevent that from happening.

WKR: Yes.

HKS: So the cars are the easiest way to start, maybe. I don't know.

WKR: Well, cars are the source of about 50 percent of the urban air pollution problem.

HKS: Okay.

WKR: And cars are vastly cleaner than they were twenty years ago. I mentioned the progress we made. The average car today is 98 percent cleaner in terms of hydrocarbons.

Smog checks, which are the way you control for this, are very unpopular, and it's hard to get them honestly administered by any state. Virginia's are a joke. A few years back we tested cars in Virginia, I think in '89, and found that cars that were programmed to fail the test were passed. Of thirty or so cars programmed to fail, a dozen or so didn't even have pollution control at all. The catalytic converters had been removed. All but one passed, on the first try. So there's a lot of fraud in these programs, and misuse and abuse.

We proposed a more sophisticated smog check, and we proposed that these things be done more centrally and that the people who are doing the smog checks not be people who are involved also in repairing the cars, not be people who are dealing basically with their customers for servicing, whom they might have difficulty failing. If you're now paying fifteen dollars, I suspect you're getting more checked. Half the pollution that comes from the car doesn't even come from the pipe. It escapes from the engine. Even after the engine stops, a lot of pollution continues to come from the car in terms of vapor loss. So the new test adds a check for oxides of nitrogen from the pipe, which the conventional test doesn't do, as well as hydrocarbons, and it also tests for the integrity of the engine, the controls of the valves and efficiency of recapture of vapors in the engine, things of that sort.

It's a much more sophisticated test. And it tests under more real-world conditions. It programs the car through a more normal driving cycle in different gears and speeds. The old test, that costs much less, doesn't do any of those things, and yet all of these new elements are necessary to get a real fix on whether a car is polluting or not.

HKS: I have a 1984 pickup truck that passed the test. I was surprised. Maybe it's grandfathered in. Maybe it depends upon the age, there are different criteria.

WKR: There are. An '84 car is not held to the same requirements as a '94 car.

Rio Summit

HKS: Foreign policy. You've written about and talked about the Rio Conference. It got a lot of publicity and was an embarrassment to the government of Brazil and so forth. Was there infighting in the White House? Did that cause the breakdown on the Rio Conference? Was that the fundamental problem?

WKR: Yes, and I guess it was not just in the White House. You have to remember the context. We were in the middle of an election year. There was a recession, and the president was under attack from the right wing of his own party. There was a challenge to him, from Buchanan, who was anti-regulatory and anti-environmentalist. All of those things played a role. It was not a time when a Republican president considered that he could get any advantage out of being seen to be accommodating to the international community on these issues. A kind of xenophobia that sometimes creeps into our politics was in evidence.

You had some forces within the administration that were extremely wary of the proposals under consideration. The OMB director and the chief of staff had been exercised about climate change--didn't believe it, didn't buy it for a minute. Thought that it was all based on faulty science by second-rate scientists, as John Sununu used to say.

Then you had the Biodiversity Convention, which didn't have the support even of the primary agency responsible for it, which is the Interior Department. And it was negotiated in Nairobi without State Department backing and support.

So two of the main issues, the flagship conventions on climate and biodiversity, that received most of the attention in Rio had no passionate defenders in the councils of the mighty in Washington. That left us with a difficult position. We made very important, substantive contributions to many of the achievements of that conference, but things that got the play and the publicity were our unwillingness to commit to stabilization of greenhouse gases, which forced a configuration of the treaty that most countries didn't want, or at least publicly didn't want--privately many of them did. And we simply refused altogether to sign the Biodiversity Convention, which was so important to the developing world. Our public image was mud as a result of that.

HKS: The president was reluctant to go. Is that correct? Initially?

WKR: I think the president always wanted to go. The people around him didn't want him to go. John Sununu not only didn't want him to go, he didn't want the United States to be represented at the conference.

HKS: So it wasn't an issue, "Well, you stay home and we'll send somebody."

WKR: I never thought of that. Darman and Sununu and others had discouraged the president from going. I mean, there was a debate about whether he should go at all, but I think we all suspected he would go in the end, knowing that so many other heads of government were planning to go. We simply held out his commitment to go, as a way to try to influence the negotiations on some of those treaties.

HKS: I was working with a fellow in international forestry in the Forest Service at the time of the conference, and the president made his announcement of a hundred and fifty million dollars to support worldwide reforestation. The Forest Service received an inquiry within about two hours of the announcement from the White House, what would they use the hundred and fifty million dollars for? Suggesting that the number kind of came out of the air. Is that a fair guess on my part? Do you know where the hundred and fifty million dollars came from? Because the people in international forestry weren't aware that the announcement was going to be made. They hadn't been asked, "What would you do if you had a lot of money?"

WKR: To tell the truth, the Agriculture Department had no role in formulating this concept. I don't think that Secretary Madigan was particularly interested in it. I never saw him at any of the meetings on it. It was something that we really came up with ourselves, in the EPA and the White House, and I don't remember how that number was developed. I really don't remember. We never came close to getting it appropriated.

HKS: That's right. It looked like it was going to come through, but it never did, so far as I heard. The people at international forestry tell me that they couldn't really handle a hundred and fifty million dollars. Thirty

would be about right. The deputy chief of international forestry, who just retired, and they did sort of an exit interview with him, and he made that observation.

WKR: Is that right?

HKS: Jeff Sermons said that, that thirty million would have been enough. But he didn't get any of it.

WKR: Interesting.

HKS: Ruckelshaus, I think, made that observation when EPA got started, that you can be awash in money and, if the infrastructure is not in place, you really can't use too much at one time.

WKR: One of the developing country ministers in Rio, hearing that Senator Gore had proposed in his book *Earth in the Balance* to have a Marshall Plan for the environment in the developing world, said, "Were I to get the kind of money suggested by that concept, I would cease to be the environment minister. I would have to become the minister for control of fraud. We have no capacity to handle that kind of money. That's not the problem." I thought that very illuminating. He never said that publicly, of course.

NAFTA and GATT

HKS: When your associate here read over the draft outline, he suggested I add "trade" under foreign policy. He didn't articulate that, so I'll just ask you about trade and EPA. I know you testified in favor of NAFTA. Is this what he probably was getting at?

WKR: Trade came on as an environmental issue in my time. I seized upon it and considered that the determinants of environmental progress in the future will be economic development and international trade to a very large degree, things over which EPA has relatively little control. We ought to be supportive of economic development, particularly in the developing world. We ought to try to channel it positively for the environment, promote our technology exports, make sure other countries have the benefit of our experience and, to some degree, that they buy our pollution control equipment. I mean, we spent a fortune, had very high standards, to develop it.

The North American Free Trade Agreement was the first place I saw to put to the test our notion that we ought to pursue environmental objectives as part of our economic goals, and that was really the message of Rio, to put the environment on the same plane as commerce, housing, transportation, agriculture and the rest. Here, practically, was an opportunity to do it.

We made unprecedented environmental commitments in the North American Free Trade Agreement. We said that the treaty should promote sustainable development, a phrase never seen before in a trade treaty, and violently objected to by the GATT people and trade ministers in the European Community. We said that the parties to NAFTA would be committed to the upward harmonization of environmental laws, something else never seen in GATT.

We committed that the efforts of national governments, and even of subnational entities, to have environmental protection standards, would be guaranteed, provided that those standards had some support in science. Well, that meant that not only the United States could have stricter standards for regulation of benzene or anything else that was passing international commerce, but that California could, too. And even Los Angeles, if there was some scientific rationale for it. To permit separate standards, testing, maybe labeling, based on a demonstrated scientific rationale, was quite an advance. And some would say a reasonably significant burden to put on trade. Nevertheless, the environment was thought worth it.

These were all very important measures. We mentioned in NAFTA four treaties that were explicitly to take precedence over trade in the event of a conflict: the Convention on International Trade in Endangered Species, the Basel Convention on Trans-Boundary Shipments of Hazardous Waste, the Montreal Protocol to protect the ozone layer, and the La Paz agreement on the border area. I think later we put in some bird migratory treaty provisions.

All of that, I think, blazed a trail, charted a new course for the design of environment-friendly trade agreements. It is possible to approach trade in a way that will vitiate the effectiveness of your environmental controls. This can happen. We saw Mexico appeal to the GATT against the U.S. exclusion of Mexican tuna, which was captured in ways that incidentally destroyed an excessive number of dolphins. I personally interceded with President Salinas to ask him not to pursue that in the GATT. He agreed not to. He was very shrewd.

I said, "In lobbying American environmentalists and NAFTA, you've done very well. You've not put out a foot wrong. Until you appealed to the GATT to overturn our Marine Mammal Protection Act exclusion of your tuna." I said, "You're really going to lose a lot of support on this, and I don't see why you're doing it."

He said, "I will fix that. Under no circumstances do I want to win in the GATT and then discover that Mexican tuna on American supermarket shelves cannot carry the label 'dolphin-safe.'" A smart man, because labeling is exactly where we would have gone next, and where the environmental community should go when we have these trade impediments to exclusion of undesirable products environmentally.

I made a final run at reforming GATT, too. Before I left office, I went to Brussels and talked to the trade people there and proposed that some of these NAFTA concepts be grafted onto the GATT. The resistance was formidable. But finally the minister I addressed this to said, "Irrespective of the merits of your proposal, the United States cannot at the eleventh hour"--and we were in the fifth or sixth year of negotiating the GATT--"come forward with fundamental new objectives. This is not reasonable."

I thought to myself, "That's right. He's right. We have gone too far down this road to raise a whole new set of concerns, so I won't press it further." But I did tell him that our NAFTA commitments represented the way of the future, and that this was where things are going, and they will eventually go that way, I think, in Europe as well. The World Trade Organization successfully resisted some of those environmental arguments that the Clinton administration put to it. The United States was the only country interested in some of these reforms. But there is a new trade and environment committee in Geneva, just to monitor WTO. There is OECD work going on on trade in the environment, and you will see some of these NAFTA concepts begin to creep into the GATT, I'm almost sure.

HKS: Do I remember correctly that an impact statement was required for NAFTA?

WKR: It was not. Ralph Nader and the Sierra Club filed a lawsuit arguing that it should be required. I believe the judge ruled that this was a matter of foreign policy discretion on the part of the president. It was not a decision or proposal of any specific agency but rather the president's proposal and therefore was exempt from the requirements of NEPA, which apply to a federal agency action significantly affecting the environment.

HKS: Other than the delay, would it have been a good idea to do an impact statement, I mean in terms of what would have been learned? Do you lay things out on the table?

WKR: The truth is, we did more than an impact statement would have required. We did an extensive study of industries, sector by sector, as they would likely be affected by these requirements. Would steel, for example, relocate to Mexico to get the benefits of more lax pollution law as a consequence of NAFTA? Would chemicals? Would petrochemicals and oil development? Would automobiles?

We discovered something like 4 percent of American industry lays out a significant amount of its capital investment for environmental protection, that is, more than 2 percent of its capital expenditures. But that those industries tend to be the ones with huge fixed-cost investments. You don't lightly move a steel plant a thousand miles, or a chemical plant. And so we did not think that very much of our industry was at risk just for pollution laws' laxity, and that which might be attracted is largely fixed in place, would have to find many other advantages as well.

The idea that you could depend upon laxity in the enforcement of environmental laws if you're an American enterprise moving into Mexico, also is flawed. It would be a very brave, even foolhardy CEO to count on Mexico's indulgence of a polluting American firm in Mexico, noting that the Mexican middle class is now 26 percent, and they're livid about air pollution in Mexico City. That's the reason that Mexico is spending 1 percent of its GNP on environmental protection, unprecedented for a developing country. So I just did not see the likelihood of that happening, for environmental reasons.

HKS: I'm not sure of the source of the photos--but if you look at a plant in Mexico, its floors are shiny, and everything is clean and spotless.

WKR: New plants and operations tend to be. It's the old stuff that's the problem. The old and the small.

HKS: Yes.

WKR: And it will take a long time to get some of those into shape.

International Issues

HKS: You've mentioned several times that you travel extensively. You're out two weeks out of the month, that sort of thing. Overseas, you went to Russia. Is this a part of the Soviet break-up?

WKR: Yes, it was. I went there before the Soviet Union had collapsed, but while powers were being significantly diffused and delegated. I was told by a member of the Presidium whom I met with--I met with a whole crowd--that the only powers being retained at that time over the environment in Moscow were over the military, that virtually all the private-sector pollution, the non-military pollution, was subject to regulation by other enterprises, by Russia or by Ukraine, whomever.

I was asked the question, "Do you have problems controlling the military?" I said, "Well, I find that General Motors is far easier to control than General Powell, not because General Powell is anti-environmental but because regulating the Defense Department is an argument over budget. If the Army doesn't get the budget for cleanup of its bases, I can't put them in jail if they don't clean up. But I can put the chairman of General Motors in jail if he ignores the law. His budgetary problems are not my problems."

It's an interesting consequence of private enterprise, the distance between government and the private sector. It's much harder to control a government agency if you're an EPA administrator. But Russia was a place where we had had a good bilateral relationship on the environment dating back to the early '70s, one of the few areas of continuing cooperation throughout that era, and I went there as part of that bilateral, to keep it up. The Soviet ministers came to the United States twice as well during my time.

I also later brought the Russian environment minister over, after Gorbachev was gone, and introduced him around. Took him to Texas and introduced him to the oil companies there and encouraged a deal be struck to try to help develop Russian oil and gas and particularly help seal the leaks in the gas distribution system in Russia, which are a major contributor to greenhouse gases worldwide.

HKS: Is that right?

WKR: Not only that, but a waste of a very valuable fuel.

HKS: Much was made of the after-effect of the oil field fires in Kuwait. Were any of those predictions correct?

WKR: I went to Kuwait, and there were a couple of concerns. One, that there was a major health impact on our own troops and forces from the oil fires. I concluded that, based upon the period of exposure to the fires and the prevailing winds, which were away from the troops, that is, which missed the main troop concentrations, that was unlikely, though we couldn't prove that.

Secondly, the concern was expressed that we would have a climate effect, at least a regional climate effect, maybe a worldwide climate effect, from the hydrocarbons getting up into the stratosphere and being transported, much the way Mt. Pinatubo and volcanic ash has moved over the years. That did not happen. The highest, I think, we recorded any pollution was at about eighteen thousand feet. The stratosphere is up around thirty-eight to forty thousand feet. So it didn't get close. That's not to say it wasn't a serious problem. It was one of the worst things I'd ever seen. The largest oil spill in all of history, and it was intentionally caused by the Iraqis, and the destruction of more than a hundred wells at the time, caused by an oil-producing country.

I remember looking at that aspect of it and thinking, if you and I are in the diamond business and I'm out to do you in, I'm not likely to render your diamond mines inoperable. I mean, I would think I'd feel a certain sensitivity, that I might like to seize them, but I don't think I'd want to destroy them if we're all in that business. That's basically what Saddam Hussein did in Kuwait. I understand that the only way he could get many of his troops to blow up these wells was at the point of a gun, because they, too, knew that you don't destroy oil wells. You just don't do that. But they did.

HKS: Is Iraq supposedly going to pay for this as part of their settlement?

WKR: Theoretically, that's right, and there are lawsuits still pending in the World Court.

HKS: Were you under some political pressure to find damage?

WKR: No. The president wanted the Congress and specifically the American public informed and, if possible, reassured about the environmental conditions in Kuwait, basically to make clear that we were taking them seriously, that we understood them. There was a lot of concern in Congress about the effects of all of this.

When I went there, virtually all of these oil fires were still going, and there were predictions made by Red Adair that they'd be going in five years. I came back, and I remember being asked in testimony about that in the Senate, and I said, "I can't testify as an expert that these fires will be out, but I can just tell you that it's costing millions of dollars a week to the economy of Kuwait. Nobody has a larger incentive than the Kuwaitis to get these fires under control, if they can be brought under control."

In every place where we at EPA had been involved--where the United States government had asked that Kuwait put out a specific fire, because in a couple of cases they were polluting the area of a hospital in Kuwait City--the Kuwaitis were able to put out the fires. So I was somewhat encouraged that it probably could be done. Adair said it couldn't be done, but he was watching a lot of his people he had trained who were now in competition with him, try to put out the fires, and perhaps saw it in a different light. At any rate, they succeeded, you remember, way ahead of schedule, in getting those fires out. I think they were all out by the end of the first year.

HKS: They were pretty dire concerns in the popular press, about what was going to happen because of the fires and the oil spill in the Gulf and so forth. Does the environmental community lose credibility? Were these considered extreme statements?

WKR: I think people generally understand that it's the function of the environmental community to be cautious, to signal problems, to point out potential dangers and risks. There's a certain discounting the public probably engages in where environmental anxieties are expressed.

I personally think it's very dangerous for environmental groups to play fast and loose with the facts, to send out fundraising mail that just is not correct, is not true. World Wildlife Fund has not been above presenting the lurid details of poaching and its impact on rhinos and tigers and other species we care about. But nothing I ever signed on behalf of WWF was false. That was a specific requirement that our fundraising people understood. We were not going to claim anything that was not literally true. I think environmentalists would do well to observe that rule.

You gain a huge amount of credibility, in my view, if you acknowledge the weaknesses of your own case, or the merits or the arguments of your critics. And then deal with them. Those are the kinds of environmentalists' criticisms and statements that I tend to pay attention to. Just as they're the kinds of statements by industry I tend to believe, too.

HKS: Wouldn't the bulk of Congress have the same general attitude?

WKR: I think so. I remember Gary Hart told me years ago that environmentalists were losing their credibility with Congress and that we should be more careful, that we needed to have fewer people, as he put it, wearing earth shoes and backpacks and beards up there and more people looking like responsible and moderate citizens. He said, "That would be very reassuring to my community." He said, and this was the mid-'80s, "The two largest areas of constituent complaints that I'm getting are on Sanijohns and OSHA requirements, and rollbars on the tractors." I was able to say to him, "Well, neither one of those is an EPA requirement." He said, "No, but there's an undifferentiated reaction against regulation I'm getting from Coloradoans. They've had it, and they lump EPA and OSHA and everybody together, and you just don't take that seriously."

It was Senator Wallop, wasn't it, who got elected almost on the basis of a television spot that showed the senator riding tall, a cowboy riding tall in the saddle, and showed him looking like the Marlboro man, and then you saw the rope tied to the saddle, to the horn, and then gradually the camera cut away, and it turned out the rope was tied to a portable toilet he was hauling out to the field for his ranch hands? People used to love that ad. It expressed a resentment.

HKS: Were there other parts of the world that you traveled to that were of special interest or special priority to you?

WKR: I went to Mexico several times. That was probably my top priority. I remember I was in Rio when there was a new environment minister chosen from Mexico, and my chief of staff there said, "The Mexicans would very much like to have you meet the new minister." I said, "What do they want?" And she said, "Well, they'd like ten minutes." I said, "What do they really want?" She said, "Well, I'll find out." She came back and said, "They'd love to have lunch." It was the busiest possible time in Rio, and I canceled what I was doing to have lunch with the new environment minister, Luis Donald Colosio, who was recently assassinated in Mexico.

That spoke to that priority. Anything that mattered to the Mexicans mattered to me. The place where an environmental concern, a shared purpose, could have the most impact, was the area where our citizens experience the highest risks to health in the United States, was along the U.S.-Mexican border, on our side as well as theirs. I'm very proud of the fact that we got a lot of money for the so-called "colonias" to have

safe drinking water and to put in wastewater treatment in those unsewered communities where the bacterial contamination is so high and diseases as a result are so great.

I worked with Canada quite a lot, because we had the acid rain accord and the air pollution accord and the Great Lakes agreements, things of that sort, that we signed in my time.

I did a lot with Germany. I considered that Germany was probably our single most important partner and also was the strongest advocate of environmental protection among the powerful industrial countries. Chancellor Kohl had a good relationship with President Bush. I thought it also was important to keep those lines open at lower levels, ministerial levels, and cooperate when we could.

I was going to go to Japan and to China if I had stayed in the agency. I regret I had to cancel a trip to Japan at one point, so I never made it to Japan, but I received their minister. They changed ministers five times in my watch. A couple of ministers I never even met.

HKS: I haven't been to Japan since about 1981 or '82. I was there several times. People wore surgical masks in the street. That really impressed me. That was really a statement by the population that something was wrong.

WKR: I haven't seen that lately, but that's right. They made extraordinary progress, too, when they decided to get serious about the environment.

I went to Brazil to lay the groundwork for the president's Rio trip. I guess I made two trips to Brazil prior to the conference, once as the guest of Prince Charles on the *Britannia* up the Amazon, where we had the president of Brazil and the environment minister, the energy minister, the education minister all on board. I was able to tell them all, "You've got to talk with a single voice, and you ought to make it safe for President Bush in an election year to come to Brazil, to come to this conference, if you want him to come." I told President Collor, "Your ministers are saying different things. You've got to get a grip on this conference." I then went back a few months before the conference and made that point again, and we laid out specifically what they thought they needed and I thought we needed. Obviously, that was a sensitive place at that time.

I went to Turkey, at the request of President Bush. After the Kuwait war, the Turks, who had been very helpful to us in the war, said to us, "We would like to change our relationship with the United States. We would like to not just be a security asset. We'd like to have a cultural relationship, a relation on social policy and progress."

So Brent Scowcroft called me up and said, "The president would like you to go to Turkey, to represent him on a bilateral mission. The Turks are beginning to be concerned about the environment." God knows, they've got awful environmental problems. So I went to Turkey, and we had an excellent mission there. I knew Turkey somewhat, had been a student and spent four months there once on a regional planning project.

I went to the Netherlands, France, and Italy with the president. I did a mission to Eastern Europe. I went to Poland and to Budapest to open the Regional Environmental Center, which resulted from a proposal I had made to President Bush to establish a new center there to deal with the regional environment of Eastern and Central Europe, and then I went there to preside over the opening for the United States. We had a bilateral agreement that took me to Poland on the environment. We tried to be helpful to the Eastern Europeans and spent a fair amount of money in Poland on a number of environmental initiatives.

I went to Mrs. Thatcher's conference on ozone, in the second month of office, in March of '89, just before the Exxon Valdez and Two Forks. I guess I went twice to London. In '90 we renegotiated the protocol to

commit to full phase-out of CFCs by the end of the decade. Previously, we had been committed to half phase-out by then.

Then I went to Denmark in 1992, to renegotiate the Montreal Protocol, just toward the end of my term, when those amendments came up again, to up the date from 2000 to 1995 for full phase-out.

HKS: You've been quoted as saying a side benefit of international involvement of EPA is to give you something to talk to the president about that he cares about.

WKR: That's right. When I was told by Katie McGinty of the transition for the Clinton administration that most of the international environmental responsibilities would be removed from EPA and put in the State Department, I reacted negatively, as you can imagine. It's the most benign and cost-effective expression of our culture, to assist other countries at a time of maximum environmental concern and reform. And it's economically advantageous for us to do so. We can sell them technologies as they begin to address their environmental problems.

A more parochial concern is that presidents are pretty busy, and you don't hold their attention talking about sewers and the Clean Air Act. At least you didn't hold the attention of the two presidents I served, Nixon and Bush.

Then I said to McGinty, "That is important for the EPA administrator, for this agency, to be seen in the company of the president." I used to have the experience. I would come back from meeting alone, as I did with Chancellor Kohl or Mrs. Thatcher, and I would do a memorandum to the president on the conversation we had. He would invite me over and ask me questions and maybe have me to lunch. I'd get on the president's calendar. That might cause the budget director to lay off me for three or four months, wondering what I'd been talking to the president about, but certainly seeing that I had that kind of access. That's valuable to the head of an agency, particularly the head of a second-tier agency like EPA that's not always on the president's mind. I think that it's a big mistake to acquiesce in the transfer of those responsibilities.

McGinty's answer, to complete that story, was to say, "Well, the presidents you served were really absorbed in foreign affairs. That's not true of our president. President Clinton will be very focused on domestic policy, and you won't need to worry about talking to him about environmental initiatives. He'll be interested in those things domestically."

HKS: How would State have handled this? Through AID?

WKR: No. They established a new undersecretary, Tim Wirth, for global affairs, and he's got the action. He's been very successful, I understand, with the population conference, and I think the administration policy on population has been quite good. The increase of support for education of girls and young women.

I don't believe, however, that the undersecretary of state can testify before Congress on health conditions along the U.S.-Mexican border. Who's going to put the testimony together? There were babies being born without brains in Mexico, in the Rio Grande Valley, we think now due to a shortage of folic acid in the diet. But who would take the State Department's views of that seriously? What experts do they have on these issues? You've got to go to the technical agencies for that.

They'll have to go back to EPA, get a lot of those people, and I don't think that the Congress or the country would pay attention to or be reassured by diplomats on these matters. I think you've got to turn to the people who have the staff with the training, and EPA has it.

HKS: AID has asked the Forest Service to handle its forestry issues. Might, under this scenario, the State Department ask EPA to do the work?

WKR: That's possible. But if the individual who is supposed to have provided the authoritative pronouncement got all of his information from some other agency, that will quickly become obvious. And I don't think that the Congress or others will be so satisfied to get State Department reassurance. I don't see why they should be.

Acid Rain

HKS: You mentioned something about acid rain in Canada. Is acid rain still an issue?

WKR: Sure it is. The National Acid Precipitation Study, NAPAP Study, concluded that acid rain had impaired I forget how many thousands of miles of streams and how many hundred lakes. One element in the Congress and the country jumped on that report and said there's no crisis. Much of the doom-saying was overdone. Well, what really happened was that environmentalists cried that the sky was falling, literally, back in the early '80s. Many elements in Congress and industry said there's no problem at all. The National Acid Precipitation Study said there is a problem, but it's not a crisis.

The law that we passed in the United States was precisely responsive to a problem and not a crisis. It said we were going to have a measured response. We're going to get five million tons out of the system in five years, and ten million tons in ten years. Do it with a performance standard, and then let people trade pollution to get it the most cost-effective way we can.

Germany did something very different. In 1980 they decided they had a very serious acid rain problem, that their forest die-back was caused by acid rain, and they gave utilities, coal-fired power plants, three years to install scrubbers, the most expensive possible way to address the problem.

We didn't do that. We granted ten. Well, that's not a crisis response. We also were told, by the way, that something like fourteen to seventeen thousand lakes in Canada were acidified as a result of U.S.-caused acid precipitation. And NAPAP didn't address that, didn't study that issue. But that was the Canadians' number. So we clearly had a problem.

Incidentally, the industry estimated it would cost us fifteen hundred dollars per ton of pollution removed per year to complete that job. My own EPA people estimated it would cost between six and seven hundred dollars per ton. You know what it's costing? As a result of the market-based system, the trading that we have, the auctions? The auction that just took place last March in 1994, resulted in a price per ton of sulfur dioxides removed from the environment of about one hundred and sixty dollars.

HKS: Wow.

WKR: In other words, our system really did work. As soon as you said, "The source performance standards formerly in effect required that no matter what the condition of the coal, you remove 90 percent of the sulfur." Even if you had really clean coal, you had to get 90 percent of the sulfur out. That was to protect Senator Byrd's constituents and the coal miners of high-sulfur coal-producing states.

Our law didn't say that. Our law said, "You've got to remove ten million tons of sulfur dioxides. You've got to do it in two stages, and you've got to do it according to a formula that requires that you get down to two point five pounds of sulfur per million BTUs by '95, and one point two pounds per million BTUs by the year 2000. But we don't care how you do it. If you switch from high-sulfur to low-sulfur coal, from coal to some combination of coal and gas, to conservation. You'd encourage your consumers to consume less and maybe shut down a plant. Or use new technology. Put in scrubbers, if that's what you want to do."

The immediate thing that happened was the price of scrubbers plummeted. Why? You no longer had to buy them, so they came down millions and millions of dollars. Then the price of high-sulfur coal, of course, came down fast. Then low-sulfur coal, which was looking very competitive, had to come down some. Gas prices dropped. They went back up again. But the result was that everybody got in competition, and the precise genius of that law was realized. I think it's the harbinger of things to come in environmental regulation.

HKS: Pricing externalities has been a goal for decades. Where did you get your economic expertise?

WKR: Resources For the Future deserves a lot of credit for having formulated the concepts of environmental economics years ago and costing externalities, coming up with these trading schemes and pollution charge proposals, things like that. But we had good economists on our staff, and we worked with the Council of Economic Advisors, with Michael Boskin's people there. And the Environmental Defense Fund played a critically important role, of conceptualization, advocacy, and of building legitimacy for trading.

HKS: It seems kind of esoteric. Did Congress have a tough time biting down on that?

WKR: They didn't particularly like it, and they weren't familiar with it. On the other hand, we put together a new coalition in Congress. We didn't try to mollify Senator Byrd or Mr. Dingell. We set out to beat them. The way we did it was by basically designing a system that promised to vastly increase the amount of western clean coal that would be used to solve the East's acid rain problem.

So we got people, Senator Wallop of Wyoming, Senator Simpson of Wyoming, Senator Domenici of New Mexico--surprising allies in this cause. That was the coalition that beat the eastern Democrats who had been opposed to doing anything about acid rain.

HKS: It always struck me as a student that this sounds like typical academic theory that has no real-world test. You say the market price for this pollution is a hundred and sixty-seven dollars a ton, or a hundred and thirty-two, whatever it was. That's amazing. We really are putting a dollar value on externalities.

WKR: Yes, it does work. We did it because the market will do it. Now, if you're running a coal-fired power plant and you're a utility, you have the choice of choosing how you're going to meet that standard, and you'll do it in the most cost-effective way. And if I, who am running another one, can get the reductions a lot more cheaply than you can, you'll buy some of the reductions from me. I will over-comply, and you'll buy some of my over-compliance.

The opposition to this that environmentalists and some people express is that, well, if you do that, you don't clean up your power plant, and you continue to contribute to the problem. This happened when the Tennessee Valley Authority purchased from Wisconsin Electric Power the right to continue to pollute at some of its plants in Tennessee. Some Tennesseans screamed.

The problem with that criticism is that it neglects two things. First of all, Tennessee has to meet its ambient pollution control standards. It cannot increase the sulfur dioxide around its plants. But that's not been the problem since the '70s, when these tall stacks were built. The problem is [chuckling] that the sulfur dioxide is emitted so high in the atmosphere that it's transported to some other state. They have your problem. Basically, their environment is subsidizing your energy production.

Secondly, the total aggregate pollution of sulfur dioxide in the United States is coming down 50 percent, five zero percent, a huge reduction. So there is no way that citizens all across the country will fail to benefit from this.

HKS: Was Canada as patient of this solution as we were? We gave ourselves ten years.

WKR: Canada has done much less to control acid rain than we ever did. They had some big nickel plant and some other plants that they were slower to get into compliance. They began to come under some criticism when it finally became obvious that the United States was going to address its problem but Canada wasn't. They did begin to get more serious.

We did a great favor to Canada in that bill. That, in my view, is why President Bush agreed to a ten-million-ton reduction, which was expensive, according to the numbers we then had. An eight-million-ton bill would have cost about 50 percent as much.

HKS: That completes my list of questions. Thank you for your time.