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Testimony of Dr. Peter H. Gleick[1]
Before the Legislative Hearing of the
Subcommittee on Water and Power
Of the Committee on Resources
United States Congress

On the Need for a National Water Commission for the 21st Century

April 1, 2003

Mr. Chairman, Representatives: thank you for inviting me to offer comments on the need for a National Water Commission for the 21st Century. I believe there is indeed need for such a Commission, and on March 10, 2003, the Pacific Institute called for its creation in a letter to the President and members of Congress. I have attached for the record a copy of that letter (Attachment 1).

The United States has not had a national water commission in place for 30 years, since the 1968 National Water Commission reported to the President and Congress in 1973. Moreover, we have never had a national water commission with the authority and responsibility to review and recommend on the role of the U.S. in addressing international water issues. My comments today will address the idea of a Commission generally, with some detailed recommendations. I will also provide specific comments on **H.R. 135**, a bill proposed to establish such a Commission. In short, the idea of such a Commission is an excellent one; but I believe the Findings and Duties as described in **H.R. 135** need clarification and revision if the Commission is to adequately deal with the water challenges facing us.

International and Domestic Water Challenges

As we enter the 21st century, pressures on United States and international water resources are growing and conflicts among water users are worsening. International attention to these problems is growing, as shown by the focus on water at the Johannesburg Earth Summit and the Kyoto Third World Water Forum. Moreover, 2003 has been declared the International Year of Freshwater by the United Nations. Globally, the realization is growing that the failure to meet basic human and environmental needs for water is the greatest development disaster of the 20th century. Millions of people, mostly young children, die annually from preventable water-related diseases. Climate change is increasingly threatening our own water systems and water

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resources abroad. Controversy is developing over the proper role of expensive dams and infrastructure, private corporations, and local communities in managing water. Yet the United States has not offered adequate leadership in providing resources, education, and our vast technological and financial experience to address these problems.

Here at home, municipalities are faced with billions of dollars of infrastructure needs and growing disputes over the role of public and private water management. Arguments among western states over allocations of shared rivers are rising, as are tensions between cities and farmers over water rights. The U.S. and Mexico have unresolved disagreements over the Colorado and Rio Grande/Rio Bravo rivers, and our Canadian neighbors are concerned about proposals to divert Great Lakes or Canadian water for U.S. use. Communities are facing new challenges in meeting water quality standards and ensuring that safe drinking water is available for all.

Responding to Water Challenges: A New Water Commission

In many cases, the resolution of these problems requires smart state and local action. But national policies and actions are also needed, as is leadership at the national level. Unfortunately, there is inadequate attention being given to national water issues, and what efforts are being made are often contradictory or counterproductive. Responsibility for water is spread out over many federal agencies and departments, operating with no overall coordination.

It is time for a new national water commission. The Pacific Institute has called for the creation of a **National Commission on Water for the 21st Century** to provide guidance and direction on the appropriate role of the United States in addressing national and international water issues. The Commission must be non-partisan and include representation from across the many disciplines affected, including the sciences, economics, public policy, law, governments, public interest groups, and appropriate private sectors. While the duration of the Commission should be fixed, adequate financial resources should be provided to permit it to do a serious and effective job. The goals of the Commission should include:

- **Re-evaluate national water science and policy** and offer guidance on integrating efforts now scattered among disparate and uncoordinated federal agencies and departments. National budget priorities should also be re-evaluated and re-structured to ensure that the national objectives are more clearly supported.

- **Recommend revisions or better enforcement of national laws related to water**, including laws governing water quality, the protection of aquatic ecosystems, the financing of water infrastructure, and national standards for improving water-use efficiency and conservation.

- **Develop recommendations for flood and drought management**, including implementing overdue changes proposed by previous reviews.

- **Work to ensure the physical security of the nation's water**, by highlighting necessary steps that could be taken to reduce overlap and streamline responsibilities of the multiple federal agencies working on water issues.

- **Develop recommendations for the U.S. role in identifying and addressing global water problems**, including how to significantly accelerate efforts to meet the large and devastating unmet basic human needs for water in poorer countries. These recommendations should address how best to apply the vast financial, educational, technological, and institutional expertise of the United States to these problems.

- **Explore how to deal with the risks of climatic changes**, including how to adapt to the growing and potentially severe impacts of global warming for water resources.

- **Make recommendations for reducing the risks of international tensions over shared water resources**, including how to resolve concerns with our own neighbors, Mexico and Canada, over shared water systems. These recommendations would be valuable in other international river basins where our experience, international stature, and expertise can be effective.

The Need for U.S Leadership

It is past time for an integrated and comprehensive national water strategy and for a stronger effort by this nation in solving water problems abroad. While many water issues will remain local, to be resolved by community participation and efforts, our national government can no longer ignore the positive and effective role it can play both here and abroad.

The need for such integrated thinking was further made apparent at the global water conference in Kyoto, Japan, which ended just one week ago. The meeting involved 10,000 of the world's leading water experts as well as a Ministerial meeting involving senior diplomatic officials from more than 150 countries. It offered an opportunity to demonstrate the commitment of the international community, nations, and non-governmental organizations to resolve serious water problems. The United States, with its great technical, financial, and educational expertise, is perfectly positioned to be a world leader in addressing water problems, yet the U.S. delegation came without the comprehensive, integrated, and informed positions necessary to play a leadership role. Indeed, the United States is perceived to be a marginal player, making contributions well below our capability and stature as a world leader. And while money is not the only answer, the size of the U.S. financial contribution to meeting basic water needs around the world is paltry – actually only one-quarter the size of Japan's and even less than

Germany's. Instead, world leadership on these issues is being played by the Netherlands, Japanese, French, British, Germans, and others.

It doesn't have to be this way. A more coordinated and considered set of positions on the size and form of U.S. contributions to global water problems, including financial, technological, and educational, could be developed by the National Water Commission for the 21st Century.

Comments on H.R. 135 "Twenty-First Century Water Commission"

Finally, I'd like to offer specific comments on **H.R. 135**. I commend Congressman Linder and his co-signers for proposing this bill. As my preceding testimony should make obvious, I strongly support the creation of a national commission. I believe, however, that this bill, as written, will not meet the needs of the nation. In particular, the "Findings" of this bill are somewhat misdirected and the "Duties," while well-intentioned, are too limited and occasionally inappropriate.

In particular, the Findings emphasize the need "to increase water supplies in every region of the country." Overall water supply is not a problem, with some regional exceptions. And even in these regions, increasing supplies does not appear to be the most efficient, cost-effective, and timely response. The greatest water problems facing the United States are not shortages, but inefficient use, inappropriate water allocations, water pollution, and ecological destruction. Indeed, water use in the United States has decreased in the past 20 years, reducing pressure on overall supply. On a per-person basis, this decrease is substantial, as shown in Figure 1. Per-capita use in the U.S. has decreased 20 percent since 1980 – a remarkable change. Figure 2 shows that total economic growth in the U.S. has continued, even as overall water use has leveled off and even declined. Moreover, where the problem is "shortage," the fastest, cheapest, and most environmentally acceptable solution will not be an increase in "supply" but a reallocation of existing uses and improvements in efficiency.

Most of the proposed "Duties" of the Commission are clear and well designed. But others could be strengthened and refocused:

Duty (2) should not be "directed at increasing water supplies" but "directed at improving water use and reliability."

Duty (3)(E) should not be aimed at "increasing water supply efficiently while safeguarding the environment" but at "improving water-use efficiency and reliability of water supplies while safeguarding the environment."

Duty (3)(F) should not recommend "means of capturing excess water and flood water" but should rather "means for managing floods using appropriate structural and non-structural approaches." This would be in line with recent federal recommendations on comprehensive flood management.

Duty (3)(G) asks for recommendations on "financing options for public works projects." While this would be useful, given growing constraints on funding at the

national and local levels, it should be broadened to make recommendations on "financing options for comprehensive water management projects."

Duty (3)(I) asks for recommendations on "other objectives related to water supply." Again, this should be broadened to make recommendations on "other objectives related to water management."

On a relatively minor point: I believe the number of Commissioners should be larger than 7, as proposed in Section 5, paragraph (a). Given the diverse nature of the nation's waters, and the complex set of issues that must be addressed, broader representation is necessary.

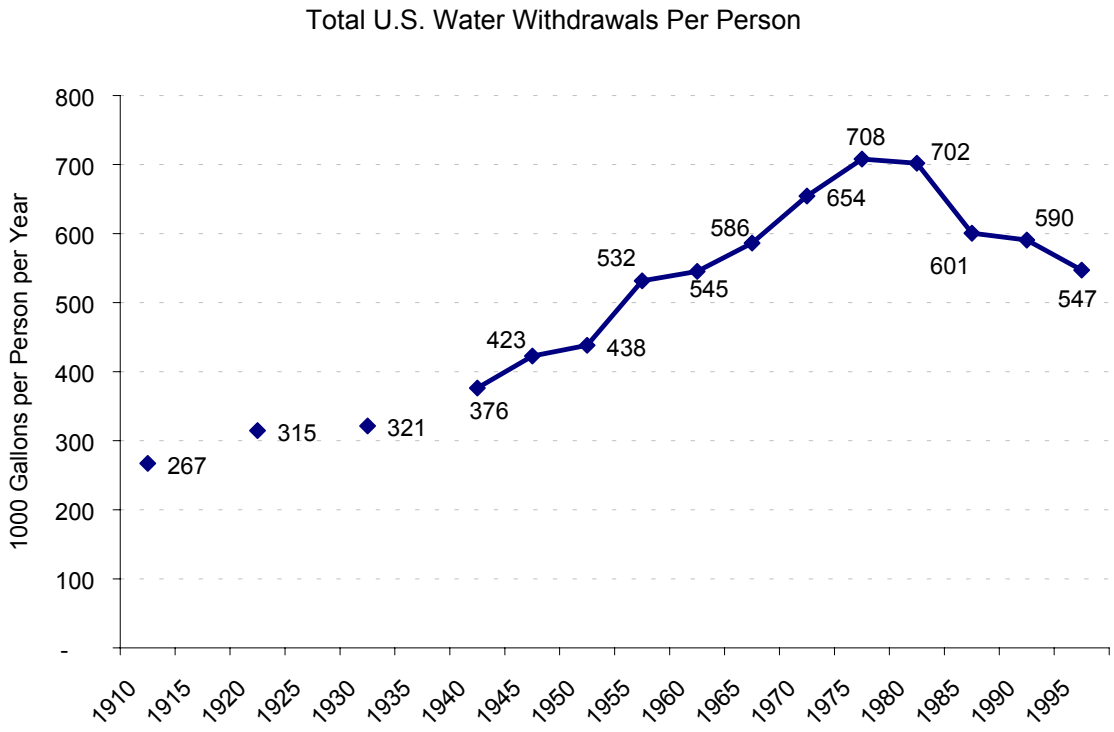
Finally, I reiterate the need to expand the scope of the Commission to address the role of the United States in solving international water problems.

I congratulate you for considering this vital issue and for helping to raise national attention on the need to re-evaluate and re-focus efforts on sustainably managing our precious freshwater resources.

Thank you for your attention.

Dr. Peter H. Gleick

Figure 1. Per-capita water withdrawals in the United States, from 1900 to the present. Total use is now below 550,000 gallons per person per year, down from over 700,000 in 1975. Data are from the U.S. Geological Survey.



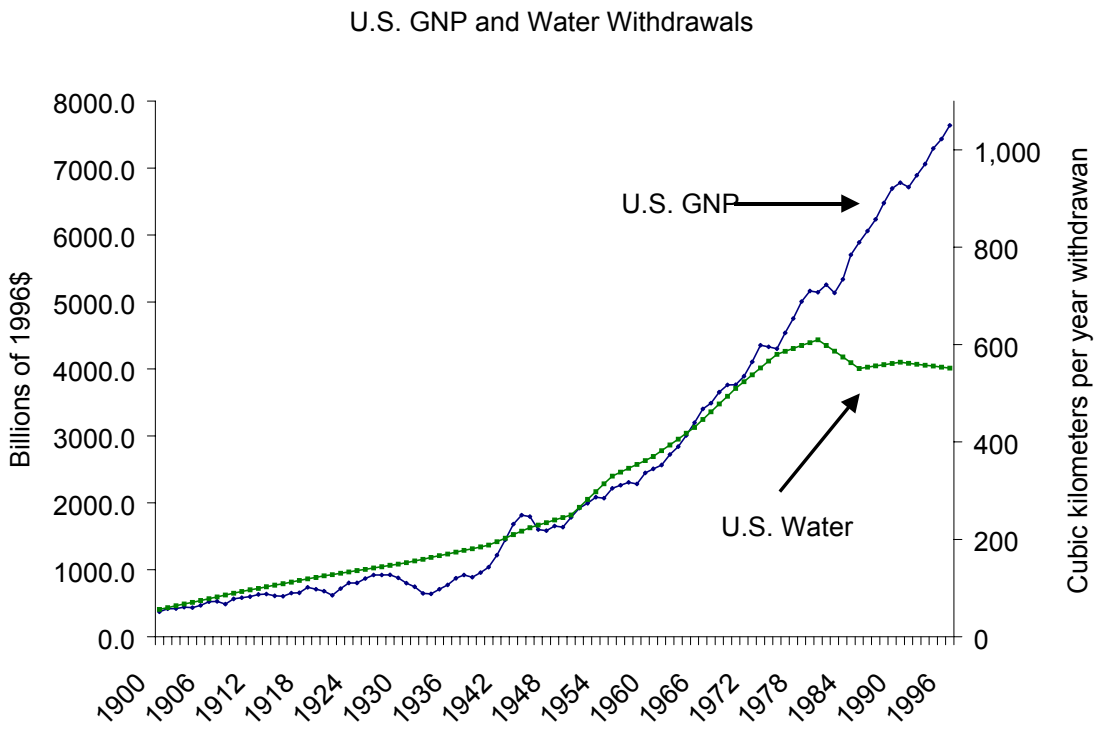


Figure 2. Total gross domestic product (GDP) of the United States and total water withdrawals: 1900 to present. Note that total economic growth has continued, but total water withdrawals (for all purposes) have leveled off, and even declined since 1980. Graph reproduced from Gleick, 2000 "The World's Water"(Island Press, Washington, D.C.)