CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES GLOBAL STRATEGY INSTITUTE AND SANDIA NATIONAL LABORATORIES

CSIS-SNL GLOBAL WATER FUTURES WORKSHOP

DAY TWO, FEBRUARY 9, 2005
10:00 AM – 12:00 PM

SPEAKERS:

CORPORATIONS:
JEFF SEABRIGHT, COCA-COLA

GREG ALLGOOD, P&G

NONGOVERNMENTAL ORGANIZATIONS:
STEVEN WERNER, WATER FOR PEOPLE

INTERNATIONAL ORGANIZATIONS AND FRAMEWORKS:
AMB. JOHN MCDONALD,
INSTITUTE FOR MULTI-TRACK DIPLOMACY

KARIN KRCHNAK, DAVOS INTERNATIONAL, LTD

Transcript by:
Federal News Service
Washington, D.C.

PETER DAVIES: I'd like to ask everyone to take their seats so we can start the morning panel, please. Good morning.

This morning we're going to have our third panel, and our third panel is going to focus following along the themes that we've had of the why, the what, and the how – on the how. And the key part of the how, which Steve so wonderfully introduced this morning, is this is a complicated set of issues, and addressing these issues is going to require forms of partnership, forms of collaboration amongst industry, NGOs, and the government that may be new forms that we'll have to create. And so this morning, our panel is going to look at a number of the questions related to how we make things happen, as well as provide perspectives from different types of organizations that we envision engaging in these partnerships. We are going to hear from industry perspectives; we're going to hear from NGO perspectives, as well as governmental perspectives, and looking forward to hear a broad array of comments from the five panelists.

We'll follow the same format as yesterday in that we will move through the presentations in the order that we have them in the agenda. We'll ask that we hold questions until we have all of the presentations complete, and then following that, we would like to have the same kind of interactive transactional discussion environment that we succeeded in having yesterday and having questions from the floor addressed for discussion by panel members, as well as by participants.

So without further ado, I'd like to move to our first presentation. Our first presenter is Jeff Seabright from Coca-Cola. Jeff is the vice-president for environment and water resources at Coca-Cola. He has a significant amount of international experience serving as a Foreign Service officer in the State Department. He worked with USAID and he has also worked with other elements of industry, with Texaco as a vice-president for policy planning, and so he brings a variety of different perspectives to this challenge and is going to talk today about the experiences that Coca-Cola is having on this challenge.

Jeff?

JEFF SEABRIGHT: Thank you very much, Peter, and good morning to all of you. I would also like to begin by thanking CSIS and Sandia for their leadership in pulling this important forum together. A lot of hard work has gone into it, and there's a lot of hard work ahead of us but on a very, very critical subject. It's a special privilege for me as well, because I've had the privilege of working with CSIS over the last, I don't

know, 25 years in various capacities and David Abshire and now John Hamre, who is an old colleague of mine from Senate days, so it's a real privilege to be here.

We're here today to talk about water, and water is an issue that is loaded with urgency and emotion. It robs life when it's scarce and, as we saw in the tsunami, it can rob life when it's abundant as well.

My company, the Coca-Cola Company, has a very special interest in water. We are, after all, a hydration company. Every product we sell contains water and, in fact, water itself is one of our fastest growing products. Without water and without reliable access to water, we have no business. And today, our business, the Coca-Cola Company and our system, is engaged in transforming the way that we think about water. We're collaborating closely with our bottling partners, our supply chain partners, and other stakeholders in a review of water and policy issues to identify and address the water challenges and the water opportunities that we have in more than 1,000 of our operation sites around the world. And we're really looking at water across the entire value chain from watershed protection to water use efficiency in our operations.

We're privileged to have the help of Hank Habicht and Lee Swanson, among others, from the Global Environment and Technology Foundation in supporting us in this system-wide global review of water policy.

And even though we're in the midst of this strategic review, I think some of the outlines of the direction that we're hearing are very clear. First, our very first priority has to be to conserve the water that we use. We have an obligation as a responsible community partner to use water in our own operations in our bottling plants as efficiently and responsibly as possible. And we're working across the bottling system to set water efficiency goals and make improvements. As one of our partners puts it, we count every drop and we make every drop count.

And we've made significant progress. You heard from Steve Loranger earlier. He sort of did my advertising for me, but in the year 2003, we improve – we expanded our global volume by 4 percent, and yet we use 3 percent less water to make that amount of product, so in that water use, efficiency savings of 7 percent. And we've done that in a number of ways, by dedicating teams in our plants to water conservation by employing new technologies, and by improving water use and reuse practices that Steve also talked about in all of our manufacturing operations, and we're continuing to set very aggressive goals across our system for 2005 and beyond.

But beyond water use efficiency, we also are working with local governments, local NGOs, communities, and schools to establish community-based partnerships: the subject that we're here today to talk about. In every community where we operate, water is obviously a critical natural resource and a community asset. It's the one ingredient in our product – and we actually have 400 different brands around the world – but it's the one ingredient that is most in the public domain. And while water is a limited resource, it possesses the rare quality of also being an infinitely renewable one, and so we don't view

it as a zero sum game in which water for one group means less water for another. To the contrary, we think that the Coca-Cola Company can and will refresh and hydrate our consumers, and at the same time support sustainable access to water within communities. These two goals are not at odds with one another. Rather, they're complimentary and, I would say, even mutually dependent because it is in our long-term interests for our business to be good stewards of the most critical ingredient. And along with the communities where we operate, we have a shared interest in finding effective solutions to water management, and that really is at the heart of our approach to partnerships. And what I'd like to do now is maybe to share a few examples of some of the things that we are doing around the world.

In India, and Steve mentioned the challenge that we face in Kerala in southern India, but not as well told in the media or the partnerships that we're engaged on in India. We really focused there on rainwater harvesting, and as I think we heard a little bit yesterday from Sandra, you know, India has a fair amount of renewable water supply. The problem is it comes in very heavy loads during the monsoon season, and it washes off. It doesn't necessarily percolate into the aquifers and recharge aquifers. And so the available rainfall is not being well utilized in the aquifers. We've begun working in about 20 of our plants and eight communities in rainwater harvesting programs, very low technology, basically channeling rainwater into percolation ponds which can then recharge aquifers. And today we're expanding that work throughout other operations in India.

And one of the goals that we have, actually – I think right now we have 76 percent of the total volume of water that we extract we are able to return 76 percent of that to the groundwater through rainwater harvesting, and we're looking to reach 100 percent over the next several years.

We're also engaged in working on drip irrigation, and that came up in yesterday's discussion. Flood irrigation is a terribly inefficient way of utilizing water for agricultural productivity. Microjet irrigation, drip irrigation, are very important activities that can help save water and make aquifers more – healthier.

In Africa, many of our bottling partners are in the process of improving their wastewater treatment facilities. And rather than building a plant dedicated solely to a Coca-Cola bottler alone, we're collaborating with the Africa Development Bank, USAID, and local community stakeholders to explore ways that as partners we can extend the scope of our efforts to a broader community benefit. We're really exploring how we can effectively leverage the human and physical capacity of our system for shared benefits.

In Europe this year, Coca-Cola bottlers and our operating divisions in 17 countries adjacent to the Danube River have set aside funds to invest in river and watershed conservation efforts. Specific activities will build on existing relationships and initiatives, such as Danube Days, supported by the International Commission on the protection of the Danube River with UNDP and others. And in addition to reducing water pollution and improving the protection of habitat supported by the Danube, the

project activities will increase understanding at both the local and global level of the role watersheds play in supporting local economies.

And globally, we're currently exploring another opportunity with USAID missions and the USAID global water team here in Washington to develop a joint community watershed partnership program that would really effectively leverage the expertise and the local basis of our operations to join with USAID to expand the benefits and watershed protection and community access, and the possibilities there are very great.

We're also currently working with the World Wildlife Fund U.S. to help protect the health of fresh water resources worldwide. This is part of a three-year partnership and we're scaling up field-based fresh water conservation programs in areas of mutual interest to WWFUS and the Coca-Cola Company, including the Mekong River Basin, the Zambezi Basin, and the Atlantic rain forest in Brazil, among others.

As an active partner in the global community, the responsibility that my company, Coca-Cola has is, I think, unique. We are produced in almost every country in the world. In fact, we have product in more countries and operations in more countries than are members of the United Nations. Well over a billion servings of our beverages are consumed by consumers, by people, every day. And we have a system worldwide that has been optimized to generate and distribute potable water every day and almost everywhere. And it's important to recognize that this is done not by people in Atlanta. This is being done by Somalians, by Rwandans, by Mongolians every day, and they have the capacity to generate fresh water in the most challenging circumstances imaginable, and they're doing it reliably and they're doing it every day. And I think one of the partnership aspirations that we have is to find effective ways to leverage that footprint of human and physical capacity to bring greater benefit to people without access and where we can help protect watersheds.

We saw the power of our system in the terrible aftermath of the tsunamis of late December. Our company and our bottling partners were able to respond immediately; within hours literally. They shipped the production lines to water and well over a million bottles of water were distributed – were produced and distributed through our distribution system in addition to other emergency supplies, and this was without any command and control from Atlanta. This was, you know, local community action taken by our bottling partners.

That local response was also coupled with a very significant corporate commitment for international relief efforts, and we were able to dedicate some of those funds to water rehabilitation work and water sanitation, and those funds in fact were matched by the United Nations Foundation, so we're joining together with them to achieve an even greater impact in the water work in the aftermath of the tsunami.

I mean, obviously immediate disaster relief was critical and that phase is now largely over, but it's as critical that we invest now in longer-term solutions to water

challenges in those effected areas and elsewhere. The awareness raised by the tsunami can and I hope will be a catalyst for all of us to invest in rehabilitating, developing, and strengthening water and sanitation systems globally, and in the process reaffirming and strengthening our commitments as responsible community partners.

In a book entitled "How the Canyon Became Grand," the environmental historian Steven Pyne makes a simple observation about water. He says, "Famed as a water planet, Earth has too much in some places and too little in others, and everywhere the crisis of matching water with people." He's right. That is our challenge: matching water with people. Can we do it? If we conserve and manage water properly, we can do it. If we adopt new mindsets and employ new technologies, we can do it. And if we have the will and the vision to make a difference and pursue responsible business practices, we can indeed help match water with people. But most of all we need deep, productive, and authentic and undeniably local partnerships. We need partners who share in the urgency and act together on the vision. Together we can do it.

What I would like to do now is just share with you a brief one-minute video. This is a disclaimer up front, not a Coca-Cola product here. This is an effort by an extraordinary individual to launch a program to help bring funds and awareness to the issue of potable water access for the world's poor, a fellow by the name of Jin Zidell from Colorado. And he's put a lot of his own time and a great deal of his own money into putting this project together. And he came and visited with us in Atlanta several weeks ago and shared this, and I was just very, very impressed with the work that he is doing. I think it's inspirational and I'd like to share it with all of you now, so if this works – is that all I have to do? Do you know how to use this, Bob?

(Begin video presentation.)

NARRATOR: One-fifth of the earth's population, more than one billion people does not have safe drinking water. Water-related diseases are the world's leading cause of human sickness and health-related death. Each day 25,000 people die due to unsafe water. Every hour 400 children under the age of five die due to unsafe water. Our world is filled with difficult problems that lack solutions. Unsafe drinking water is one problem we can solve. There are no technological or mechanical barriers. We only lack the collective will and effort to end this condition. For approximately $25, you can provide sustainable clean water for one person for life: a one-time investment.

Introducing Blue Planet Run, creator and organizer of the World Foot Race. In 2007, every nation in the world will be invited to enter a relay team in the World Foot Race. Running 200 miles a day for 60 days, each team will cover 12,000 miles raising awareness and funds to bring safe drinking water to the people of our planet. Around the world in 80 days on foot, a huge task, an epic race, an obtainable, sustainable goal. Blue Plant Run, the World Foot Race 2007, racing to bring safe drinking water to the world.

(End video presentation.)

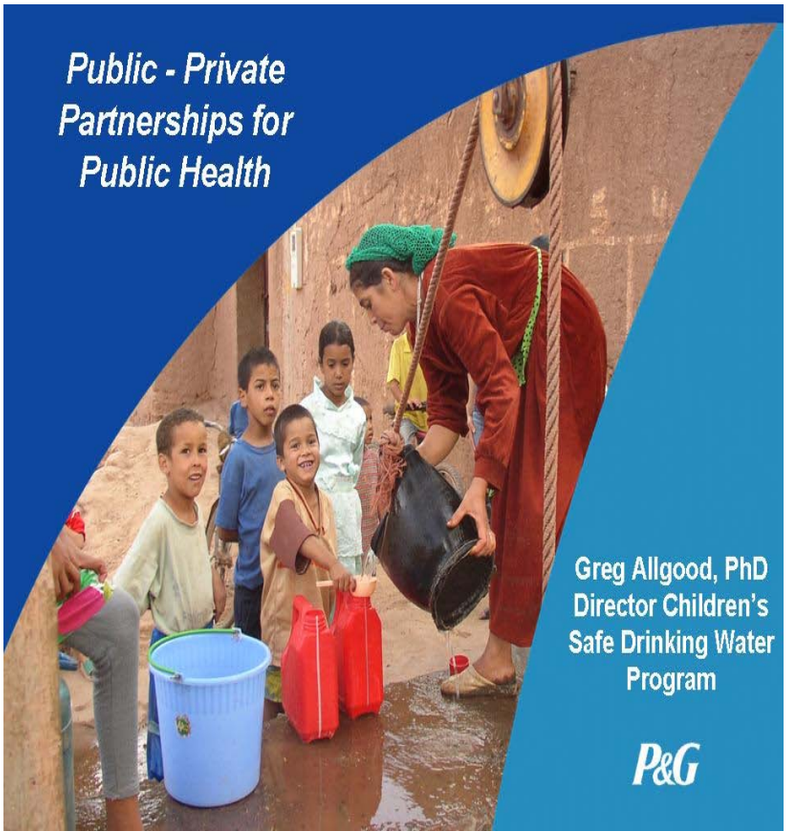
MR. SEABRIGHT: That concludes my remarks. (Applause.)

MR. DAVIES: We're now going to move to our second speaker, who also comes to us bringing industry perspective. Greg Allgood is the vice-president for environment and water – Greg is the director of safe drinking water program at Proctor & Gamble, and he has been with P&G for 19 years and currently leads P&G's partnership efforts to bring safe water systems and technology around the world. We had a chance yesterday and two weeks ago at the (free ?) Alfalfa luncheon to see a demonstration of the Pure technology that Greg has been heavily involved, particularly from the challenge of how it – of implementation, how it is you bring such a technology to different parts of the world.

He has done research at the University of North Carolina in a number of water areas, and has also been involved in safety assessment, medical and regulatory affairs, and clinical research.

Greg?

GREG ALLGOOD: Thank you. Good morning. I'd like to also thank Sandia and CSIS for this opportunity, and thank all the people who have plugged my talk in advance, starting with the wonderful demo in the morning, and then today Steven is talking about our work for Pure. Thank you. And yesterday, Paula Dobriansky and so Erik and others asked me to tell you a little bit more about what we're doing in-depth.



It's a journey. We certainly do not have all the answers in what we're trying to achieve with our safe drinking water project, but we've learned a lot and we've developed a lot of partnerships. And so I felt that instead of a broad policy discussion, I'll narrow down now and talk about our specific efforts on safe drinking water.

And I've titled it "Public/Private Partnerships for Public Health," and that's very intentional. What we're

trying to achieve is a public health goal, and we know that we cannot achieve it alone; we have to do it through partnerships. So when we started looking at where we can make a difference as a company in our corporate sustainable development efforts beyond showing that we're responsible corporate citizens, we felt that we could – there were opportunities in meeting the world health needs, and that our focus should be the agreed goals, the millennium development goals, and specifically because of the technology that we have, we wanted to focus on providing access to safe drinking water.

As we began to work in this area and looking at what other people were doing in public health, you know, we quickly learned that some – this is not something that the private sector can do alone, nor can governments, nor NGOs do it alone, as you've heard from other speakers. Instead, we should leverage the strengths of each partner. In trying to achieve public health goals, the private sector does not have that core competency. We need to gain access through the groups that do have that access, but we can bring something to the game ourselves. We can bring technology innovation. We can bring new business models, and we also believe that we can use market systems in order to achieve the scale that's necessary to meet some of these problems. So yes, we need investment from governments, bilateral donors from the private sector, but we also should look at – to the local economies to use the market systems to provide some of the – the solution as well.

So let me tell you a little bit about the partnerships we've developed specifically in safe drinking water. And it started with a technology innovation story, and that was a partnership itself. Through a cooperative research and development agreement with the USCDC, the Centers for Disease Control and Prevention, we have been working on safe drinking water now for about a decade. We've tried various technologies that did not work, and then finally we came to a technology that is now proven based on some of the work that I'll show you. This technology and a few others, we know that if people use them correctly in their homes, they can dramatically reduce diarrheal illness and death. And so now, the

important thing is to learn how to scale those up. Because of the interest that we had and other groups, including Coca-Cola, Johns Hopkins, and some others in the room, with the World Health Organization we created a network that focused on household water treatment.

Now, household water treatment is complementary to the goal that everyone desires, and that's pipe-treated water in your own home. Now, the reality is, of course, that that's not going to happen for everybody for a long time to come; and for some people not in their lifetimes. So while we're trying to achieve that infrastructure goal, at the same time we need to provide more readily available solutions to people that are not near pipe-treated infrastructure, so treating water in the home is one complimentary solution. Now, more than 50 organizations have joined this network and it has a long name, as you can see here, the International Network to Promote Household Water Treatment and Safe Storage.

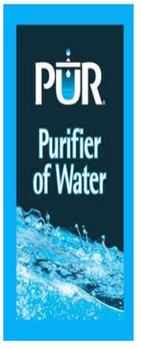
We have a web site. We have a secretariat housed in the WHO. I forgot to put the web site address here, but you can see me afterwards. I'll tell it to you now. It's hhwater – for household water – hhwater@who.int. And our next – so hhwater@who.int. And our next meeting will be in Bangkok – our next international meeting, May 30th through June 2nd.

I'll tell you a little bit more about our specific technology, the one that you saw the other day. We sell dilute bleach, simple chlorine in some parts of the world. In fact, we have the leading bleach in Guatemala. And we worked after Hurricane Mitch with a number of groups to provide that bleach to help

prevent the cholera outbreaks. We worked with the USAID, Catholic Relief Services, and others to provide our bleach in safe storage vessels. And then we followed up with consumers, which is something that consumer products companies do. And when we told the consumers, they told us that the bleach is nice, but we didn't see anything happening, and some consumers said, you know, "We didn't trust it. We really need to see something happening." So consumers were telling us there was a need for another complimentary technology.

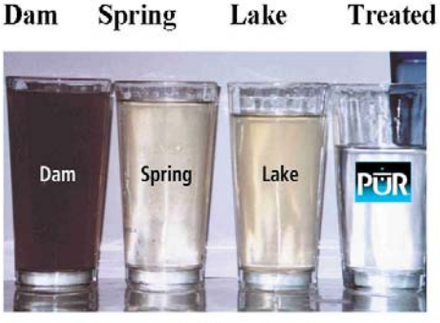
Partnerships in Safe Drinking Water

- Reverse engineered current municipal treatment process using same ingredients
- Small sachet to treat 10 liters of water using coagulation, flocculation and disinfection
- Affordable cost of $0.01 per liter



P&G

Kenyan Drinking Water Samples



Dam	Spring	Lake	Treated
Turbidity (NTU)			
1850	55	37	1

And then our partner in the CDC said, well, for dirty waters, for turbid waters, they'll quickly use up the bleach, and so you need something that's going to remove that turbidity. And so with those two, both the consumer need and the technical need, our scientists went about looking at another technology, and that's the one you saw yesterday. It's this little package of ingredients. In the end what we did, though, is simply reverse engineer what treats our water, so it's a mini water treatment plant and a sachet, if you will. It's got the same ingredients that treat our water. It's just we put them into a little package and made them stable, so it's a disinfectant. It's calcium hyperchloride, which is simple bleach. And there's a coagulant, iron sulphate, and those work to cause the flocculation that you saw, and then there's a disinfectant to make the water safe.

It can be produced at low cost, only about 3.5 cents per little sachet, and then even in models where we provide it using a commercial distribution system, the final consumer cost will be less than 10 cents for – so less than one penny per liter. This shows you some different samples that were all treated. Each was treated with

Results of Laboratory and Field Testing

- Very effective in visually cleaning dirty water
- Effective removal of bacteria (>99.99999%), viruses (>99.99%), and parasites (>99.9%)
- Effective reduction in heavy metals (e.g. arsenic and lead), organics, and pesticides

one sachet for ten liters and resulted in clean water, so it's very robust for – even treating water that's very dirty.

We did extensive testing to show that the technology works. As you've seen it, it can visually clean water. It also is a very effective removal of pathogenic bacteria, like cause cholera and typhoid fever; viruses, which cause a lot of the diarrheal illness in the world, probably about 25 percent of them; and parasites. As we heard earlier, cryptosporidium will even go through our waste treatment plants. Parasites like cryptosporidium and Giardia are chlorine resistant – highly chlorine resistant – and this is very effective at physically removing those parasites. Because of the ferric sulfate – the iron sulfate in the product, it binds heavy metals, so it will take out arsenic and cadmium and lead, and also some pesticides like DTD.

The next step was showing that it works in the field, and so through our partnerships again with the CDC, but also with Johns Hopkins School of Public Health, we've now done five health intervention studies, which are critical. You know, when people use it, does it reduce illness in children? And we've seen reductions from 26 to – the most recent study by Johns Hopkins showed a 93 percent reduction. That last study was in a refugee camp in Liberia, so it's a very good way to lower illness.

And we've seen with a few of the other technologies that are also proven, like the CDC safe water system, and just simple solar disinfection that they see similar results, so we know that these technologies can significantly reduce illness and death. Arsenic, we followed up our laboratory studies with a study in Bangladesh. And as you know, there's about 50 million people there being poisoned by the arsenic that's in the groundwater, and the studies showed that when people used it in their homes, they could reduce the arsenic levels by 85 percent.

Now, we've been providing the product for emergency relief for about a year and a half to global relief groups like UNICEF and others, and the CDC has looked at our deployment in emergency situation, most recently in Haiti, and did – going into consumers' homes and doing standardized questionnaires, and their biggest questions were, you know, we know that in our health intervention studies it reduced diseases. When it's deployed in an emergency situation, is it practical and people – do people use it correctly? And the results of their studies showed that, yes, in fact, it was.

Intervention Studies

- Diarrhea reduced from 26-90% in 5 studies by CDC and Johns Hopkins
- Arsenic reduced by 85% in Bangladesh study by CDC
- Effective and practical for emergency deployment as measured by CDC in Haiti

Based on what we learned there, we've been deploying it in other situations and it's been used in the floods in Bangladesh and the Philippines. It's been used all the way back to the Bam earthquakes in Iran, pretty much wherever there's been a natural disaster in the last year it's been used. And then, of course, the tsunami hit this year. And we were able to supply 15 million of the sachets, which is an enormous amount. It's enough to make about a billion glasses of safe drinking water. And this is an example where P&G doesn't have a lot of infrastructure in the places where the tsunami was, so it was an example where we could not have done that without our partners. So groups like AmeriCares loaded up two planes full of sachets to send them to the region. Samaritan's Purse, World Vision, UNICEF, and International Federation of the Red Cross, and CARE and Save the Children are all deploying product in the Maldives, Sri Lanka, and Indonesia.

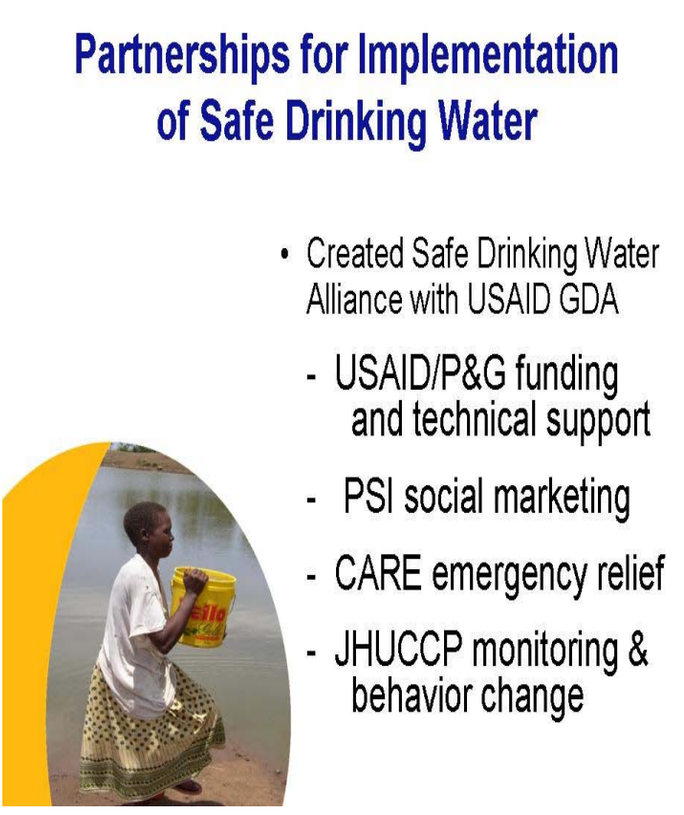
Well, once you develop a product and prove that it works technically, then implementation is the next part, and that's probably the toughest part for something where you're trying to reach developing world consumers with a product that they really need to use every day to have a health benefit, and so we've been also working on that for about two and a half years now.

We were fortunate to partner with USAID and their Global Development Alliance and formed the Safe Drinking Water Alliance that Paula Dobriansky referred to yesterday. Johns Hopkins, Center for Communication Program – Gary Sapetson (ph) and Rob Ainslie are both here from their group – were the prime in this alliance that we created. P&G and USAID both provided funding for it and also technical support.

It's a bit novel. We are, for the first time in our history, licensing our – one of our brands, the Pure sachets, to a not-for-profit NGO, Population Services International, and they are social marketing. They are selling our product – distributing and selling our product as part of this alliance. CARE is measuring and monitoring and learning how to deploy the product in emergency relief situations. They're doing that in Ethiopia. And they've seen that when you provide the Pure sachets with the nutrition that people need in a camp that you dramatically reduce the amount of time that's needed to nutritionally

rehabilitate the kids, which makes a lot of sense. As Erik pointed out yesterday, if you're drinking unsafe water, you have diarrhea, you're not going to absorb the nutrients from the nutrition program.

And Hopkins is monitoring this, and they're also doing what they do very well, which is community mobilization, communication efforts. We're working together in this alliance, not only in Ethiopia, as I mentioned with CARE's work, but in Haiti and Pakistan. And we're working on other partnerships. The UK, DFID, the Department for International Development, has provided a grant for us to expand our work in Haiti nationwide. We are going – we are also doing the social marketing work in Uganda. We launched there in November, and we're seeking other partners. We hope that USAID will join us in working in Africa, because that's where the greatest need is. And our company has given my group the resources to expand to two new countries a year through partnerships, which are essential, so we're looking for the partners to do that.



So in conclusion, we know that this relatively new approach of treating water in your home and storing it safely can dramatically reduce illness and death, and it's an extremely cost-effective and health efficient way to address part of the global water crisis. The private sector needs to step up in ways to fund and be partners in this work, but they cannot do it alone. We cannot do it alone. We have to have effective partnerships with governments and NGOs who have the public health expertise that's needed.

Thank you.

MR. DAVIES: Thank you, Greg. (Applause.)

For our third speaker this morning, we're going to shift over to perspectives from the NGO world, and Steve Werner is here from Water for the People. He is the executive director of this organization. And he has also worked with the American Cancer Society, with CARE, and with Habitat for Humanity International. And his expertise is in the areas of board development and training, planning, advocacy, staff leadership training

and management systems, and has worked with a large number of national and international organizations in the areas of fundraising and marketing.

Steve?

STEVEN WERNER: Thank you. I would also like to thank CSIS and Sandia for putting this forum together and inviting Water for People to participate. I especially want to thank all the staff who've been so hospitable in making us feel welcome and taking care of arrangements, so also to your staffs I want to extend a thank you. Thank you, Erik. Thank you, Peter.

A few weeks ago I spoke to a Rotary Club that was meeting near my wife's school, so my wife sat in and I found I was really nervous, because I do a lot of presentations, but having my wife in the back of the room with her arms folded, I knew I was going to hear later about speak louder, stand up straight, and all of those kinds of things, so I'm actually a little nervous, because I have so many friends in this room. I know I'm going to hear about it later, any of the gaffs of miscues, but I wanted to also hand this out, because I noticed yesterday I was having trouble seeing the slides from the back of the room, and I noticed some of my friends were also having to strain a little bit to see the wording, so I thought it might be easier if you just had the handout, and then we could just go from there.

The first page – I'm not going to read this to you, of course – is the – our vision statement at Water for People. And we've heard over and over the statistics, so I don't really need to belabor those points, but I believe that this vision can be achieved if we do have effective public, private, and NGO partnerships.

I did want to let you know, because it's germane to my remarks today that we are the charity of choice of the North American water industry, which is the great, great opportunity and benefit to Water for People. The North American water industry comprises the American Waterworks Association, and that's why Water for People is based in Denver, Colorado. We get free office space and a lot of support from AWWA, because they helped start us in 1991.

We have a sister organization in Canada now that started in 1995, but we're also supported by all the other major water associations and federations, like the Water Environment Federation, and Bill Bertera and all of the staff at WEF have been just terrific. Peter Cook representing the National Association of Water Companies has been terrific with his personal support and his staff support and his membership support. But you can see the other list of associations that support Water for People, so virtually anybody who works in the water field, whether it's a consulting engineering firm, a manufacturing company, a public or private utility knows about Water for People and supports us, so we're very lucky to have that base of support. And they support us not just with their contributions, but with volunteer time.

We also are lucky to have a lot of support from other agencies. Alan Heckt was here yesterday, and EPA supported our Water for Africa project, and I'll be talking about that as it relates to the subject matter. We've also had support from AID and also from their initiative in Asia, the Asian Environmental Partnership. And Rotary International, which is not, of course, a government agency, but – I'm a rotarian, and I don't know how many of you know that Rotary played an instrumental role in helping to eliminate polio. Now, there's still a few isolated cases around the world, but virtually by the end of 2005, polio won't be a problem in the world, except for a few isolated pockets, and they're thinking that by 2007 it will be totally eradicated in the world.

The numbers that I've heard, even though I'm in Rotary, is somewhere between $600 million and $1 billion was – were contributed by individual rotarians and rotary clubs. And now Rotary is getting involved with water initiatives. The current president and next year's president and the president after that will be making water part of their presidential themes, which means that they're asking every rotary club in the world to take on a water or sanitation project or an environmental or conservation project. So if you have any connections to rotary clubs, please help spread the word and get them involved at the local level. And then other associations around the world – and this is not a comprehensive list, but IATUS (ph) is, many of you know, the association of water professionals in Latin America is also very involved with Water for People.

The next one, partners in the field. I wanted to – not just again read this list to you, but we do work with all of the larger international nonprofit organizations, but also groups like the Peace Corps. We have universities that send college students abroad to work with Water for People, and we've partnered with Habitat for Humanity. And that actually happened before I joined Water for People, so I can't take any credit for that.

What I think is significant is that we partner in the field with indigenous nongovernmental organizations. They're not just water and sanitation NGOs; they're health NGOs and they're community development NGOs, and that follows in line with our strategy of building capacity. Our goal is to not be an implementing agency, but to help train NGOs to carry on the work, and there's many examples where groups that we've worked are continuing the work without our direct support, so the idea of building capacity is working.

Of course, we couldn't get done what we're doing without having great funding partners, and there's several companies here today that represent those funding partners. Joe Cotruvo representing American Water; they've been supporters of Water for People from the very beginning, and even with their new parent organization, RWE Thames, they're actually expanding their support to us, so we appreciate that.

All of the large engineering firms support us, and I'm proud of, and again feel humble that we have Steve and Tom Wingate and Erik from ITT because they are one of our newest corporate supporters, and we appreciate them getting involved with Water for People. But we also get support again from the associations and direct support, in-kind support, volunteer support. We're getting help from the U.S. government, and then I

think what's really significant about this particular page is that we are getting more and more support from the local municipalities.

In a lot of our countries, about a fourth of the total projects are supported by U.S. donors. The rest is coming from our indigenous NGO partners, from the local municipality, and from the community themselves. We do ask the communities to provide some type of support, and in many cases it includes both in-kind support, meaning that they provide the raw materials, the sand and – that's made into cement. They also put in the sweat equity, of course, and then they are also contributing more and more cash. So a typical Water for People project might be about $10,000, and our contribution might be $2500 to $5,000 and other funding partners, including the local community, makes up the rest of that support. And then our – the NGOs that we partner with also contribute support, so we're able to now leverage and get more work done so that all the support's not just coming from outside funding supporters.

Our geographic focus right now is in almost every region in the world, but you can still see that we're still fairly small, but our – again, our support is growing. We've just – opening up an office in India after doing work there for five years, and it looks like we're likely to have more than one office in India in the near future.

Water for People's work is mostly in rural areas, but through support from the EPA we did start doing work three years ago in urban poor areas in Africa – in five African countries. I'm going to talk more about that in a minute. In phase two of Water for Africa, we were able to attract funding from the Conrad Hilton Foundation, who has been very supportive of us over the years, and it looks like we're likely to get some support from other donors as well, so Water for Africa is going to go from a half-million-dollar project to likely over a million dollars when we have the other funding partners jumping on board.

Our program approach is that we keep our work simple, so under that paper, which talks about Water for People program approach, we use small-scale appropriate technology. We do that for many of the reasons we heard about the last two days, but it's easier to install, maintain, and fix. We have a very good track record with sustainability because we are using materials that you can find in the community or close to the communities where we're working, so if something breaks, there's spare parts nearby. They're not dependent on materials from far away. You can see that we do a variety of projects, depending on the water source. I was asked yesterday by Chris about how much does it cost to – per person, and generally the lower-scale appropriate technology where there's gravity – a mountain spring that we can tap for a gravity-fed system is about $20 a person. Where we have to drill bore holes, it might jump up to about $40 a person. Of course, that's a pretty wide band, but – and it's – really varies so much, dependent on the water source and how easy it is to access that.

We keep good company. We do pick our partners carefully and, as all of us know, we're only as good as the personnel that work with us, and the partners that we partner with, so it's true for us in the field. When we take a lot of care to find really

dedicated staff who are host country nationals, we find – we also pick our partners very carefully to make sure that they really believe in the model we feel is important for sustainability. We don't go into communities and tell communities this is what you should do this way and that way, but we sit down and we talk with them. Our projects usually take longer for that reason. They're usually about six months to 12 months in length because we spend a lot of time on the front end making sure the community understands their roles and responsibilities.

And we keep our promises. We are proud of the fact that if a community is willing to put in the sweat equity, we'll carry through all the way to the end, even if there's some other extenuating problems, but we're also going to keep our promise to walk away if the community is not going to put in the sweat equity, because there's no point in putting – installing a water or sanitation system if it's not going to be maintained and kept up, so we have walked away from communities when after several tries they don't seem to be able to get their act together. I think that's important, too.

Now, yesterday there was a lot of talk about governance and civil society, and there's some great examples of that in our projects. And again, I'm talking about Water for People, but this would be true for so many of the other great groups out there that use a similar model, so I don't want it to sound like we have the corner on the market, so to speak.

The civil society, though, you can see being addressed at the grassroots level, because we do ask the communities to form water committees, and it's really great to see that they do elect five people from their community. We do encourage them to have at least two women on a committee of five. In some cases, it might be four out of five. In some cases, it might be one out of five, but having women involved is very important to us, because women are the ones, as we heard yesterday, that bear the brunt of the work and the suffering that comes from not having safe drinking water or proper sanitation. But by having women on the committee and having a committee that's elected by their community members, it provides accountability and responsibility. They're actually implementing democracy at the very small grassroots level, and they set up an election schedule for people serving about every two years, so the membership rotates where maybe two people get elected in two years, so there's continual turnover. But then, what's really great to see is that they go around and take ownership over the health and hygiene education in the communities to make sure that their neighbors know – understand how to keep the water systems and sanitation systems safe and clean.

They also through this committee structure keep the books, so one of the aspects of our work is that to make it sustainable, there has to be some continuing funding. And there was a lot of talk yesterday about the fact that water – you know, people has to – have to pay for water, and it needs to be market-driven. Well, while the initial work is funded through grants that come from donors' contributions, the ongoing upkeep comes from the water committees and they're collecting a tariff from each household, so they dutifully collect the tariff every month, log it into their books, and you can go into Water for People community and see the books. Every home's listed. You can see who's paid

and who's not paid. And the money is kept carefully by the committee, so you can audit the books and see if all the numbers add up. But then they have a pool of money that's available for spare parts when things break, and inevitably something's going to break somewhere along the line, so if the spare parts are available close to the community and they have money we've taken care of a big part of the sustainability piece of our – of these projects, but I really like the civil society aspect.

And in a community this past summer in Ecuador – it was kind of a neat experience too – that in regard to helping at a micro level with a – breaking down conflict, the one community I was visiting was on this side of the mountain and, you know, you could probably throw a rock at the community on this side of the mountain, even though it took about 45 minutes to climb down and up through the valley – they told the story about how the community on the other side of the mountain, which had been traditionally in conflict with this community that Water for People had worked with – it was kind of like the Hatfield and the McCoys for as long as anybody could remember.

Well, the community on the other side of the valley came one day and they brought a feast with them, and they asked the community if they could sit down and have food together. And in the course of that, they talked about how they could do more if they worked together in the community where Water for People was working, was now helping the other community to develop their water and sanitation systems. And I just really like that story, because these were two communities that had been fighting for years and years, and now they were cooperating around water. And we talked a lot about that yesterday, but – so it's happening on a micro level when one community can help another community get access to safe water.

Now, there's some innovative approaches that Water for People and others are using. I talked about Water for Africa, and we've – are very fortunate to have the support of the EPA. Some of the outcomes of the phase-one Water for Africa is on that next page where it's titled "Innovative Approaches and Partnerships." In the Water for Africa work, we first found out that we needed to define the communities in these urban poor areas. And by the way, we're using the term "urban poor," because as all of you know, you can see huge numbers of people living right in the middle of the city. While most of the urban poor areas are defined as being peri-urban on the outskirts, we're seeing large numbers of people right smack in the middle of cities, and so we use the term "urban poor."

So when you go into these urban poor areas, one of the important things is just defining the communities. There's – as you know, people that have moved to the cities from many different parts of their country. They represent different ethnic groups, and so a lot of people have shied away from work in urban poor areas, because it's hard to define the community.

We sat down like we did in the rural areas, which is understanding the issues, and learning what works and what doesn't work, and as some – a number of us commented yesterday about the high cost of water for the poor in urban areas, and that's what we

found as well, except we found price – that the urban poor were paying as much as 50 times for the water from street vendors. And in the urban poor areas, they called these street vendors cholera carts. Some cases they call it different names for them, but they all – they all recognize that this was unsafe water that was unregulated, so – that's okay.

MR. SEABRIGHT: Sorry about that.

MR. WERNER: Oh, that's okay. Actually, it reminded me that Blue Planet Run is also one of our newest supporters, but thanks, Jeff, for showing that video.

MR. SEABRIGHT: Oh, okay.

MR. WERNER: So in this Water for Africa work, our first approach was to stimulate dialogue in – and get communities talking together. And then what we found was really needed was getting the community to talk with the local government officials and local utilities, because the – their own governments thought that they were not good customer risks, that they – if they extended water lines to those areas, they wouldn't get paid for the water.

What we found is when you got people talking about what they needed and just like in the rural areas where water committees were formed, water committees were organized in these urban poor areas, and the people proactively collected money and brought it to these meetings where utility representatives came to demonstrate that, well, we are willing to pay. Here's money that we're willing to pay. We're willing to put in the sweat equity, so one of the goals of – one of the outcomes of phase one is that we were able to demonstrate to local governments that the urban poor can be good customers and worth the risk of making that investment of extending water lines. So we're now into phase two, and I'll talk a little bit more about that in just a second, because we are attracting other funding partners.

We've also started a fellowship program. Last year was the first year. John H. Ware, Jr., was the gentleman that helped build American Water into one of the largest private utilities in the U.S., and his family helped create this fellowship program. And what we did in the first year is we found water professionals from four different countries who came to the U.S. This year we're expanding it by one to five – to five water professionals, and we've changed it just a little. Instead of finding people who are working on the periphery of the water industry, we now have found midlevel water – midlevel career water professionals from cities. And we are working with the community college in Denver that already has a water operator training program, and they've designed a special program to teach technical skills.

Our partner in this project has been the University of Denver, and the University of Denver is going to provide leadership training for the professionals. So on every Monday for four months, these water professionals from five developing countries are going to learn technical skills. Tuesday through Wednesday, they're going to go to one of the businesses that has agreed to be their host agency and that rep – and those

businesses are engineering firms, Denver Water, other water utilities in the Denver metro area, the Colorado Department of Health.

And then on Friday, they're going to get leadership skill training from the University of Denver where they're going to learn how to make presentations, how to put on training programs, and things like that. The whole goal is that they would go back to their countries and use their skills to train other professionals in their countries. Our long-term hope is that these will be the future leaders of their countries in helping to develop their national water policies.

And I should point out that we get a lot of help from the business community, not only with providing mentoring opportunities but for providing a lot of in-kind support. One company gave all the fellows laptops – laptop computers – and others have – and others are having their employees provide home-stays to keep the cost of this fellowship down. Diane Tate's here representing the State Department, of course we had other representatives yesterday, but they've been really terrific at helping us to get the visas for these border professionals and they're helping to make introductions for the fellows when they go back to their countries so that they can have the contacts to use what they've learned effectively, so it's a good example of how the business community and government's helping us with this particular program.

Now, the next line on there isn't worded very well. I apologize, because I've been on the road for a little while and didn't have a chance to have my secretary proofread this for me, which is usually the best way to make sure these things sound – come across well. The next line says, "Unlikely, but welcome partner organizations." And what I meant by that is that our focus is public health, and we're very clear about that. We are there to help improve water and sanitation systems, but as we know from a lot of our discussions yesterday, when women's time is freed up from hauling water, when they don't – when they have an extra three or four hours a day we then invite NGOs into our communities who have skills around micro-credit. We also partner with NGOs that are specialists on environmental and conservation issues to help protect the watersheds. And we are looking for groups that have social marketing skills to help us more effectively communicate what needs to happen to other communities near by.

So what I meant by that particular line is that Water for People doesn't partner on the up-front end of the project but we are opening up our communities to other groups to go in and continue to work with the community. And I have an example further back in this paper about a real – one of the many success stories.

And then we are looking at special initiatives. As we all know water impacts women disproportionately and so our work and helping – really does help to empower women. When they don't have to take four hours a day to haul water they have time to generate micro – small enterprises which brings in extra money. We've seen over and over when we go back to the communities and ask the women, "What's the difference now?" Of course they say that their children are not as sick, there's fewer people dying, but they also bring out the blouses that they're sewing and the sweaters they're knitting,

and they talk about the money they now have to send their kids to school that they didn't have before. So water, like we talked about yesterday, does cut across many issues and help contribute to the overall betterment of the community.

Now, new opportunities – things that we're looking at. We're trying to create a water corps. And this idea is that we have, this wonderful base of over 100,000 water professionals represented by WEF, NAWC, American Water Works Association, and others. And so we're looking to how we can get this technical expertise abroad and put to good use, especially in urban areas with helping utilities to develop stronger policies with training and other forms of technical assistance. And this fits really well with the – President Bush's initiative on Volunteers for Prosperity. We are getting a lot of requests to find water professionals who will go abroad for three weeks, two months, six months. There's a – just like other sectors there's a lot of early retirees within the water industry who are willing to go abroad and use their time and talent effectively.

We're also working with a lot of groups including Blue Planet Run on how we can do a better job of increasing worldwide awareness of water related illnesses. And we are also getting help from the State Department on that with a project that's up – coming up next month. We've just been invited to join the Water and Sanitation for the Urban Poor, which is – was created by RWE Thames, the parent company of American Water. And as you can see they have a very diverse partnership including Unilever, and WaterAid, CARE, World Wildlife Fund.

And I put that in there because I think it is a great way of taking the things that we learned from water – through Water for Africa, and expanding on it. I really complement RWE Thames for creating a broad coalition to look at how we can all work together to do a better job for the urban poor.

We've also – we're also working with Sister Cities who created the Sister Cities for Sustainable Development Initiative, and it's kind of similar to the Water Corps because Sister Cities, when they polled all of their Sister Cities in developing countries the number one issues was water and sanitation. And they've asked if we would help with creating the program to find water – not just find water professionals in the U.S., but to make sure that their time is used effectively when they go abroad and work with the utility personnel in their sister cities.

The American Water Works Association and the Water Environment Federation have a program called Qualserve where they go in and they help other – one utility will help another utility with how to improve their operations, and we're going to borrow from that model at how we bring water professionals from developing countries to go abroad and help their sister city utilities in other countries.

And then of course there's a lot of challenges connected with meeting the Millennium Development Goals, and I'm sure that Ambassador McDonald is going to be talking more about that, and he's so instrumental at getting the UN to focus more of it's

attention on water and sanitation issues, so I feel a little humbled by being in the same panel with you, Ambassador McDonald.

Now I just want to touch very quickly – and I'm wrapping up – on two bottom-up successes and these are just representative. Again, I talked about Water for Africa but some of the things we learned that came out of Water for Africa was the Child to Child Health Education Program, where older students taught younger students important health and hygiene practices and then the students used picture books to take home to their parents to teach their parents about health and hygiene practices.

We found that you can get people from – in urban poor areas from different ethnic groups to work together if everybody understands that they have equal participation. We found that you can get communities and their local government officials to negotiate and talk together about how to do work together to address their water and sanitation issues, especially around extending water lines and making sure that the water is available at a fair price. By the way, in the Water for Africa work, in phase one we did build tap stands and latrines and other forms of sanitation and one of the things that was interesting was that because there was a water committee in place they took ownership to make sure that the water lines and the tap stands weren't vandalized. And they had somebody – they took turns being at the water – at the tap stand to make sure everybody got a fair share of the water and it was available to people that paid for the water. And when the utilities understood that, they were willing to take the risk to extend water lines.

Also for the first time in many of these communities, community mapping was done. We did it so that we could make sure that every home was getting the health and hygiene education message. But it was a first time a lot of these communities had any of the homes mapped at all.

And then the second example is the Mayan Women's Project. In a community near Panajachel in Guatemala the women asked Water for People – and in this particular community the women really took the lead – asked Water for People to help address their water and sanitation. Now that sounds – it sounds like this community was pretty organized to begin with so I don't think we can take a lot of credit for this but after they had improved water and sanitation they – we invited another group to work with them and they did form a weaving co-op. Their weavings are truly remarkable, and they came to the attention of an entrepreneur from Canada who now is importing them and selling them through some of the nicer retail stores in Canada. And this community is now very, very wealthy.

So, again, I think of it as a pretty organized community to begin with, with women that were pretty driven, but it's an example that when women's time is freed up and you help them with introductions to other groups that some other really remarkable things can take place, but if they didn't have their time freed up – if they were still always having to care for their sick family members and if they had to haul water for several hours a day, they wouldn't have the time to do the other things.

And the last thing in here is a letter. And I edited it as you can see, only because I didn't – we work with a lot of different partners in Honduras and I wanted to be respectful of our local partners, but this was a letter that was sent to me at the end of November by a Peace Corps volunteer who worked with Water for People. But I think it's a really good example of how if you do get help from a lot of partners – businesses, governments, local NGOs, international member profits – you can figure out ways to make sure that the aid is really effective at the grassroots level.

And the point of this letter is that this mayor who I met and he was – is a young mayor, he was only about 30 years old, I was very impressed with his energy and commitment to his community. He was very spiritual which may have been a part of why he was so service driven, but he recognized the fact that the way they had been addressing the water needs previously was to import some pretty expensive, on a relative economy scale, experts from the capital. And the cost of the water projects were really expensive, and when Water for – he asked Water for People for help, we took a different approach and we trained local personnel we talked to them about how they can get their materials close to their community instead of bringing it all the way from the capital or from the next larger city.

And you can see from the letter that the cost of the projects went way down. And this mayor is now going back and developing other partners with other companies. And also, I don't want to denigrate the group that was helping this community with their water projects because they do a good job over all, but by finding local solutions and local help you can deliver water at a much lower price, and you can also build capacity by training people close to the community to address those water needs.

So thank you very much for your time and attention.

MR. DAVIES: Thank you Steve. (Applause.)

We'll now move to our fourth panelist. It's my pleasure to introduce Ambassador John McDonald. Ambassador McDonald is the chairman and co-founder of the Institute for Multi-Track Diplomacy. And he brings a wealth of experience into that task. He spent 40 years as a diplomat, retiring from the foreign service in 1987. And back in 1983 he joined the State Department's newly formed Center for the Study of Foreign Affairs as it's coordinator for multilateral affairs, and he's also served as the coordinator to the UN decade on drinking water and sanitation.

Ambassador McDonald?

AMBASSADOR JOHN MCDONALD: Thank you very much. I want to talk about the global vision and what is possible to create a framework for future action which I would hope that all of you can become involved in.

United Nations held a first and only world conference on water in 1977. And it covered the whole span of water issues. Out of that remarkable meeting some 100

recommendations for national and international action were made, and they were blessed by this General Assembly that same year, but not much seemed to happen because they were resolutions and governments had a long time to think about them and very little action was taken.

While I was at the State Department, having come back from an overseas assignment, in 1978 I heard about this meeting and I looked at that document and I saw one paragraph of those 100 recommendations calling for a decade – a ten year period – just to focus on drinking water and sanitation. I thought that was a fantastic idea, I've been in 97 countries around the world, lived 20 years overseas: I know the concerns about safe water and sanitation issues. So I plucked out this one paragraph, got the State Department to back me on this effort, and decided to see if we couldn't launch that decade at the United Nations.

It took about a year and a half and taking the draft resolution which I produced through various UN organizations and finally came to the General Assembly in November of 1980. And we were able to set aside a three day special session during the course of that General Assembly in order to accommodate 40 different ministers of development who wanted to speak out and support this concept of a decade on drinking water and sanitation. So it was successfully adopted as a resolution and the decade started on the first of January, 1981.

By the end of that ten year period, according to WHO figures, it was what I consider a remarkable success: 1.1 billion people in the world got access to safe water for the first time in their lives; 769 million people got access to sanitation facilities for the first time in their lives. Now those are very large figures. What happened? What was different? How did we and many thousands of other people make this come about?

Now, first of all, those 40 leaders and their 40 respective countries who spoke at that special session became empowered by this whole concept and they went back and politically began to make a difference. They began to influence their heads of state, they began to see that politically they could have a personal advantage by bringing water to people and getting their votes in exchange. So it was a political thing that moved a lot of countries forward rather dramatically.

But we also had some new ideas. As many of you know there are tens of thousands of broken pumps and non-working wells around the world, and for a very practical reason: because they're put in by the West for foreign exchange, and the villagers, once the pump needs spare parts, don't have the foreign exchange to buy the spare parts. So the well is just sitting there and doesn't work. The World Bank and the UNDP went out – sent teams around the world and they came back with four different designs of simple pumps made with local material that could be utilized in different situations around the world. And so what happened was it brought the private sector into the production of those pumps. And of course the pumps could be sold for local currency. The best example is the Mark II pump in India where one and a half million pumps during that ten year period were produced by local industry, sold for rupees.

When they needed spare parts the villagers used local currency to buy the spare parts. And those pumps are still working today and there are estimates that they brought safe water to 360 million people in India over that ten-year period.

Another thing that we did – this is the early 80's remember, and just doing what we just heard about: some dramatic examples about bringing women into the decision making process. You know that the women are the water carriers of the world, and you see pretty postcards with them carrying water on their heads in a pot. Well that's very, very hard work and millions of hours a day are spent by women and children carrying water. You've got to realize the men don't care where the water comes from. They just want it there, and it's up to the women to provide it. So we encourage various organizations around the world in various countries to bring women into the decision-making process. First of all in those committees that you're talking about decide where the pumps should be placed, and then coming in with this locally produced pump and training the women how to repair the pump and making them responsible for the pump and for the water produced for that particular village.

Now, this has had very interesting sociological repercussions as well – this giving them leadership roles. I saw in the Washington Post a few weeks ago a story about the untouchable women in India. You know the caste system has been illegal for many decades but it's still there just like in Bangladesh and in Nepal. And the untouchable women in that community are responsible for the pump and for the water. And finally the highest ranking in the caste system in that community were able to accept the (unintelligible) – accept the fact that if they really wanted safe water they had to acknowledge that the untouchable women had dealt with that water, had touched it, and had produced it. And they were now very good consumers. So this was breaking down the caste system, which I think is a pretty unexpected and dramatic example of what the change in approach can actually bring about. So women are critically important in this whole particular process.

We also had to restructure the United Nations a bit to make it more effective and the assistant director general was placed in the UNDP and was able to coordinate the United Nations' effort to make them more effective in the process. Well, I think that was a very solid example of a global vision that was practical and was implemented by scores of people around the world.

But the decade ended in 1990 and drinking water and sanitation just fell off the map – fell off the concerns of many governments because there was no pressure on them to actually focus on these particular issues. A number of NGOs were created to try to fill that gap, but it still wasn't quite the same and so really the impetus of that first decade was beginning to slip rather dramatically.

In 19 – actually in the year 2002, so that was some years later, I decided by now a private individual with a small non-government organization focusing on ethnic conflict and conscience that conflict and peace and water can go together, decided that I would try to launch a second UN water decade. So I drafted up a four-page resolution, and the

focus was on the Millennium Goals of 2000 and then later on the Johannesburg Goals, to bring by the year 2015 safe drinking water and sanitation to half of the people in the world who did not have it; a fairly modest goal I think, just half of the people. But that's what the resolution said they were blessed by the world twice, in 2000 and 2002. So my four-page resolution took those focal points and decided let's launch a second UN water decade to bring about an action program which will make that global vision actually take place.

Well, my first effort to find a government that would sponsor this resolution at the General Assembly, because you have to have government do that and you have to try to achieve a total consensus, which means 192 nations have to agree that this is a useful goal. So I went to the State Department, talked to friends there and they said, "Well that's very interesting but we really are not that interested, and we certainly don't want to take a leadership role in that particular area." So I began to move around the world in the West over the next year. I interacted with the French, and the Germans, and the Dutch, and the British, and the Norwegians, and the Swedes, and the Canadians, and the Japanese, all at the intergovernmental level. No interest whatsoever.

So I was getting a little discouraged I must confess. But I finally had a bright idea on the 1st of August of 2003. I went to the mission in New York of Tajikistan. Now, most Americans don't have a clue about where Tajikistan is located and they've probably never even heard of it, but they had gotten their act together a few years before and they had launched the International Year of Fresh Water, and the year was 2003. So this was toward the end of that first year. Now, Tajikistan is a poor country. It was riven by internal conflict for the early years of it's separation from the Soviet empire when the empire collapsed. But they had gotten their act together at the United Nation's forum, and they had put forward this draft resolution which was then adopted unanimously to launch that UN Year of Fresh Water in 2003.

So when I met with the Ambassador I said, "You know, you're on the world map now in a very positive sense for this year, but the year is coming to a close in a few months. How would you like to be on the world map for ten years? How would you like to support the decade resolution?" He said, "Wow, that's fantastic. I love it!" So here was a totally different response than I'd had from the West. He said, "You have to, however, convince my president of this particular goal." Well, I didn't know who the president was but I – he gave me the address and I wrote a nice letter and I attached my resolution and the ambassador sent the letter by a diplomatic pouch to the president so he would read it.

And it so happened that three or four weeks later the president was hosting a water conference in Dushanbe, his capital, and in his opening speech he proposed a second Water Decade. Someone was looking out for me. (Chuckles.) The thousand people in that conference thought it was a great idea and their conclusion and recommendation for action was let's have a second UN Water Decade. They call it now Water for Life.

So he went back to his ambassador and said, "Get to work." So the ambassador and I talked and I said, "Look, this has been my experience with the West. Don't go near the West. What you have to do to make this thing work, you have to get 120 signatures on your draft resolution from the developing world and then the West will begin to give in." And so that's the strategy that we adopted.

And through ADIAS (ph), which some of you are familiar with who have contacts in all of this hemisphere, we were able to get all of the nations in this hemisphere to sign up for that resolution. And by the middle of November, 2003, the Tajikistan mission had 120 signatures, all in favor of this new decade. And then, as I predicted, the West began to shift. First the Canadians were first to give in – signed the resolution; then the Japanese; then the Spanish and the Portuguese and then the EU. And finally along the end, the U.S. came along. And so on December the 23rd of 2003 the General Assembly of the United Nations unanimously adopted, all 192 nations, that particular resolution. And so this was approved unanimously.

The decade officially starts on the 22nd of March, next month, which is the UN Water Day. And unfortunately the UN is not doing enough to – in my opinion to make it happen, so we launched a little e-mail campaign to get people to write to Kofi Annan and say, "Let's do more than you're now doing." And I've also been trying to restructure the United Nations a bit to get an assistant director general appointed in UNESCO, which is now the lead agency in water in the UN system: 75 million dollars a year budget with 160 people working on water issues. And so with a little restructuring here and there I believe that this decade can be the start of a whole new program and a whole new process.

So that is a world vision, it's a global vision. It demands partners and partnerships to make it actually work. And so I'm delighted to hear all of the wonderful things that are happening in the public sector and the private sector and the NGO communities, because I think now that you know about this second decade you can begin to focus on it, and you can begin to build and make it happen. Because we need the political will not only of the United States, but across the world. We need the backing of the people at the grassroots level across the world. I think that working together that this can actually come about.

I was also involved in water issues for some years by creating my own NGO called "Global Water" in 1982. We're a very small, tiny not-for-profit organization trying to put in wells and educate women about how to do this in several countries in Central America and in parts of Africa. My executive director down in San Diego just came back from Ache. He was there for two weeks, came back a week ago, to talk about water and sanitation issues and he brought some materials with him and actually put in a well for a camp of 500 people. But I'm sorry to say in spite of all the PR and publicity we hear about, in the two weeks that he was living in that camp in Ache, he didn't see a single sign of physical progress being made in any field, let alone water and sanitation. So I think we have to move along beyond the talk and make the action actually take place.

Thank you very much. (Applause.)

MR. DAVIES: Thank you, Ambassador.

I'd like to introduce the final speaker in our panel this morning. Karin Krchnak is involved in a number of different arenas. The Council for Sustainable Development is one of those, but she is currently in a state of transition herself. Having been a senior associate at the Institution for Governance Program inside the World Resources Institute she will soon become the Director for International Water Policy at the Nature Conservancy. Karin is an environmental lawyer and has worked on policies in the environmental management and research conservation arena and has worked on those policies in many different settings around the world.

KARIN KRCHNAK: Thank you.

I'm the one who has to actually go after Ambassador McDonald. So I don't think it was actually that bad to go before. I think the after is the more difficult part. But I thank you, Ambassador, for actually setting quite a good stage for internationally what we're dealing with. And I have to agree there isn't enough being done about the decade. And some civil society organizations are calling on events in March that we can bring more attention to the decade, so we're hoping that there'll be more.

As Ambassador McDonald kind of brought us to the international context and the focus on this is partnerships, I wanted to also bring in the discussions at the global level of partnerships. And then we'll come into what should be the U.S. role on partnerships because – as part of the agenda topic for this session. But briefly I co-chair the UN Commission on Sustainable Development Freshwater Caucus, and in the lead-up to the World Summit on Sustainable Development in 2002 there was quite a bit of discussion on the crisis of implementation. We've had a fair number of policies ranging from Dublin through the World Water Forums but we're seeing a lack of implementation. And so Civil Society was thinking there's this lack of implementation. So concept in terms of partnerships started gaining ground. It officially actually was I think first mentioned in the Commission of Sustainable Development meeting in session eight, but in the World Summit in 2002, partnerships were really officially recognized as a tool for implementation.

I just want to point out, because since I was the person representing the NGOs at the World Summit in the plenary session, I went back to some of the documents that we wrote in the World Summit process to look at how we were looking at partnerships. And I mean partnerships very generally. And we actually had four main concerns about partnerships at that time.

First, that they be in response to locally articulated needs through a democratic participatory process. Second, that they be in keeping with policy commitments made by governments. Third, that they include mechanisms for democratic accountability for

government partners. And fourth, that they include corporate partners only when enforceable and functional standards for corporate accountability are in place.

So interestingly enough and in the Civil Society networks in – that are now still involved in the global sessions these themes keep reoccurring. So I just wanted to raise that when we're talking about partnerships in general. I think we've moved beyond that though, because partnerships now really are an accepted way of implementation, and I think that's positive because we did spend a fair amount of time arguing about yes or no partnerships when in fact partnerships can be a real tool for building common approaches.

So in terms of the U.S. role, which I think this session was really looking what the U.S. role should be, we could look at it in a couple of different ways. Funding, obviously, in terms of the State Department is very supportive of different partnerships: USAID, the Millennium Challenge Corporation perhaps. Also, building capacity is a second way. The Smithsonian Institute, USGS, are involved in different ways of building capacity.

Sharing experiences and new technologies. Again USAID is involved in that, USEPA and the Army Corps of Engineers. So another way of sharing experiences and learning from new approaches. But finally, I think that another way that we don't necessarily get it is providing example for others. One of the things that's often now discussed is – you know, there are different solutions to address these issues, but the problem is one of scaling up. How do we scale up? And so particularly when we look at what could the U.S. role be when we look at water partnerships, scaling up would be one area in terms of bringing that expertise in.

One of the things in terms of, I think, a challenge for the U.S. in partnerships is a lack of, maybe, visibility in partnerships. I actually did a search – there's – if you go to the World Summit on Sustainable Development website there's officially registered website – there's – for partnerships – officially registered partnerships – sorry. And there are 297 officially registered partnerships. If you do a search for the United States Government not a single one comes up. There are 106 water partnerships to – I have to actually correct myself there, one does come up but it's not related to water. Of the 106 water partnerships if you just do a search for the U.S. government not one comes up. So what you need to know is you need to know that you need to look for USAID, for EPA, for other agencies. I found seven with USAID, two for USEPA, and one for USGS. So one of the things I think we need to understand is that a better marketing – or better in terms of visibility of the U.S. role in partnerships, and the experience that the U.S. brings to these activities.

There is one thing that I did notice when in looking at these partnerships and the Freshwater Caucus and the other caucuses are involved now in trying to track the partnerships is there's a heavy – heavily involvement of academic institutions and universities, which are excellent partners, but I think over time we need to start moving toward more NGO involvement as well, in addition to academic institutions.

So how should the U.S. engage the corporate sector, civil society, international organizations? It's a challenging question, and particularly if you note those few elements that I mentioned in the beginning that can give you some idea of the challenges. But partnerships can be a really key tool for building trust among partners and different types of groups in particular, so I think the U.S. could be particularly involved in helping to build that trust; using dialogue sessions, using round tables, whatever it may be in terms of mechanisms that can help build that trust. Because a lot of – really, in terms of implementation, a lot of the problems, really, we encounter is a lack of trust. I think you mentioned in terms of communities that may not be doing things. It may not be that they don't want to do things, but there may be some inhibitions there for whatever those reasons may be.

I know particularly I've – in terms of just polling the caucuses in the Commission of Sustainable Development there's this feeling of – that partnerships are from the U.S. or developed countries are being imposed on developing countries. And so it's not that they're not welcome, but it's just how we go about doing them. And the challenge, of course, is that partners have different strengths and weaknesses. So when I look to the question of what should the U.S. role be, I kind of came up with five elements. And I'm going to try and be brief because I know we want to have some discussion here.

First, and I don't think I would be a civil society person if I didn't say this, is consistent funding, and I think I would criticized by my NGO colleagues if I didn't say funding. But of course not every government is in position to fund every partnership. But they also are – they are in a position to identify other funders – others that may be out there, so if they cannot fund a partnership but identify other partners – other potential funders. Also perhaps take the lead in developing – I don't want to say permanent, but maybe semi-permanent working groups around water partnerships. If you look at the water partnerships that are part of the official World Summit on Sustainable Development, there's 106 water partnerships, but there's no real mechanisms for really bringing together these different partners and learning from each other. And so maybe some sort of mechanism of semi-permanent committees and so forth where you can bring partners together and the U.S. could take lead in that activity.

Second thing I would say is the U.S. in terms of bringing a real partnership approach. And in this I think it's been discussed here quite a bit yesterday and today is looking at local technology solutions. So if you're coming in as a partner, it's not saying well we necessarily have the best approach, but really respecting different – other mechanisms and others have mentioned rainwater harvesting and other approaches.

Third, I would say is the internal governance mechanisms for partnerships. A lack of policies and procedures for the actual functioning of partnerships can mean that partners don't really understand what their roles and responsibilities are. And I used to actually be a manager of one of the official World Summit on Sustainable Development partnerships so I know this challenge first hand. To have a really well functioning partnership you do need some sort of rules and governance procedures. And it takes time

to create that organization. Whether it is a secretariat or not, there does not have to be a secretariat, but there still need some sort of rules and procedures and it takes time, and actually that is the most difficult part to ever get funded is actually that organizational, structural development for managing and implementing a partnership. So perhaps another thing for the U.S. is to take an active role in helping build mechanisms for good governance for partnerships.

The fourth thing, I would say, is focus of support for partnerships that are driven by what are long-term solutions – sustainable solutions for water problems. We have the targets for reducing the proportion of people without access to drinking water and sanitation and a great deal of attention is being focused on that, but I know from our standpoint in the Freshwater Caucus we are saying that's not all the water problems is drinking water and sanitation; water problems are much more complex. And so when we look at partnerships and what type of partnerships to develop and support, looking at the issues in a broader way – the need of cross-cutting partnerships for example – and I think this morning water and energy was mentioned particularly, but water and energy not alone; there's also water and agriculture partnerships.

So looking at cross-sectoral issues, when we look at water I think the problem that we've had particularly when we've been functioning in the UN System and for the caucuses, we're very – it's the silo effect. While we're dealing with water, you're dealing with agriculture, you're dealing with sustainable production and consumption, you're dealing with whatever the other issue – forestry, whatever it may be. And we really don't necessarily come together because water issues are so interrelated. We are, as far as the Freshwater Caucus I have to say, we're now joining with all the other caucuses as agriculture, energy, and so forth for this next meeting on the Commission on Sustainable Development which will focus on water for – try and find how can we all work together and develop these cross-sectoral approaches and solutions. It's a long process, we have to recognize.

The other thing as far as looking at what are long-term sustainable solutions is also community driven. Community developed small-scale solutions, and some have spoken about that. But I think if we're looking in the next ten years, particularly this decade in what can be done in terms of implementation and meeting these goals, community derived solutions are key, particularly if they're designed and built, and effectively maintained.

My last point I'm going to come to is gender mainstreaming. Actually probably as the only woman up here on this panel I should say this, but a number of the panelists have talked quite a bit about the role of women and water. And I'm on the steering committee for the Gender and Water Alliance, and one of the things that we have noted is a lack of really gender mainstreaming in the partnerships – in water partnerships, a lack of gender mainstreaming in integrated water resource management. And so as far as existing partnerships or future partnerships, I think there could be much more in terms of – done in terms of gender mainstreaming. And it's often a very misunderstood concept,

we know, but for example with water people it's great to see different efforts in terms of addressing gender issues.

I will note – I guess as Ambassador McDonald mentioned, you had a spark of an idea of the decade, and so maybe what I would want to just close here with is a spark of an idea that some of us have been talking about is actually bringing together the women ministers of water, which there are about 24 of them, at this next meeting of the Commission on Sustainable Development. And interestingly enough, we just talked about this, we had our steering committee meeting for the Gender and Water Alliance last week, and sure enough someone said, "Why just the women ministers? There are great male ministers of water." And so of course we had to recognize it's true; because gender issues are not women's issues, they're equity issues of male and women relations and our focus is really in terms of water – sound water management.

So I just throw this as a spark of an idea; we're still trying to get this developed, and if the U.S. government would be so inclined to help support this initiative is actually bringing the women ministers of water and also male ministers of water together at the next Commission on Sustainable Development meeting. I'm part of a – the Women's Bar Association and so we were thinking, well, why isn't there a Women's Minister of Water Association, and so our – right now the name we've given to it is instead of "Agenda 21", "Gender 21". And so maybe if this is the place where a little concepts could get a spark. I'm hoping that it can.

Just to close, so we do have time for discussion, I do want to recognize though in terms of – even Ambassador McDonald mentioned, in terms of the progress that we've made, when we were involved as the Freshwater Caucus in the second preparatory meeting for the World Summit on Sustainable Development there was one paragraph on water. There were many paragraphs on forestry, many paragraphs on agriculture, and other areas. And we ended up two years later with water being the priority theme for the Commission on Sustainable Development, so I think we have come a long way but we have a long way to go.

And from my perspective as being involved in a civil society for quite some time, I think we need to move away from the civil society for water and civil society – or corporate side for water or international organizations for water and really look at a more comprehensive way of joining forces with the agricultural organizations, forestry organizations, oceans, and so forth because I think that's really where the solutions will come in terms of meeting the targets that we've made.

Thank you. (Applause.)

MR. DAVIES: Thank you, Karin.

I'd like to invite questions or comments from the floor for both the panelists and for comments also for the floor.

Q: While we're on the subject of partnerships, my name is Diane Tate and I'm with the U.S. State Department, I wanted to put in a brief plug for a meeting that Morocco will be hosting this March, March 21st through the 23rd, in Marrakech that will focus on partnerships for sustainable development, specifically water and energy partnerships.

And there are many themes along the lines of what Karin just mentioned that will be covered at this forum. I think it's going to be a really exciting opportunity to speak with colleagues that are focusing on governance issues and partnerships, but also about how to actually implement through partnerships.

If you'd like more information please see me, and I'll make sure you get an e-mail. Thanks.

MR. DAVIES: Thank you.

Other comments, questions? I'm going to ask as we did yesterday when you have a comment or question to please introduce yourself with your name and your affiliation.

Q: My name is Samuel Terera (ph). I'm a graduate student in Natural Resource and Sustainable Development at American University. I'm happy to view many initiatives and ideas and what I want to say is I think all these investments in technology and partnerships are very important, but it is also very important to focus on the source of the problem, which is the watershed management. Healthy ecosystems provide recharged aquifers, create a – (unintelligible) – between dry seasons and wet seasons.

Future water avoiding pollution on rivers and aquifers, and also – (about implementation ?), among many others, biodiversity – (unintelligible). And our society used to value service and products that can market because this service – this environmental service does not have a market, we tend to deplete ecosystems.

In many countries – in Ecuador, Costa Rica, Brazil – there are payments for environmental service – they are developing payment for environmental service, which creates a market for the service. In 1996, Costa Rica initiated this program of (PS ?), which they're working on watershed management. They make contracts through partnerships among NGOs, companies, even like Kyoto strategy to take money from companies that pollute to pay farmers to protect their farms, their forests.

So an example of – in Costa Rica, they take money from hydroelectric companies and beer companies and industries to pay farmers to protect their land, to protect their forests. So the forest produces – keeps producing the environmental service. Companies like this pay $10 per hectare, which is – I mean, depending on the watershed, it is not much. And the government, through tax on gasoline and through also the Kyoto strategy, paid $30, so the farmer received $40 dollars per (hectare ?) per year, which is not much.

I mean there are a lot of problems in (lakes ?) because sometimes the farmer just does not see this as enough incentive to change their agricultural production or cattle production to forests, but it does protect the forest that is already there.

Also in Brazil two years ago it was published – a paper that the company that distributes water and clean water invested less than $5 per (hectare ?) per year managing the watershed, and now in four years they will receive the money that they invested. Just changing the way they treat the land; the way they produce.

So there are ways to manage the watershed which is also very important to the focus.

MR. DAVIES: Thank you for that comment.

Other questions or comments? If not – well, go ahead. I have one, but go ahead.

Q: I just can't resist asking – my name is Hank Habicht from the Global Environment and Technology Foundation. This is an outstanding panel of business and NGO leaders who have a good perspective on the government and one of the biggest enemies of progress, as we've heard over the last couple of days, is turf and the fact that, for example, the U.S. government is very fragmented.

There's enormous expertise that's spread out over really dozens of agencies if you look at watershed, and technical expertise, and economic, and financial, and regulatory expertise. And my question is, as you're constructing partnerships in which the U.S. can play a very potentially useful role, how much of an impediment is that fragmentation to you and do you have any thoughts or advice for how the federal government could present more of a seamless window on the partnership world?

MR. DAVIES: Thank you. I think that's a wonderful question to get feedback from the rest of our panel here.

Why don't we start over with Jeff.

MR. SEABRIGHT: Well, I mean, I don't have a specific response to that question, but I can say that the degree to which the transaction cost of a partnership goes up and the amount of coordination and time and effort goes into sort of the management of it as opposed to the doing of it, I think it probably is a disincentive for private sector companies to get engaged. So finding ways to streamline the engagement with the U.S. government so that there aren't multiple moving pieces, and more efficient management of that would be a huge plus.

MR. ALLGOOD: I would have a similar comment that they – the amount of time it takes to build the partnerships is very long and so you have to have a lot of patience and we speak different languages between the private sector and the government as far as time scales. So it's hard for us to – (chuckles) – it's hard for collaborations to take place.

So you have to have – for the private sector you have to have a very long-range view in order for the partnerships to work, because you're just on these different time scales.

But the other thing that's been pointed out, I think it was pointed out very effectively in the opening presentation yesterday, is the small amount of funds that are currently going to the – from the USAID into safe drinking water it's – and particularly for Africa. I think it's – that needs to be refocused, clearly.

I think that the third area and then I'll stop, is the need – I lost my thought. I'll stop there. (Chuckles.)

MR. DAVIES: Steve?

MR. WERNER: Well, as a small NGO it is very confusing and we don't have the staff or time to really sort it out, and so it would be nice if there was like one place you could go for information who knew what different areas of the government were working on.

I should point out that another individual representing Water Lines, which is a small NGO out of Santa Fe, is helping to start up a water advocacy office here in Washington. The office space is already been rented and he'll be hiring an executive director and asked representatives of different NGOs to serve on the board. So perhaps a water advocacy office here in Washington will be able to keep up with who's doing what and be a central point that everybody could look to to get information.

AMB. MCDONALD: In addition to that there is a bill on the Hill now in the House calling for the creation of a U.S. water commission to do some of the things you're talking about. So it's out there, it just makes – (needs to ?) step forward.

MS. KRCHNAK: Just to add to that, that's true, and in the process for the World Summit there was interagency task – I can't really now – maybe, Diane, you know what it was called – interagency working group on water. And so that does help. As far as even with the UN, is with UNESCO being now – in terms of coordinating, we find if there is a central clearing house function it does help streamline partnerships and projects overall.

MR. ALLGOOD: I may – I did remember my third remark – (laughter) – and the point – it may be a counterbalance to the comment we just heard, and that is, my experience it that loose structures are better and that we should work against creating too much – too many new partnerships and too many new organizations, and focus on action oriented things. I would promote loose structures for networks.

MR. DAVIES: I have a related question for the panel.

In one of the themes that we're looking at this first workshop is looking at the theme of innovation and policy. The second workshop in March will be focusing on

innovation in technology. And it's clear that if you look at the range of problems that we've seen over the last two days from rural settings in developing countries to major urban settings in both developing and developed countries the range of solutions is quite broad, and the range of potential technology is quite broad.

And in thinking about that breadth of a technology, a common theme – and it's not a surprising one I think it's one that we all share – is the question of how to bring more funding; more resources. But the inverse part of that problem is how to make things more cost efficient; more energy efficient. And so in the realm of developing innovative technologies across that entire spectrum, whether it's a pump or a filter, for a point of use or cutting the cost of desalinization by a factor of two or five, what do we need to have in partnerships between government, industry, non-government organizations, and also between potentially U.S. participants and international participants to make that technology development happen in a focused fashion?

AMB. MCDONALD: Can I comment indirectly? Karin talked about a spark of an idea and I – a group of us have an idea that could relate to the question you're talking about. About a dozen people got together a year ago to take a look at whether it was all feasible to bring down the 80 to 90 percent figure of waterborne disease in the country to zero. We all know that the technology is there for the most part, but is there a political will – is this even a possibility?

And we had representatives at that meeting from Atlanta, from the center there, from Rotary International, from WHO, from the Carter Center, and several business leaders. Just about a dozen people, and we spent the whole day looking at this; whether it was possible and whether it was feasible, and we finally decided it was worth a try. And we chose the country of Ghana as the place to start as a pilot project and now we're seeking organization and funding to bring that about. But this is a spark of an idea, and that's what I wanted to – and it can relate to new technologies as well, but if you don't have an idea, you're not going to be able to achieve your goal.

MR. DAVIES: Do you have a comment?

MR. ALLGOOD: My comment would be; as we've looked at the efforts, very good efforts, that are occurring around the world and in the safe drinking water area, most of the best examples are still very small scale. I mean, usually we're talking about 30,000 people, 10,000 people and so I think with a lot of successes we now really need to focus on scale and how can we get scale so that we can make a significant dent in the MDGs.

MR. SEABRIGHT: I think I agree with what Greg just said, I mean from where I sit the challenges that we face – I mean, it's not really a question of technology innovation but more a question of technology dissemination. How do you get to scale because I think we have a lot of the answers we just need to get on with them.

Q: I'm Peter Cook with the National Association of Water Companies. I think getting on with it within the limits of our resources is absolutely critical and we've talked about in our policy innovation discussions, how many people need to be involved to effectively get on with it. We have many partners, many arrangements that have to be used to meet the tremendous challenge we have worldwide.

And as part of those partners, I think the private sector is going to have a very significant role and we have to recognize that for the private sector to be involved there has to be some sort of profit incentive. It may not be the right model in all situations but that certainly has to be a major player in these partnerships and in these solutions. One of the reasons we're here today and yesterday is because worldwide there has been a failure of governments to provide safe water to their populations, to their citizens. And in spite of this obvious fact, at least it's obvious to me, there are many groups that argue that only government can provide water because water is a human right and you cannot trust private profit-making companies to consistently provide reliable water at a price that is affordable and fair. And many of us have over the years just sort of discounted these critics, which are active worldwide as well as domestically. And unfortunately they are getting some traction, and if we want to get on with it we are going to have to address the criticisms that these groups have raised and are continuing to raise every time major projects are trying to be put together in urban areas and non-urban areas around the world.

And so that is something I think we collectively have to address, we have to either discredit the criticisms, or we have to respond to them so that those groups that are currently critical and are working against private sector involvement in many of these partnerships, that these groups come on board and offer constructive solutions or we can move on without them, and without their obstruction.

AMB. MCDONALD: You have a very valid point. A lot of people in the world believe that drinking water is a human right, and there are language and articles to that effect, and different countries handle it in different ways. But I think it's a matter of trust relationships on both sides and I think a lot more energy has to be spent on that. I remember in the case of Cochabamba in Bolivia, recently a major water company came in and they took over the entire water for the whole city and sold it in bottles for the whole city until finally people rose up and said you can't do that. So there is trust and I think that is a critical element.

MS. KRCHNAK: Just adding to that, I agree with the trust building. I think it needs to be from both sides. I mean, your first comment in terms of corporate, who come in only if it's profit, needs to move a little to the middle and the side that's, well, there's only – all water should be – I was at – when I was at World Summit on Sustainable Development on the panel the farmer next to me representing farmers said, "All water should be free for everybody, every farmer." So neither side is really going to get us to what we need to be at in terms of getting on with things. So I think both sides need to come more into the middle so it's not just the for-profit, we're only doing it for profit, or the side where it's all free.

That's not really getting us ahead on the discussion. It's the same as the privatization debate. And so I would say – I would – this challenge, I think it needs to come from both sides, not just the side that's saying, "water is a human right," because from their perspective it's also looking at issues in communities where there's just not the funding in the communities or in people's pockets to be able to provide funding. And so even our Freshwater Caucus statement that we're developing for this next Commission on Sustainable Development there is a point in there in terms of having a certain amount of (liters ?) available free for certain communities, and then have an increasing tariff structures. So, you know, it's an understanding that people come from different perspectives but we need to kind of try and find a compromise.

MR. WERNER: I would just add that I think also it takes some courage too, because just on Monday I was talking with somebody and they were downplaying the idea of partnerships with some companies because of something that happened 15 years ago. And I think some groups, NGOs and others, need to look at what the situation now. Did a company or did an NGO – for that matter, there's a lot of NGOs that have gotten in trouble because – in the past, but we just need to kind of get beyond and say did – have things changed and what's going on currently? And it takes some courage because sometimes you don't – you know, if you're an NGO you want to be very careful about the relationships you have – (audio break, tape change).

Q: – to put out there. One building on the question before of scale and resources, and that is on the role, potential role at least, of the Development Bank in partnership and as some have already been mentioned by Jeff Seabright and others. I just wondered how the U.S. government and also other private sector companies and NGOS might look at the role of the Development Bank. They've got resources.

The second point of this one is to (put out ?) and it was one to you, Karin, woman to woman, but you were talking about getting women ministers to – ministers for water to your committee on sustainable development so gender and water (align ?). And something that I know in our organization we've done through some of our partners we work with is also engaging the first ladies, and not only our own first lady, Mrs. Bush, but also in developing countries many of the – what we have found, the first ladies themselves took a very active and interested role in African countries to say as to what's going on and can have significant influence and support. So to put that idea out there too.

Thank you.

MR. DAVIES: Comments?

Q: Well, just a quick observation that I had from yesterday. It was interesting listening to Claudia from the World Bank and Sandra and they were both talking about water, but Claudia was talking about big water and Sandra was talking about little water. And I think one of the roles that the regional development banks can more effectively play is to make more resources available for support – community investments.

I mean, they tend to focus on large infrastructure. That's sort of the mandate and the history of those organizations. But there are some innovative programs that the Central American Bank for Economic Integration has done to lend to very small municipalities and have small, you know, NGOs working with those communities to help allocate resources and repay those – repay those loans. And in many cases that's gone to water infrastructure in small communities.

So I think there is a role and a very important role that they can play going forward.

Q: (Off mike) – actually to bridge the two – actually, the gender water lines and the Asian – (off mike).

MR. DAVIES: Take one last question from the floor.

Q: It's really just a comment or an observation, and that is that this whole discussion about public and private and partnerships and all of the rest really doesn't have a great deal of traction until we deal with the question just raised a few moments ago and that is of water as a basic human right.

I don't know if it is, but it is a basic human need and we know that there cannot be life without water just as there cannot be life without air. Now, in parts of the world where there is plenty of water, we also know that that water in most instances is not at the right place or at the right time or oftentimes fit for human consumption without extraction, processing, delivery, and the rest. Whether government does it or the private sector does it, there is the cost associated with all of the above, regardless of whether water itself is innately free or not.

In parts of the world where there isn't a supply, the problem becomes more complex still and it strikes me that that's where the role of government is most important, because at least as most civilizations recognize, government has a responsibility for providing or for making available, or certainly not denying, the essential elements required not only for human existence, but for some modicum of dignity as well.

So it strikes me that the way to begin the conversation, if we really want to get beyond this obstructionism that occurs over issues of who owns the water is to divide the question into two parts and concede the first, and the first is is that life cannot take place without water and everyone on the face of this Earth has a right to live.

If we can concede that and then move to the parts that have to do with the economics of giving it to people when they need it in a safe form and recognizing that both government and the private sector have valuable roles depending on the circumstances and the economics and the politics in providing that value to the innately present water, we have something to begin working with.

But until we do that, we're going to continue to have in these international forums these almost endless circular discussions about people's right to have water. And of course it sounds silly when we talk about it like this because of course the answer is always yes. Just as we wouldn't deny our neighbor air to breathe, we shouldn't and can't deny them – actually we can deny them water to drink, but we shouldn't be thinking that that's even an option. Just an observation.

MR. DAVIES: Thank you for that observation, and I also – do you want to comment?

MR. : Well, I just wanted to go back to Karin's comment and one other idea I have about bringing the women ministers together is that you need to make sure that the men are hauling water for the women symbolically. (Laughter.)

MR. DAVIES: Any other comments from the panel? If not, please join me in thanking this morning's panel. (Applause.)

I'd now like to ask my partner, Erik Peterson to help us wrap up this session and to provide some information on communication that we've had – (off mike).

MR. PETERSON: Peter, thank you very much. I am delighted to relay a message from the Senate majority leader, Dr. Bill Frist, who as you're all fully aware is engaged in budget matters this morning, but I'd like to outline some of the points that he's made and then relay a direct communication that we received at – I think it was sanctioned or authorized at about 5:30 or 6:00 A.M. this morning and sent by e-mail to us. You can imagine the kind of schedule now on the Capitol.

Dr. Frist and his – has made the point that the president in his inaugural speech asserted – and I quote – "that the best hope for peace in the world is the expansion of freedom in all the world." And the majority leader has argued that he would like to add as a corollary to the president's comment that the expansion of freedom must include freedom from the repressive impact of insufficient or unsafe water.

And he's made six observations that I think echo many of the points that we've covered here in the past day and a half. Let me go through them very briefly. The first is that lack of access to safe and clean water abroad can no longer be overlooked by policymakers here in Washington. He has made that point very strongly in a number of forums, including a week and a half ago here at CSIS at a (Pre ?) Alfalfa club event that Peter and I attended.

Beyond that he's argued, and I quote here, "Simply put, clean water should be a right for all, not a privilege for the few." That obviously builds on our previous discussion. His third point in looking forward is that providing clean water improves everyone's quality of life, but he notes, as others have here, that it disproportionately benefits children and women.

The fourth point in moving forward that he would like to stress in this context is that unsafe water is not simply a problem we must address, it is a public health crisis that we must prevent, and he notes, we will prevent. The fifth point offered by Dr. Frist is that medicine in public health is a long overlooked currency of peace. This is the point that Peter made yesterday in his introductory comments, and I think it also resonates in the light of our discussion over the past day and a half. And the final point – and it's a very simply point – from Dr. Frist is that he will do his part.

Now, he would like me to read to you the following message: "To the conferees of this meeting of the CSIS/Sandia seminar on water, it is with much regret that I have been unable to attend your Global Water Futures workshop. The press of the Senate schedule has made it impossible for me to participate these last two days. I do consider the work of CSIS and Sandia National Laboratories in this critical policy area to be essential to helping advance the debate on global water issues.

As I recently said at a CSIS luncheon, how well we manage supply, demand, quality, and distribution of this strategic resource will mean the difference between life and death, between health and disease, and between stability and instability in key regions in the world."

He goes on to say, "I congratulate your efforts to elevate water to a strategic priority of the U.S. government. It is also commendable that you have addressed the need to directly involve the private sector in this effort. Legislation that I am preparing to introduce shortly will build upon both these objectives and will benefit from the conclusions of your workshop.

Sincerely yours, William H. Frist, M.D., Majority Leader, U.S. Senate."

So we'd like to thank the majority leader for those comments and the spirit of those comments and we look forward to learning more about the legislation that he will be introducing, as well as to broader efforts.

So that, ladies and gentlemen, brings us now to the finish line. And if you'll permit me, I'd like to gratefully acknowledge a number of people who have made this workshop possible. First of all, I'd like to thank all of the speakers who have lent their expertise, their perspective, and their insight over the past day and a half. I would like to thank Steve Loranger for his exceptional comments this morning. Jim Tibbo (ph) – we had a remarkable film last night, Jim. Thank you so much for allowing us the opportunity of seeing that. All of the speakers, this expert panel and the exceptional speakers also that we had yesterday, thank you so very much.

Beyond that, I'd like to acknowledge with deep gratitude our relationship here at CSIS with our partners in Sandia. Les Shepard (sp) was here yesterday. He left for personal reasons, but we look forward to having him back soon. Ran Findley (sp), Howard Purcell (sp), Tom Hincubine (ph), thank you so much for being with us. And of course I'd like to very gratefully acknowledge Peter Davies and his role in this workshop.

Finally, if you'll permit me, let me acknowledge with deep gratitude my own team here: Sam Brennan (sp), Elizabeth Picard (sp). And some young interns who give their time here: Lavida Dia (ph), Jamie Lee Johnson (sp), Brandon Lord, Bobby Roshan (ph), and Romel Sharma (ph); all of whom were instrumental in making things happen.

But above all, the woman with the camera there. Laura Keating has given up a huge amount of time and shown remarkable dedication in making today's event possible. So would you please join me in thanking everybody? (Applause.)

In his eloquent comments, Jeff Seabright thankfully – thanks, Jeff – acknowledged the hard work that had gone into this, but he also very wisely noted that we have a lot of work ahead. I've been putting together my checklist and it includes the postprocessing of this event that we'll be doing with Sandia, trying to boil down this remarkable discussion on a number of points. We need to revise the working paper that we distributed to you. We look forward to getting your comments, your feedback. We need to finalize the plans for the next seminar exactly a month from now: March 8th and 9th. We need to develop the joint website by that time with Sandia. We'll be working on that. We need to develop ideas on principles and recommendations and continue our discussions with all of you.

And finally, we need a speech summarizing the conclusions of this event to present before Senator Domenici tomorrow at noon. (Laughter.) So if that is our homework, I'd like to ask you to do your homework. First is please put on your calendars March 8th and 9th when we'll continue this discussion on innovation in water policy by looking at technology. We already have a number of speakers nailed down. We're looking forward to an equally compelling discussion then on the role of technology in moving the ball forward.

And the other thing we'd ask you to do is to contact us in the meantime to develop these sparks of ideas that develop across the board. We have a remarkable diversity of views, of perspectives here, and we'd very much like to hear from you with respect to new initiatives, new ideas, et cetera. We look forward to working with you, to being your partner as we move this agenda forward.

Peter, would you like to add anything to this?

MR. DAVIES: I'd like to add my thanks to all the participants and the panelists. I think one of the things that distinguished the last few days was the breadth of perspectives that we have around the table here, and I really think for a problem of this nature there's no way we're going to get where we need to get to without bringing together those perspectives in ways that we haven't imagined yet, and that's the challenge that we take.

I'd also like to thank our partner, CSIS, for this endeavor. We've been working on this for some time and it's very exciting work and we clearly have a long ways to go, but it's a compelling challenge, so thank you.

MR. PETERSON: So that concludes our workshop. Thank you so very much, ladies and gentlemen. (Applause.)

(END)