Peter Kostishack: …who are two members of our Advisory network. They're both on the line to share some of their grantmaking experience on water issues in China and South America. For those of you who are less familiar with Global Greengrants Fund, we give small grants to grassroots organizations around the world. One of the ways that we do this is through using this global network of advisors. They're practitioners, leaders, and experts who help us identify good groups and projects, and so both Baohua and Enrique are part of that network.

Water is a very central issue to much of our grantmaking. Some of the many issues that our grantees are working on include access to clean water, contamination from mining and oil development and industrial agriculture, international financing of water privatization, the loss of fresh water because of hydro and other industrial projects, and also the impact of climate change on water availability.

What's really relevant to our work, also, is that water happens to be a mobilizing factor. It really has the ability to bring people together. In all of our own communities, as well as elsewhere around the world, people are organizing themselves around protecting the quality of their water and their right of access. Water is really a unifying factor for environmental movements around the world. So this is very fundamental to one aspect of Greengrants' own Theory of Change, which is about building the infrastructure for movements for social change.

We're going to learn a bit today about how access to clean water has united groups in China, and also in South America, and what happens when they start to act. Just a couple of quick housekeeping things before we continue: we've had about 30 people RSVP for the call, and so because of that, we've muted the lines except for our speakers in order to keep the background noise down. There will be some time for questions after both of them present. In the meantime, what we'd like to do is ask you to send your questions to us by email during the call to Jennifer@greengrants.org. Jen will be fielding the questions and bringing them to me, and I can present them to our speakers. Also, let us know if you want us to include your name. So, we'll read those questions first, and then at the end, we'll also open the lines up for some more direct conversation. Also, I don't know if you heard the announcement earlier, but this call is being recorded. We're doing that so that we can make it available for download on our website for those who couldn't join us today.

With that, I'd like to introduce Yan Baohua, who's a member of the Greengrants China Advisory Board. Baohua is originally from Baoding city in northern China. She has a long history of working for environmental organizations in China, and her expertise is in environmental education and building the capacity of grassroots groups to improve the effectiveness of their projects and their organizations. She is joining us from Tucson, Arizona, where just last month she defended her Doctorate in Education, with a focus on environmental learning. So, congrats Baohua, and Dr… I'll let you take it from here to tell us a little bit about the context in China.

Yan Baohua: Thank you, Peter. Hello, I'm very glad to have the chance to be here and to share the water issues and the experience of our grantees working in China to address these issues. Like Peter said, I came from China, and I got to know Greengrants in the late 1990s. At that time, I was a member of a

college student environmental organization. Our organization, actually, is a grantee of Greengrants, so that's how I got to know Greengrants, and I began to serve as a China Advisor in 2005.

First of all, I would like to give a brief introduction of the water issues in China, and then I would like to use some stories of our grantees to share how they have been working to address these issues.

Water shortage and water pollution are two major issues facing China. Water shortage is quite a historic issue, and water resources per capita in China is only about one-fourth of the average number in the world. Water shortage is particularly serious in northern China, where I came from.

With the process of industrialization and urbanization, water pollution has increasingly become a major challenge facing sustainable development in China. According to the Report on the State of the Environment in China, issued by the Ministry of Environmental Protection, the overall quality of surface water across the nation was subject to intermediate pollution. Among 745 water sections under the national surface water quality monitoring program, including 593 river sections and 152 lake or reservoir monitoring sites, 28 percent failed to meet Grade V standards. In other words, over one-fourth of these waters are not proper to use at all, even for agriculture or landscaping purposes.

In China, there are seven major rivers: Pearl River, Yangtze River, Huaihe River, Yellow River, Haihe River, Liaohe River, and Songhua River. According to the same report, in 2006, among the 408 monitoring sections of 197 rivers of the seven major river watersheds in the national monitoring program, 26 percent failed to meet the Grade V standards, or are not proper to use at all. Overall, Songhua River, Yellow River, and Huaihe River were subject to 'intermediate pollution', and the Liaohe River and Haihe River in north China were under heavy pollution.

As a result, there are some impacts to the sustainable development of the nation. First of all, access to safe drinking water is an increasingly important issue. Among the 222 surface sources of drinking water for 113 cities for environmental protection in China, the average ratio that reached the drinking water standards was only 72 percent. That means that over one-fourth of the sources for drinking water did not meet the standards.

According to the report of the Environmental Protection and Resource Conservation Committee of the National Peoples' Congress in 2007, 80 percent of the lower-level underground water (within 50 meters underground) of the Huaihe River, which is located in central China, fell into Grade V. This means that the water is only good for agriculture and landscaping use, but not good for drinking. Even the underground water between 50 meters and 300 meters, which we call mid-level underground water, was also partially polluted.

Another issue is the impact to human health. There are some villages with high cancer rates in heavily polluted areas, for example, the Huaihe River watershed and the Taihu Lake watershed. These issues have increasingly been catching people's attention. Although there are few existing research studies to show the causal relationship, it is increasingly recognized by researchers that there are some positive relationships between the increasing cancer rates and water pollution.

Another major impact concerns the underground water level, since surface water is not good for drinking. People are increasingly relying on underground water for drinking, and this will result in the decrease of underground water levels. In many places in north China, including the capital city, Beijing, the underground water level decreases about two to three meters every year.

So those are some impacts of water pollution. The causes of pollution vary across the nation, but there are some major contributors. Two of these are agricultural pollution from the use of fertilizers and pesticides, and industrial pollution from paper-making, chemical production, electrical power industry, and textile mills. Another cause stems from the increase of population in the urban areas, where there is excess sewage and water use from a growing number of households, which poses a major challenge for the water quality in China.

I would say there are two important roles of environmental organizations, especially the grassroots organizations working in the communities to address the water issues, and the first role is education. They can help to spread information on water pollution and help the public to learn about water pollution issues, especially those issues in their communities, and they're actually related to their own lives. These organizations will be able to help the local people be aware of water pollution and their right to know, to participate, and to monitor water pollution issues. These organizations can also try to help the public make changes in their own lives to lessen their impact on the water system. For example, trying to reduce the discharge of sewage and trying to resist products of the water polluting factories or enterprises. Also, they can help to try to influence people around them, and not just act by themselves.

Another important role for environmental organizations is to monitor water quality and to help with the enforcement of water pollution-related laws and regulations in the nation. For example, many of the local organizations have organized volunteers to investigate water pollution cases. They have been writing letters and proposals to the government to address water pollution issues in their communities or their region.

Greengrants has played a very important role in helping the small organizations to develop. When these organizations are first established, it's generally difficult for them to obtain outside funding. Greengrants' support enables these organizations to work on local environmental issues, and it's through this process that they can obtain their own institutional development and build their own social reputation. At the same time, Greengrants China Board Advisors have been trying to work closely with our grantees to provide them with suggestions and ideas, both for their project development and institutional development.

Next, I would like to use some grantees as examples to show how they have been working hard to address these water issues in China.

The first organization I would like to share is Green Kunming, which is located in Kunming, the capital city of Yunnan Province in southwest China. In 2007, we gave a grant of $500 to Green Kunming to investigate pollution in the Dalongtan River. This river runs underground and flows into Dianchi Lake, which is one of the three lakes in the national treatment plan. These three lakes are important because

they are water sources to nearby central cities with very dense populations. As a result of their work at Dianchi Lake, Green Kunming was awarded the SEE-TNC First Prize in 2008.

This project began in the middle of 2006, and continued until the mid-September 2008. In August 2006, Green Kunming learned from a farmer living near Dianchi Lake that a business was going to build a car washing facility in the Xishan District in Kunming, which would cut off the underground river to be used in car washing. Greatly concerned, Green Kunming organized a group of volunteers to investigate this issue. With the data that their investigation produced, they visited the Dianchi Management Bureau and the Environmental Protection Bureau of Xishan District. However, through their research, they found that there were few documents on underground river management, and even these local government agencies didn't have any information about underwater river regulation and management. As a result, they decided to conduct a comprehensive investigation of the Dianchi watershed, including the underground rivers and reservoirs. They publicized their research findings in the local media.

Through their investigations, they found more problems. For example, a reservoir had been heavily polluted by nearby piggeries, and many springs and lakes had almost dried up. In July 2008, based on their investigation of 24 rivers, they wrote a letter on behalf of citizens on the issue of Dianchi Lake underground river management. The letter was submitted to the Secretary of Municipal Party Committee, Mr. Qiu He, while local media also reported on this issue. As a result of their efforts, they received a response from Mr. Qiu He, who claimed that we should try our best to restore our whole underground river system in Kunming. He also requested the Bureau of Water Resources of Kunming City to thoroughly investigate the condition of the whole underground river system within a month. Through their efforts, Green Kunming effectively addressed this issue and raised awareness of the public on this issue. Also, the media coverage educated the public, encouraging people to pay attention and show concern for the issue.

In 2008 the China Advisory Board awarded another grant of $3000 to Green Kunming to continue their work towards protecting the Dianchi underground water system, particularly through mapping the historical hotspots along the river and maintaining their publicity activities.

Another story I would like to share with you is that of Green Anhui. This group is different from Green Kunming in that we have been supporting them since their establishment in the early 2000s. Their work focuses on the Huaihe River, and most of the people in this organization are young people who have been working closely with the college environmental organizations. They conduct environmental education programs and organize volunteers to conduct on-the-spot investigations of rivers. Also, they have been working with local villagers of Qiugang, a village near the industrial city of Bengbu. Through their collaborative efforts, they have successfully exposed the serious water pollution caused by three chemical factories in the mass media, and initiated the related local government agencies to enforce environmental protection laws and regulations against these polluting factories, forcing them to address this issue. It is another successful story.

Peter: Thank you, Baohua. Now, from what I understand, they actually got the government to shut down some of the polluting companies. Is that right?

Baohua: Yes, it's in the process.

Peter: Well, I appreciate your giving us a context, and also talking about some of the successful roles that local environmental organizations are playing in China to educate people and to actually do citizen monitoring of water.

I'd like to turn now to our next speaker, Enrique Bostelmann, who's joining us from Montevideo, Uruguay. By training, Enrique is an agricultural engineer, but his real passions are environmental activism and paleontology. Enrique is a paleontologist at the National Museum of Natural History in Uruguay, but, more importantly for us on this call today, he's the coordinator of Global Greengrants boards for the Andes and the Southern Cone of South America. He's the co-coordinator of our South American Regional Fund, as well, and he also happens to be an advisor for our partner grantmaking organization in Brazil, Centro de Apoio Socio-Ambiental, or CASA. So, Enrique, we'll turn to you now to learn about community struggles for water rights where you're working in South America.

Enrique Bostelmann: Thank you very much, Peter, and good morning to everyone. Briefly, I want to share with you my engagement with Global Greengrants. My first work was related to protection of environmental timbered forests in Mediterranean areas in Chile, when I joined an organization which was called the Centro de Derecho Ambiental (CEADA). I was the biodiversity director of that organization for four years, and I advocated my work in line with the national biodiversity strategy of Chile, which, at the time, was in its first stage of development. After that, I started my PhD studies here in Montevideo, and at that point I was contacted by Global Greengrants to become part of the Southern Cone advisory board, which I entered in 2005 as an advisor for Chile and Uruguay. At the end of 2006 I became the coordinator of both boards that we have here in South America (Southern Cone and Andes), and also part of the CASA, our partner in Brazil.

South America has a pretty special situation related to other regions because we have an imbalanced irrigated continent. We have one of the wettest environments of a temperate forest in the south of Chile and Argentina, and also the driest desert in the world in southern Peru and northern Chile. So, keeping this in mind, we have very diverse scenarios with regard to water, in terms of access to water and how society uses water for productive industries and for the conservation of biodiversity.

Fundamentals of concern on water resources are based on cornerstone situations, which I want to comment on in more detail, briefly. Of course, one of the most important is that many people on the continent still lack free access to water, especially in the rural areas, and more so in the arid and semi-arid areas, for example, southern Peru, northern Chile, western Paraguay, etc. In all of these areas, states have not yet done enough to develop the access to water for the people. What we face is a constant pressure from big industrial projects to take underground water in order to maintain their operations, while neglecting the needs of the people.

Another problem, which is certainly worldwide, as Baohua expressed about China, is industrial contamination and pollution. We have a lot of cases in the continent, unfortunately, centered on the development of agriculture, paper mill operations, poor treatment of wastewater, etc. Indeed, in some cases we are facing enormous amounts of poorly treated wastewater effluence by big industries. For

example, a paper mill here in Uruguay can produce one million gallons per hour of untreated or poorly treated wastewater effluence, and the contaminants, even diluted, create a problem. In many cases, we don't have a correct monitoring of this process.

Mining operations, dam construction, and industrial agriculture pose other major problems with local communities.

A fourth issue is the privatization of water service. This factor has produced more social mobilization than any of the above mentioned, in some cases reaching political and international involvement, as we will see in cases from Ecuador and Uruguay.

Climatic tendencies in distributions of precipitation and the disappearance of mountain glaciers are also important issues, and will especially be problematic in the future of big cities, which depend exclusively on rain or glacial melt for their water resources. A good case to tell you is about Lima, the capital of Peru, which depends exclusively on what the highlands plateau receives in rainwater during the summer. So, we are facing an issue with climate change that will likely be socially and politically important in most parts of tropical South America, which could result in massive displacements of populations in urban areas.

Certainly, these issues are clearly social ones, but we also face a biodiversity crisis. As in the United States, South American freshwater ecosystems are highly endangered and almost neglected from public policy. First, this is concerning because of the traditional use of these ecosystems: to provide goods for society. However, the second point is that most of these endangered species belong to taxonomic groups that the public is not aware of; we could cite many invertebrates and fish. Thirdly, because we have so little knowledge about the ecosystem dynamics in freshwater ecosystems in the continent, any solution we have found seems to be ineffective or even harmful in some instances.

All of these factors that I have told you are in accordance with highly fragmented legal framework and totally disparate political and legal agendas in most of the countries. For example, in Chile, most of the access to water privatized, which means that you either need to buy water or maintain the legal right to access the water. Of course, big companies, particularly dam constructors or mining corporations, have greater capacity to obtain these rights, while the rural populations, especially indigenous peoples, do not have the tools or resources to engage in an active legal battle for these rights. As a result, these marginalized populations are left without access to the water they need, even if, in the case of indigenous communities, the water is on their original territories.

Another issue concerns the future of the underground water resources, which are relatively unregulated and unevenly distributed across the continent. We have large aquifers that contain potable water, which have not been tapped for thousands of years. Big industries are applying political pressure to gain access to these underground water reservoirs, especially in arid regions where surface water is insufficient for their needs. Since we do not have a legal framework in most countries for this kind of situation, it is becoming a political issue.

A good example that combines many of these issues is the institution of a national law for the protection of mountain glaciers in Argentina. Advances of private mining operations throughout Argentina are some of the most extensive on the continent. And, indeed, most of their watersheds are strictly connected to the Andes and its glaciers, particularly to support the country in the dry seasons. Facing this situation, a scientific panel formulated a proposal to allow the protection of the national glaciers, which was approved with total majority in the Parliament, in both chambers. However, the President vetoed the law because it directly affected the interests of the mining operations. Even a politically concentrated opinion can be stopped by industry leaders interested in maintaining access to the resource.

Evidently, these different scenarios demand different actions in communities and small local groups, in urban areas and in rural areas, where people are facing different situations with different strategies. Through our positions on the Greengrants Advisory Boards, we are looking for and we are supporting different kinds of movements and different kinds of conflicts between social groups and any of these factors that I have enumerated. For that reason, we have a lot of examples we can share with you about how communities are facing the threats or the pressures of conflict over water resources.

Looking at some studies on what we have done in the last few years, for example, we have supported more than 12 cases related directly to mining operations. Not all cases are directly related to water issues, but they're always relevant because mining requires hundreds of millions of liters of water for its operations. In each case, there are side effects in the water pollution that mining creates and the enormous amounts of water the operations require. Organizations all over Latin America are trying to build a network to face the advancing pressures of the mining industry and create some sort of international group to follow the operations, particularly with regards to water resource quality.

The case which I will present to you occurred in the last two years in Ecuador. Ecuador is becoming an interesting country with regards to the discussion of water rights because it's the first country on the continent to include access to water as a human right in their constitution. There is also debate about improving the quality of the service and how the government will regulate rural services in the country. Through Greengrants, we have supported a lot of movements which were involved in this debate for the inclusion of this basic right in the constitution.

One such group is the civil association, Mi Cometa. It is a social movement based in the city of Guayaquil, in Ecuador, which is the most important economic center of the country, and located in the lowlands, facing the Pacific Ocean. This city was part of the experiment to privatize water resources in the country. At the beginning of the privatization process, there were a series of irregularities and injustices that were noticed by some social group, and finally led to the creation of the coalition, Mi Cometa. This group sought a response from the company that was given the concession to control the city's water, the international, private firm, Bechtel. After the first four years of operations, poor people were more neglected in the service they received, but charged over 180 percent of the standard cost of supply. Because these people could not afford to pay the cost of the water, the service was shut off in some areas. What's more, service declined in other areas and there were cases of Hepatitis and other problems among children in most of the southern part of the city.

For that reason, the Mi Cometa began to participate in activism and start a campaign to denounce these injustices, and grew its presence in local and even international opinion. Eventually, the group developed a political platform to demand a new law regarding water resource rights, particularly to end the concession to Bechtel and to put water back under state ownership and local management.

The Greengrants Andes Advisory Board supported Mi Cometa during the end of 2006 and the beginning of 2007, providing grants to their national campaign and sending leaders to the capital of the city to make contacts with the politicians drafting the new constitution. This was an interesting time of debate, and it was absolutely important that these leaders participated in these debates because, finally, most of their demands were included in the constitution. The referendum passed in 2008 includes the right to access to water.

We feel that the support we gave was absolutely important for this group to reach their goal, which also became a national priority and a part of the new constitution.

We have some other cases related to paper mill operations, which are also related to social movements, but with the few minutes I have left, I want to share with you some view of how we can improve our efforts to mobilize social forces. Particularly, to gain more access to water for people, and try to eliminate the difficulties they are facing, especially in the capacity of small groups and indigenous communities to face the pressure of big industries.

One thing to consider is that the Chilean privatizing model is becoming part of the agendas of many other countries. For example, Peru is using this privatization model in much of their discussion in Parliament. We also see that other countries are more and more interested in exploring the privatizing of water resources.

On the other side, other countries like Ecuador and Uruguay are working hard to include legal access to water as a right in their constitutions. One thing I believe is important is to focus on actions in countries that are considering the privatization models, especially because the move generates serious problems. An important issue here is that these countries are looking at the economic model that is tempting for countries in the region to follow. So, focusing our efforts towards groups that are trying to raise public concern about what is happening to their water resources could be an important issue.

Peter: Thank you, Enrique. One question that has come in I want to ask Baohua: somebody asked, what is the reaction of the Chinese government to grassroots work bringing attention to the impacts of water contamination? What type of alliances can be effective in dealing with water contamination?

Baohua: In terms of the first part of the question, I think the general response is very positive because water pollution is a really a very, very serious issue challenging the development of China. The central government has issued many regulations and has promoted the treatment of water pollution. However, as you may know, at the more local level, because of economic development and the government's desire to promote development, they may keep silent when there are polluting industries contaminating the river or the underground water. But when the voices of the public begin to be heard, and when the

mass media reports on pollution issues and their impacts on peoples' lives and health problems, the government does begin to react on the issues. So, I think the general reactions are positive.

It's very important for all different people to work together, from the community to grassroots organizations to the mass media to the local environmental protection bureaus. When they work together, they will be more effective to address the issues and to really find a solution. It's not just the responsibility of the government, as we used to rely on the government to address all the issues, the public should be aware of the issue, and everyone should have their voices heard. So, in regards to alliances, I think they're very important in this case.

Peter: Thanks, Baohua. I want to turn back to Enrique. You mentioned the need to work in other countries where this concept of water privatization that you see in Chile is gaining a foothold; can you tell us, were there any lessons that were learned from the experience in Ecuador and the work of Mi Cometa that might be useful and that we might find a way to apply in some of these other countries?

Enrique: It was absolutely important that the local communities that were directly affected got engaged in this social mobilization. What I think is the most important experience we can take from this particular case is that it was the decision that the local leaders and the local community made to fight for their rights that moved them to take action and bring their case to the national government, and eventually change the constitution. My sense is that what we need to do to support all these small groups, all these locally operated cells and local leaders that are trying to keep their rights for their communities to turn their case into a national platform. I believe that the Equatorian experience showed us exactly how to do that – finding the center of local demands in the territory, then moving towards a wider, more national discussion, and finally reaching the success of mobilizing their forces by getting their rights in the constitution.

Peter: Thanks, Enrique. We have a question here from Gespal, in Canada, and it goes to both of you. You both highlighted cases where local environmental groups have been able to influence a change in industrial practice and policy. In order to reach a balance between centralization and decentralization of water management, what overarching mechanisms or framework needs to be in place, particularly at the local level, for this to happen, to ensure equitable access to potable water resources? Secondly, how do public-private partnerships and industry factor into this?

Baohua: It's really a long question, but I think it's very important. From the community organizations' perspective, they will be able to contribute to the solutions of this issue by monitoring what's happening in their communities and then to communicate the information to the local government. Also, it's important for industry to disclose any environmental impact information to the public, so that the public can know what's happening around them, and with their future. As for the industries, the framework should be that industry has the obligation to be responsible for their own production and for the community where they are located.

Peter: Enrique, do you have anything to follow up on?

Enrique: Yes, of course, my perception is that this particular issue depends on the kind of relationship that the local community has with the local government or the national government, and also with the industries. In many cases, we are facing all kinds of situations possible. For example, if the local community and their authorities have a good relationship, things are much easier, because the community can raise their demands and the government is receptive to them. In most of the cases that we are seeing conflict, the big issue is that the local authority or the national authority simply doesn't enforce the law, or they take sides with the big industries or the big economic sectors, leaving the community behind. At this point, what really needs to happen is to have the local community get organized and grab attention for their demands. Of course, industries and financiers are looking for returns on their investments, so what they need to do is follow the law and things will be okay. However, in some cases, we have this legal emptiness that needs to be addressed by the government, and this is a task that needs to be done by the local authorities, at the beginning.

Peter: Any other quick questions? Okay, well, with that, I'd like to extend a huge 'thank you' to Baohua and Enrique for your expertise and sharing your knowledge and what's going on out there. Also, I would like to thank Jen Adams for all of her work in organizing this call, and thank you, also, those of you that are participating through your questions and for supporting this work. I'll also add that both Enrique and Baohua have expressed that they are very happy to follow up if you have any further questions. The best way to handle that is to contact Jen at Jennifer@greengrants.org if you have questions or want to get in touch with them directly. Please also send us any feedback, so that when we do any future calls like this, we can make them even better and more useful. Thanks again.