Declaration on U.S. Policy and the Global Challenge of Water

A Report of the CSIS Global Water Futures Project

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Cover photo: Photograph by Brent Stirton/Getty Images for Circle of Blue. A chronic scarcity of water lies at the root of tough economic times facing San Marcos and other towns scattered across Mexico's Tehuacn Valley, Circle of Blue reports, www.circleofblue.org.

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DECLARATION ON U.S. POLICY AND THE GLOBAL CHALLENGE OF WATER

The Case for U.S. Engagement on the Global Challenge of Water

The United States now has the opportunity to take a global leadership position on a critical resource—water—that will become even more critical in the future. The world over, water is intricately linked to the stability and security of communities and nations, human health, education, economic prosperity, humanitarian relief, and stewardship of the physical environment. Beyond that, water is vital to other key resources essential to the human condition, most notably agriculture and energy.

The global challenge of water—including safe drinking water, sanitation, and hygiene—represents an important leadership opportunity for the United States.

In his inaugural address, President Barack Obama acknowledged this power of water as he stated, "To the people of poor nations, we pledge to work alongside you to make your farms flourish and let clean waters flow; to nourish starved bodies and feed hungry minds." He also called the United States and other developed countries to action as he declared, "[W]e can no longer afford indifference to the suffering outside our borders; nor can we consume the world's resources without regard to effect. For the world has changed, and we must change with it."[1]

Following these sentiments, the new president and his administration should launch a farsighted initiative on water, which can promote U.S. interests, strengthen U.S. leadership, and help address some of the most pressing challenges of our time.

The stakes are already tremendously high—884 million people across the planet do not have access to improved drinking water, and 2.5 billion do not have access to improved sanitation.[2] A staggering 1.8 million people, 90 percent of them children, lose their lives each year as a result of diarrheal diseases resulting from unsafe drinking water and poor hygiene. Inadequate water,

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[1] President Barack Obama, inaugural address, January 20, 2009, http://www.cnn.com/2009/POLITICS/01/20/obama.politics/index.html.

[2] World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Programme for Water Supply and Sanitation, *Progress on Drinking-water and Sanitation: Special Focus on Sanitation* (New York and Geneva: UNICEF and WHO, 2008), p. 2, http://www.who.int/water_sanitation_health/monitoring/jmp2008.pdf.

sanitation, and hygiene are responsible for roughly half of the malnutrition in the world.[3] Other water-related infectious diseases, like dysentery, trachoma, guinea worm, malaria, and a broad range of neglected tropical diseases, continue to plague the developing world.

In addition, unsustainable water use in regions across the planet is rapidly changing the prospects for future generations. Aquifers are being depleted and polluted. Great lakes—from Lake Chad to Lake Baikal, from the Aral Sea to the Dead Sea—are mere fractions of what they once were. Our understanding of the extent of pollution is incomplete, but it is estimated that every day the world is dumping some 2 million tons of industrial wastes and chemicals, as well as human and agricultural wastes (fertilizers, pesticides and pesticide residues), into the water supply.[4]

The global water predicament is serious, and many current water practices are unsustainable.

The geopolitical dimension of the water challenge is equally important. Historically, water has not been a source of major conflict. Experiences such as the Indus River Commission and the Nile River negotiations have demonstrated that addressing mutual water interests can lead to cooperative rather than confrontational outcomes.[5] Nevertheless, demographic pressure and new pressures on resources intensify the potential for water-related conflict. The stakes are high. Some 40 percent of humanity lives in an international river basin, 214 basins are shared by more than 2 countries, 13 are shared by more than 5, and almost 50 countries on 4 continents have three-quarters of their land in international water basins.[6] If tensions were to escalate, the ensuing instability could run contrary to U.S. interests or even pose a threat to the security of the United States.

In key regions of the world, decreasing water quality, rampant overuse, poor infrastructure, and changing rainfall patterns are impeding development and threatening social/political stability and cohesion. The conclusion is inescapable: Lack of access to safe drinking water and improved sanitation is a major challenge confronting the world, and the absence of sustainable practices represents a growing threat to future generations. Without adequate supplies of clean water for economic development, no country can grow out of poverty and into prosperity. This has serious implications for broader U.S. national interests—present and future—across the globe.

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[3] Lorna Fewtrell et al., *Water, Sanitation and Hygiene: Quantifying the Health Impact at National and Local Levels in Countries with Incomplete Water Supply and Sanitation Coverage*, Environmental Burden of Disease Series, No. 15 (Geneva: WHO, 2007), p. 22, http://whqlibdoc.who.int/publications/2007/9789241595759_eng.pdf.

[4] World Water Assessment Programme, *Water for People, Water for Life: The United Nations World Water Development Report* (Oxford: UNESCO/Berghahn Books, 2003).

[5] Karin R. Bencala and Geoffrey D. Dabelko, "Water Wars: Obscuring Opportunities," *Journal of International Affairs* 61, no. 2 (Spring/Summer 2008): 21–33. See also Aaron T. Wolf, Shira Yoffe, and Mark Giordano, "International Waters: Identifying Basins at Risk," *Water Policy* 5, no. 1 (2003): 29–60.

[6] Frances Cairncross, "Environmental Pragmatism," *Foreign Policy* 95 (Summer 1994): 43.

The current global crisis of water, as daunting as it is, is becoming even more profound. Many water-stressed and water-scarce regions of the world are precisely those with the highest rates of population growth. By 2030, the number of people living in water-stressed countries—where governments encounter serious constraints in their ability to satisfy domestic, industrial, and agricultural water demands—could increase to nearly 4 billion.[7] In particular, these water shortages are expected to accelerate in the Middle East and North Africa, sub-Saharan Africa, South Asia, and China. In addition, by 2030 an estimated two-thirds of the world population—a staggering 5 billion people—is projected to be without a connection to public sewerage. Finally, by 2030 a fifth of the world's land area (a third more than current levels) will be subject to the risk of erosion from water, with serious implications for crop production and sustainability. Global urbanization patterns and the rise of megacities pose especially difficult problems in this regard, and the expression of these water-related challenges will likely vary across urban and rural communities.

The future is even more daunting as a result of global climate change, mounting water scarcity, continued population growth, and environmental degradation.

Global warming accelerates and intensifies pressure on water systems. Climate change scientists have pointed to the potential that higher temperatures and resulting losses from glaciers and snow cover could reduce water availability and hydropower potential and change seasonality of flows in regions inhabited by one-sixth of humanity.[8] They also believe that flood potential could rise in other areas of the world, affecting an estimated one-fifth of humanity. This could accentuate the vicious flood-drought cycle already affecting many developing countries. There is a growing consensus on the need for greater efforts to both reduce the impacts of climate change and adapt to those impacts that are inevitable. Much of that work on adaptation will have to focus on addressing water dislocations. Although the water challenge is substantial, many remedies (technologies and techniques) already exist that if more widely deployed could alleviate problems associated with water quality and quantity. Ultimately, the extent to which we can address the water, sanitation, and hygiene challenges depends on our capacity to promote multidisciplinary collaboration and effect cooperation across relevant sectors.

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[7] Organization for Economic Co-operation and Development (OECD), *OECD Environmental Outlook to 2030* (Paris: OECD, March 2008), http://www.oecd.org/document/20/0,3343,en_2649_34305_39676628_1_1_1_1,00.html.

[8] Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Synthesis Report* (Geneva: IPCC, 2007), p. 49, http://www.ipcc.ch/ipccreports/ar4-syr.htm.

U.S. interests linked with the global challenge of water transcend humanitarian relief and economic development objectives, as important as those objectives are.

Targeting water as a priority instrument of Washington's engagement with the rest of the world would enable policymakers to assist with humanitarian relief, strengthen human health, support other public health commitments (such as efforts to address HIV/AIDS), support education, promote economic development, advance opportunities for girls and women, and improve the capacity of countries to protect themselves against drought and flood. For example, on average, 30 percent of the UN Millennium Development Goals are linked to progress in the area of water.[9]

Furthermore, it would allow important commercial opportunities for U.S.-domiciled corporations working in water-related technologies and processes. Targeting water would also yield other geopolitical "water dividends"—including removing what is a serious obstacle to stability and security within states and preventing conflict or tension between countries with shared water resources. Safe drinking water initiatives are typically highly visible, tangible, effective, cost effective, and (most importantly) demand responsive. It is in the long-term interest of the United States that economies become self sufficient, provide jobs, and end the permanent welfare mentality of the past. Finally, water represents an avenue for the United States to demonstrate leadership across the world at a time when its image has eroded.

In short, a water-centered set of policies could represent a remarkable opportunity for the United States to "do good" while "doing well" when it comes to pursuing its interests in the world. Building on an existing bipartisan consensus on water, as reflected in the important support of both parties for the *Senator Paul Simon Water for the Poor Act*,[10] and putting the United States in the lead of a global campaign to address the challenge of water, can and should be a principal focus of the Obama administration.

Water is not only a challenge for the developing world; the United States in particular faces a growing domestic water problem. Over the next 20 years, the U.S government will have to spend an estimated $300 billion to $500 billion to maintain and upgrade our nation's water infrastructure.[11] As U.S. foreign policy begins to address international water problems systematically, domestic leaders—particularly in Congress and at the state and local levels—will

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[9] Ryutaro Hashimoto, "MDGs and Water" (presentation at the 3rd Meeting of the UN Secretary General's Advisory Board on Water and Sanitation, Rome, Italy, November 3–4, 2005), http://www.unsgab.org/docs/mdgs/mdgs-ref02.pdf.

[10] *Senator Paul Simon Water for the Poor Act of 2005*, 119 Stat. 2533, Public Law 109-121 (December 1, 2005).

[11] Transportation and Infrastructure Committee, U.S. House of Representatives, "Oberstar, Johnson and Blumenauer Call for GAO Study to Establish Clean Water Trust Fund," press release, January 30, 2008, http://transportation.house.gov/news/PRArticle.aspx?NewsID=424.

also need to elevate policies to address water issues at home in a much more comprehensive, strategic manner.

U.S. International Water Policy and the Global Challenge of Water: Action Steps

In the light of the foregoing considerations, we recommend the adoption of the following seven action steps to guide the United States in its policies relating to the global challenge of water.

1. We believe the new U.S. president should spearhead a comprehensive and sustained global campaign to address the global challenge of water…

President Obama, we believe, should fashion and carry out an aggressive campaign to address the global challenge of water. The goals of the campaign should be to (1) ensure that the international community exceeds the target it established for itself in the UN Millennium Development Goals to reduce by one-half the number of people on the planet without access to safe drinking water and sanitation by the year 2015 and (2) mobilize the international community on an equally aggressive timetable to address the remaining water needs by the year 2025.[12]

2. The president should develop an integrated strategy for national action on the global water campaign…

Given the scale and complexities of the international challenges related to freshwater and sanitation, an effective initiative from the United States will require powerful support from the grassroots level up to the highest levels of government, along both sides of the political aisle and guided by an overarching strategy. Already, the *Senator Paul Simon Water for the Poor Act* calls on the president to develop a strategy "to further the U.S. foreign assistance objective to provide affordable and equitable access to safe water and sanitation in developing countries" and to develop such a strategy in consultation with numerous agencies and international organizations.

While the U.S. Department of State and U.S. Agency for International Development (USAID) have since taken a number of useful steps in this regard, including the recent development of a water framework,[13] we believe that this is an appropriate time to conduct a wider assessment of the global challenge of water and to develop a more comprehensive national strategy. Such a strategy would transcend a State Department/USAID–focused approach, as significant as that is, and

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[12] The seventh of the eight Millennium Development Goals calls for the world to "Halve…the proportion of the population without sustainable access to safe drinking water and basic sanitation" from the baseline year of 1990 by the year 2015. See United Nations, *The Millennium Development Goals Report 2007* (New York: United Nations, 2007), p. 25, http://www.un.org/millenniumgoals/pdf/mdg2007.pdf#page=14.

[13] U.S. Department of State, Bureau of Oceans, Environment, and Science, "Senator Paul Simon Water for the Poor Act: Report to Congress," June 2008. The framework is reproduced as annex A in that document. See "Addressing Water Challenges in the Developing World: A Framework for Action," pp. AI–A21, http://www.state.gov/documents/organization/105643.pdf.

instead would consist of a whole-of-government approach to international freshwater challenges. It would be far reaching in nature (looking into the more distant future), integrative in scope (assessing the role of water policy across the government), and developed to account for the wide range of dimensions of U.S. international water policy (humanitarian relief, education, economic development, health, environment, stability, and security).

3. The president should appoint a special high-level representative to lead implementation of the U.S. global water campaign…

In order to carry out the president's agenda on global water issues, and to help elevate water on the list of U.S. foreign policy priorities, we believe President Obama should appoint a widely respected individual as a high-level U.S. special representative for water-related policy goals. Reporting directly to the president, the special representative would be responsible for the development of the U.S. water initiative, as well as for interfacing with a range of international counterparts. He/she should be a forceful advocate—both within the United States and internationally—for mobilizing the support necessary to achieve significant change.

4. The special representative should be directly reinforced by a core team to help guide implementation of the water campaign, in addition to expanded capacities at the Department of State at the behest of the special representative…

In order for the U.S. government to efficiently implement the president's global water campaign, an institutional home—led by the high-level special representative—is needed to track the deployment of resources, evaluate progress, and coordinate across the 15 federal agencies working on water issues. Currently, only a small office in the State Department is tasked with effecting water-related cooperation and strategic coordination across the entire U.S. government. Despite dedicated efforts by personnel in that office to effect such cooperation, the reality is that too few persons with too little direct authority are tasked with trying to do too much.

The special representative would be staffed with a core team to help implement such a global water campaign, and he/she would also be supported by expanded capacities at the State Department. The special representative would also be responsible for developing the enduring governmental structural focus on water. This restructuring should reflect the high-profile nature of the global challenge of water and the high-profile nature of the U.S. commitment to address that challenge. For example, it should have the kind of emphasis that came with the U.S. President's Emergency Plan for AIDS Relief (PEPFAR).

5. The proposed U.S. campaign should be commensurate with the magnitude of the challenge—which means a significant increase in the amount and duration of resources committed under the campaign…

In FY2008, Congress appropriated $300 million in support of the *Senator Paul Simon Water for the Poor Act*. That was an important and welcome development, though the commitment of the bureaucracy was not overly supportive. A high-profile U.S. water initiative implies a strong,

bipartisan, top-to-bottom, multiyear commitment with substantially larger amounts of financial support.

We therefore call on the new president to commit an additional $1 billion each year for the next four years to support a U.S. global water campaign. These resources would be used both to finance direct, high-priority initiatives identified under the strategy and to catalyze broader international support (with other countries and through international financial and development institutions).

Along with congressional appropriations, there might be resources available in the White House to jump-start this early in the administration (via executive order) while waiting for a larger appropriation from Congress. If small amounts of funding could be made available directly through the White House, there would be opportunities for rapid but effective and sustainable successes: tangible, topical, effective, cost-effective "quick wins" for the new administration.

The United States already funds a number of organizations, such as the Global Environment Facility, working to address the global challenge of water. These programs should continue to receive U.S. support under the new water strategy. Furthermore, the lessons learned from previous large and small projects should be documented and widely shared so that the progress already achieved can be leveraged to maximize synergies across any new programs of the U.S. global water campaign.

The rates of return on investment—financial and geopolitical—are all positive. According to the World Health Organization, the global return on every dollar invested in drinking water and sanitation programs is $4 and $9, respectively.[14] These investments have direct positive impacts on education, health, industry, and agriculture. Ultimately, solutions need to be effective, sustainable, scalable, affordable, equitable, and culturally acceptable. Therefore, there is a need for innovation and development of a comprehensive research agenda that includes monitoring and evaluation but extends beyond that to a range of topics such as development of new technologies.

6. Catalyze international efforts…

Achieving the goal of halving the number of people in the world without access to safe drinking water and sanitation by 2015 and eliminating these issues by 2025 inherently requires robust collaboration with the international community. No one nation alone can bring about the solutions to this global challenge. It follows, then, that multilateral action is paramount for success. For that reason, the United States should reenergize a broader international movement on water and sanitation, especially in those areas of the world where the need is the greatest. Such an international approach would include, of course, systematic cooperation with the other

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[14] Guy Hutton, Laurence Haller, and Jamie Bartram, "Economic and Health Effects of Increasing Coverage of Low Cost Household Drinking-water Supply and Sanitation Interventions to Countries Off-track to Meet MDG Target 10," WHO, Geneva, 2007, http://www.who.int/water_sanitation_health/economic/mdg10_offtrack.pdf.

members of the G-8 (building on the 2003 Evian Summit) and the Organization for Economic Co-operation and Development (OECD). It also would include efforts with the World Bank, the regional development banks, and other international institutions as appropriate. The UN General Assembly has proclaimed the years 2005 to 2015 as the "International Decade for Action: Water for Life," and UN Water offices have already opened in Spain and Germany specifically to support the goals of the Decade.

Existing multilateral venues that have begun to focus on the global challenge of water—such as the World Economic Forum, the CEO Water Mandate (under the auspices of the UN Global Compact), and multilateral development banks—should be utilized in the context of the U.S. global water campaign. Collaboration is also needed between businesses, nongovernmental organizations (NGOs), and governments.

An implicit aim of this initiative is to encourage foreign government leaders (heads of state, finance ministers, and others) to better prioritize water and sanitation commitments within their own federal and local budgets. A concerted international response would represent a powerful incentive for them to assign a higher priority to water-related projects.

7. Reinforce public/private-sector partnerships...

The technical expertise and financial resources of the private and independent sectors are critical to addressing the global freshwater crisis. Cutting-edge innovation on issues of access, quality, and scarcity of freshwater resources are emerging from the private sector at an astonishing rate. Also, NGOs, foundations, universities, and civic/faith-based groups have become extremely active in this sector. The U.S. government should redouble its efforts to leverage private/independent-sector investments and expertise for achieving common goals in the realm of water resources. Public/private partnerships are excellent ways to harness existing networks to deploy new technologies to the field.

The business community in particular can have a profound impact on the water agenda, whether it is through increased efficiency in their operations, community programs, or watershed protection. In this regard, it can and should build on the number of preexisting forums that are already working to address the global challenge of water, including the World Business Council for Sustainable Development and the CEO Water Mandate.

Conclusion

In light of humanity's water predicament—current and future—there is a powerful case to be made that the United States can and should play a far more assertive role. Such a role could improve conditions across the world while promoting broader U.S. interests—an authentic "win-win" proposition. This represents an important opportunity for the Obama administration.

To bring water to the policy surface, however, it implies a crosscutting consensus among the economic development and security communities that water is critical to the full spectrum of U.S. interests. It would require a new integration between traditional geopolitical interests and broader

humanitarian interests. It means committing substantially more financial resources. Above all, however, it requires the political will to put such a farsighted strategy into place and sustain it.

For all of these reasons and more, our capacity to manage freshwater resources is one of the most significant "strategic" challenges and opportunities of our time. Now is the time for the president to launch a bold new U.S. campaign to address the global challenge of water.

William H. Frist, *Former Majority Leader, U.S. Senate*
E. Neville Isdell, *Chairman, The Coca-Cola Company*

This Declaration has also been endorsed by the following individuals:

Harriet Babbitt, *Vice Chair, Global Water Challenge; Member, Jennings, Strouss & Salmon PLC; Former Deputy Administrator, U.S. Agency for International Development*

William J. Bertera, *Executive Director, Water Environment Federation*

K. David Boyer Jr., *President & CEO, GlobalWatch Technologies, Inc.; Former Senior Adviser for Public-Private Partnership and Director, Global Development Alliance, U.S. Agency for International Development*

Julius E. Coles, *President, Africare*

David Douglas, *President, Waterlines; Founder-President, Water Advocates*

Monica Ellis, *President & CEO, Global Environment & Technology Foundation*

General Carlton W. Fulford Jr. (USMC Ret.), *Former Deputy Commander in Chief, U.S. European Command*

Helene Gayle, *President & CEO, CARE USA*

John H. Gibbons, *Former Assistant to the President for Science and Technology*

Jonathan Greenblatt, *Cofounder, Ethos Water; Former Vice President, Starbucks Coffee Company*

Hank Habicht, *Managing Partner, SAIL Capital Partners; Vice Chairman, Global Environment & Technology Foundation*

Lee Hamilton, *President & Director, Woodrow Wilson International Center for Scholars*

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Carter Roberts, *President & CEO, World Wildlife Fund*

Anthony "Bud" Rock, *Vice President for Global Engagement, Arizona State University; Former U.S. Acting Assistant Secretary of State*

Donna E. Shalala, *President, University of Miami; Former U.S. Secretary of Health & Human Services*

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Graham Spanier, *President, Pennsylvania State University*

Caryl M. Stern, *President & CEO, U.S. Fund for UNICEF*

Jim Thebaut, *President, The Chronicles Group; Executive Producer, Writer, and Director of* Running Dry *and* The American Southwest: Are We Running Dry?

Steve Werner, *Former CEO, Water For People*

John Whitehead, *Former U.S. Deputy Secretary of State; Former Cochair, Goldman Sachs*

Christine Todd Whitman, *President, The Whitman Strategy Group; Former Administrator, U.S. Environmental Protection Agency*

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