



Water: New Thinking for the 21st Century

Peter Gleick

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By Lily Kunin '10

“We have limited and unevenly distributed fresh water resources, and they are used inefficiently and ineffectively--in part because of the lack of basic national water policy,” said Peter Gleick. “The next President faces challenges around our freshwater supply and management with diplomatic, economic, political, and public health ramifications; comprehensive and sustainable national water policy must be an early priority.”¹ As an internationally recognized expert on water, and named by Wired Magazine as one of fifteen people the next President should listen to, I was curious to hear what Gleick would in fact recommend to the President beyond water issues as a priority. I was lucky enough to find my answer clearly stated in an essay on the Pacific Institute’s website entitled “Recommendations for the Next President.” Having read these recommendations and multiple other papers published by Gleick, I had been able to form a basic understanding on what he was going to speak about before he came. In one paper in particular, titled “Basic Water Requirements for Human Activities: Meeting Basic Needs” he discusses the need for sustainable consumption of water, and even defines basic water requirement levels. The main point I took from this article was his belief that water is not just a natural resource, but that it is also an essential human right. The concept of water as a basic human right was carried over in his talk at Connecticut College entitled “Water: New Thinking for the 21st Century” which was compelling, yet straightforward. It provided an optimistic view that we can get on the path to a healthy water future.

Gleick began his talk by pointing to the fact that we need new thinking. Problems in terms of water have changed, and we cannot deal with 21st century problems with the thinking of the 20th or 19th century. This was also the first recommendation he provided for the new President; that we need to develop a 21st century water policy. He highlighted three dimensions as to why there is a water crisis. First, there is a human dimension, which he called the worst and most inexcusable. There are millions of people around the globe that lack access to safe drinking water, and billions of people that suffer from water related diseases each year. The reason that the human dimension is the most inexcusable is because these are all preventable issues. The issue is not technological; we know how to solve the issues. The second dimension is the environmental dimension, which is also related to humans, as we are the ones devastating the ecosystems by overexploiting the water resource or contaminating it. With climate change, there will be a fundamental change in the hydrologic cycle. Unfortunately, there is a pattern in which devastating events leading to legislation in the United States, and even an alarming issue such as climate change may not grab such immediate and clear legislative attention. Finally, the third dimension is political. Gleick points out that one half of water falls in what is called an “international river basin” and there are over two hundred sixty international rivers. Therefore, it is relatively easy to conclude that water could be a source of political tension, and in fact has been for many years. There is a long history of water conflict, and as time has progressed the disconnect between water laws versus water rights has increased.

Gleick believes that the problem is getting worse, citing population growth as a main reason. Population growth is tied to all environmental problems, not just those dealing with water. Unfortunately, exponential population growth tends to be in areas where water is the scarcest. The combination of these two factors can exacerbate the problem. In addition, the problem has grown simply because of the paralysis over what to do about it. There is much disagreement, which has delayed the process of doing anything at all. There is particular disagreement over climate change, a direct factor affecting water. He believes that there are increasing consequences taking place due to climate change. In his recommendation report to the President, he states that climate change will affect the supply and demand for water resources, and that the nation is already starting to see these changes.ⁱⁱ He recommends integrating “climate change into all federal water planning and activity.”

Gleick then brought up the concept of “peak water,” which may seem impossible at first thought, since water is seen as a renewable resource unlike oil, in which we often hear the term “peak oil.” However, Gleick explains the term “peak water” not as the idea that we are running out, but in terms of the fact that we are pushing the limits especially in aquifers where we may no longer be able to tap a renewable resource. This concept is taken further with his discussion of “peak ecological water” which weighs a cost benefit analysis. He posits the question, does pumping another gallon of water provide more ecological harm than benefit? Arguments have reached this point in many places such as in the Everglades or in parts of the West Coast where salmon are now extinct. In these places, alterations by humans have had detrimental effects and it could be argued that the costs have far outweighed the benefits of water usage in these places.

However, Gleick made it clear that there is no need to be pessimistic about our water future at this point, and that we can get on what he calls a “soft path” towards a sustainable water future. He says that we will inevitably get to this path, because at one point there will be no other option. He argued six things that need to change to get to this path. First, he reasoned that the issue is not a result of a lack of water, or money, or brains. We can use these things to our advantage to get to where we want to be. Second, he pointed to problems in infrastructure. The problem is a thinking problem, not an infrastructure problem. Therefore, it would not be fixed with new standards for infrastructure, but investment in infrastructure is a step towards creating better water quality and use. Third, we need to stop taking the demand for water as fixed. The good news is that the United States uses less water today than it did twenty years ago, even on a per capita basis. We can cut down water use through efficiency, but also eliminating or shortening activities. Next, we need to expand the definition of supply by using methods such as rainwater harvesting, treated wastewater, and desalinization. Fifth, Gleick says that water needs to be properly priced. The fact that it is not leads it to be overused. This creates a tension between human rights and economics. The price of water still needs to be equitable. He says that the poor need to be provided water for free. I agree that we should pay more for water, or more for the service of the water being provided to us. Lastly, he argues that concepts such as regulation and management need to be expanded. For example, structures that manage water systems may be decentralized creating a local system for what is happening at the local level. He feels that the responsibility falls on the government to develop and enforce these systems or regulations. It is a combination of all these components that can lead us to form a sustainable water future. We can envision the water path we want in the future, and we know how he can get there.

I think it is important to note that the essay of recommendations for the President that Gleick wrote was titled “Water: Threats and Opportunities—Recommendations for the Next President.” It seemed to be an overarching theme throughout the conference that we cannot only find a sustainable path, but we must go beyond that and see water as a source of opportunity. For example, the United States can make international goodwill efforts to help provide clean water, and Gleick believes this should be done. The path ahead may be challenging, but there is no doubt that water can provide opportunity and that a sustainable path can be achieved.

For more information on Gleick’s work and the Pacific Institute, see: (List compiled by Maria Figliola ’10 and Tyler Dunham ’09)

- Gleick, Peter. *Water and Conflict: Fresh Water Resources and International Security*. International Security, Vol. 18, No. 1. The MIT Press, Summer, 1993.
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- Cooley, Heather, and Taryn Hutchins-Cabibi, Michael Cohen, Peter Gleick, and Matthew Hedberger (2007), Hidden Oasis: Water Conservation and Efficiency in Las Vegas. Pacific Institute, November 2007.
- Peter Gleick Webcast on Peak Water: <http://newsecuritybeat.blogspot.com/2009/02/video-peter-gleick-on-peak-water.html>
- Gleick, Peter. “The Luxury of a Toilet—Peter Gleick of the Pacific Institute.” Sanitation Updates. 28 April 2009. <<http://sanitationupdates.wordpress.com/2009/04/28/the-luxury-of-a-toilet/>>.
- “Interview with Doctor Peter Gleick.” American Rivers, Washington DC. 14 November 2006. <http://amr.convio.net/site/DocServer/Full_Transcript_Interview_with_Peter_Gleick.pdf?docID=5281>.
- “Peter Gleick on Peak Water.” The Environmental Change and Security Program. YouTube.com. <<http://www.youtube.com/watch?v=Rm7lxwKgO5I>>.
- “Peter Gleick Reports on a Looming Water Crisis.” NPR.org. 27 November 2007. <<http://www.npr.org/templates/story/story.php?storyId=16654226>>.
- “Pacific Institute Home Page.” Pacific Institute. May 2009. <<http://www.pacinst.org/>>.
- “The World’s Water.” Pacific Institute. 2009. <<http://worldwater.org/>>.
- Pacific Institute Bio: http://www.pacinst.org/about_us/staff_board/gleick/
- Pacific Institute Publications (Gleick contributes to several): <http://pacinst.org/publications/>

ⁱ Pacific Institute. “Water: Threats and Opportunities—Recommendations for the Next President.” http://www.pacinst.org/publications/essays_and_opinion/presidential_recommendations/index.html (accessed 10 April 2009).

ⁱⁱ (Pacific Institute)