

**Leading the World Toward  
a Safer and Sustainable Future:  
GREENPRINT FOR A NEW ADMINISTRATION**

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*For Further Information Please Contact:*

**Ginette Hemley**

Senior Vice President

Phone: 202.778.9605

Email: ginette.hemley@wwfus.org

**Jason M. Patlis**

Vice President and Managing Director, U.S. Government Relations

Phone: 202.778.9647

Email: Jason.patlis@wwfus.org

**Michael Ross**

Senior Writer for Programs

Phone: 202.778.9565

Email: Michael.ross@wwfus.org

## PREFACE AND EXECUTIVE SUMMARY

The longer we view our security in purely military terms, the less secure we may be in the future. Focused on the pursuit of Al Qaeda and military engagements in Afghanistan and Iraq, U.S. foreign policy has paid too little attention to the social, economic and environmental causes underlying many current conflicts—causes that, unchecked, may pose a greater threat to global security in the future than terrorism does today.

Half the world still lives on less than \$2 per day and does so only by subsisting on natural resources provided by the environment—an environment already stressed by unsustainable development, climate change and pollution. As more nations enter the ranks of the global middle class, consumptive demands are rising. The riots erupting around the world as a result of soaring food prices may only be a taste of things to come if we fail to address this growing imbalance between what humanity consumes and what nature, in its declining state, can provide.

Globalization, which has greatly increased the carbon footprint of goods and services traded around the world, and the rush to biofuels, which has accelerated deforestation and driven the price of basic foodstuffs beyond the reach of many, have contributed to an emerging resource crisis of potentially catastrophic proportions. Global consumption of natural resources currently exceeds the planet's regenerative capacity by nearly 25 percent and is expected to increase threefold by the middle of the century as our numbers and demands grow. Indeed, if everyone on Earth consumed its resources at the rate Americans do, we would need the regenerative capacity of three planets just to keep up with the demand.<sup>1</sup>

And overarching all of this is climate change, which threatens to reduce arable land, intensify natural disasters, and stress—beyond the point of likely recovery—many of the key ecosystems upon which we rely for food, freshwater, carbon sequestration and other indispensable natural services.

*Climate change. Natural resource exhaustion. Ecosystem collapse.* These are among the most profound and long-term threats to peace and security in the 21<sup>st</sup> century. The conflict imperiling the planet in the coming millennium is less likely to be between nations than between man and nature.

Although our international prestige has fallen sharply in recent years,<sup>2</sup> the United States is still the only nation capable of exerting the leadership needed to mobilize the globe into confronting these challenges. Doing so, however, will require us to develop a foreign policy vision that looks beyond the backstreets of Baghdad and Basra to the broader threats confronting our collective security in a globalized and increasingly interdependent world. Doing so also will require a retooled program of foreign assistance that gives the same level of priority to sustainable development, poverty alleviation and conservation as it does to military spending and diplomacy. The emphasis may still be on security—but on security in a wider context that encompasses not only military conflicts, but also the underlying social, economic and environmental factors that sometimes cause and many times exacerbate them.

Finally, doing so requires that we restore the integrity of science to our policy and decision-making so that we may bring what has always been one of our greatest strengths to bear in our response to climate change and other environmental challenges that demand technologically innovative solutions.

To help restore America's image in the world, protect its interests and guide the planet toward a more sustainable and prosperous future, the next administration must act decisively in four key areas.

### **Take the Lead in Confronting Climate Change**

Because it threatens people and wildlife virtually everywhere they live, from the Arctic to the Amazon to the American Midwest, climate change is the biggest challenge we are likely to face in the 21<sup>st</sup> century. Meeting it will require a major global effort. But far from leading this effort, the United States, historically the largest emitter of greenhouse gases, has lagged far behind. The next president must make climate change a top domestic and foreign policy priority. His administration must:

- ✓ *Lead the global effort to secure a new climate change treaty.* This must begin before the inauguration with the naming of a new climate negotiator to attend key talks in Poland in December. This must also include working with Congress to secure the bipartisan support essential for ratification and implementation of the new treaty.
- ✓ *Support global efforts to curb deforestation, the cause of nearly 20 percent of all CO<sub>2</sub> emissions worldwide.*
- ✓ *Propose legislation to establish a cap-and-trade program to lower domestic greenhouse gas emissions and promote the creation of a low carbon economy through renewable energy sources and improved energy efficiency standards.*
- ✓ *Develop a preparedness strategy to assess and cope with the impacts of climate change on people, regions, ecosystems and agriculture in the United States.*

### **Ensure Food for All**

Our appetites consume the planet: Agriculture is the world's biggest business, its largest consumer of freshwater and its main driver of terrestrial species loss. More than half of Earth's habitable land surface and nearly three-fourths of the water we consume are used to produce food.<sup>3</sup> Yet, despite record-high grain harvests in recent years, much of the world still goes hungry. We must grow food, but we must also find more efficient and environmentally friendly ways of doing it. The next administration should:

- ✓ ***Reconsider corn-based ethanol and support the development of best-practice performance standards.*** The demand for biofuels has increased food prices and accelerated deforestation that releases as much CO<sub>2</sub> as gets saved at the tailpipe. Biofuels have a role to play in our response to climate change, but the rush to produce them has been ill-considered. The administration should support the development of performance-based standards to ensure that biofuels are part of the solution, not the problem.
- ✓ ***Increase agricultural assistance to poor countries, with an emphasis on conservation and sustainability, and seek to lower tariffs and subsidies that hurt farmers in the developing world.***
- ✓ ***Reform fisheries management.*** Three-quarters of the world's fisheries are being fished to maximum sustainable capacity or overfished to the point of collapse.<sup>4</sup> We need to reform the way they are governed. The administration should support a "rights-based" approach that gives participants in a fishery more economic incentives to ensure its long-term sustainability.

### **Secure Water for Life**

Life cannot exist without water, yet critical shortages of water for drinking and sanitation plague one-third of humanity and are growing, while freshwater species are among the most endangered on Earth. As population and pollution pressures mount, managing freshwater as a strategic resource becomes a vitally important task. The next president should:

- ✓ ***Make freshwater availability a strategic priority.*** Marshalling U.S. scientific and technical expertise, we should lead a global effort to secure adequate water resources for people and freshwater systems in Latin America, Asia and Africa within 25 years.
- ✓ ***Lay the scientific and policy groundwork for water security.*** Lead the convening of a panel of international experts to assess the status of water resources, identify knowledge gaps and set research priorities to predict where water scarcities may arise.

### **Protect Nature and Manage Resources Sustainably**

Demand for natural resources reached its maximum sustainable level in the late 1980s, when the world's population stood at roughly 5 billion.<sup>5</sup> Since then we have been running in the red, using resources faster than nature can replenish them. Managing such deficit spending in an unstable world, where the gap between supply and demand widens yearly, should be both a key priority of U.S. foreign policy and a central objective of U.S. foreign assistance. The administration should:

- ✓ ***Restructure America's antiquated foreign assistance programs to better integrate conservation and sustainability into the framework.*** Our foreign assistance programs

were conceived years ago as tools to further U.S. interests during the Cold War. But using them to fix today's problems is like trying to repair a computer with a hammer and a saw. Development spending, traditionally the impoverished cousin of military assistance, should be accorded greater priority in our foreign aid. Conservation, the most effective yet underutilized tool we have to ensure sustainable development, should be integrated into and across all relevant aid programs.

- ✓ ***Invest in our natural assets.*** Forests, oceans and freshwater systems are our main sources of sustenance, yet we don't manage them so much as plunder them. Forests are being felled at the rate of an acre per second,<sup>6</sup> contributing to an extinction crisis biologists say is unparalleled since the end of the dinosaur age. Our oceans are dying because of overfishing, coral reef destruction and pollution. We must improve our management of nature and place greater value on the services it provides to us. A good start would include putting critical Alaskan fisheries off limits to oil and gas exploration and working for stricter international controls on illegal logging.
- ✓ ***Undertake a new engagement with China.*** How China develops in the next decade will have a huge impact on the global economy and the environment. Unmanaged resource demand will further stress the planet. But without impeding development, China can also use its trade and investment policies to help reduce the global ecological footprint. The president should seek a new "opening" to China to promote cooperation on energy conservation and green supply chain issues.

The world has changed dramatically since the end of the Cold War, the era for which America's archaic foreign aid framework was crafted. Cut loose from its bipolar moorings, the shape of the new order is still shifting, transforming old definitions of power and influence. Also being redefined is our notion of security, which now has a more complex meaning than it did 30, 20 or even 10 years ago. Terrorism is certainly a critical dimension, but environmental and resource-related conflicts loom as perhaps larger threats to our collective security in the decades ahead. For the next president of the United States, the central question is whether we will simply respond to this change, or lead it with a new global vision that meets the challenge of climate change and works to eliminate hunger, achieve sustainability and protect the environment upon which we all depend.

# GREENPRINT FOR A NEW ADMINISTRATION

Why a “greenprint”? Blueprints have been used in project designs for nearly two centuries. The notion of a greenprint is not limited to structural design, however, but incorporates all aspects of planning and development, including an accounting of environmental impacts. As much as blueprints were considered prerequisite for projects in the 20<sup>th</sup> century, so greenprints should be the standard for successful planning in this century. This one doesn’t address every action the next administration should take. Rather, it seeks to present a framework for how climate change, resource consumption and biodiversity loss can be addressed, both abroad and—because a strong domestic policy is essential for global leadership—at home.

## 1. CONFRONT THE CHALLENGE OF CLIMATE CHANGE

Sea levels are rising, the polar ice cap is melting and storms are becoming more intense, more destructive. Climate change already impacts our lives and in the future it will pose increasingly grave threats to global food security, freshwater availability and our most precious natural assets. To address these threats, the global community must dramatically reduce greenhouse gas emissions, from both fossil fuels and deforestation, to a level consistent with keeping average temperatures from rising more than 2 degrees Celsius above preindustrial levels—the threshold above which scientists say catastrophic climate changes could occur. The world cannot achieve this critically important goal, however, unless the United States not only joins, but helps to lead, the effort.

### 1.1. Take the Lead Globally

To position the United States to help lead the efforts to achieve a new global agreement on climate change, the president cannot wait until he is inaugurated. Time is short; work must begin immediately after the November election. The incoming administration should:

- ✓ ***Appoint a chief climate negotiator in time to attend the next annual meeting of the Conference of the Parties (COP) in Poland in December 2008.*** The president-elect should send an official observer delegation to the December meeting, where decisions critical to a new treaty will be taken by the parties to the U.N. Framework Convention on Climate Change (UNFCCC). A bipartisan congressional delegation should also be encouraged to observe the remaining negotiating sessions in order to help lay the groundwork for Senate ratification of the new treaty.
- ✓ ***Immediately begin crafting constructive positions on critical issues before the COP.*** The next president urgently needs to set a new tone by assuring the world that the United States is now committed to achieving a global deal on climate

change by the Copenhagen COP in December 2009. One way to do this could be through a post-election speech, delivered in time for the December talks in Poland, that pledges to make domestic climate legislation a top priority and promises to reengage in the global negotiations with constructive positions, an open mind and a willingness to listen.

- ✓ ***Support efforts to curb global deforestation.*** Because tropical deforestation, especially in Brazil and Indonesia, accounts for some 20 percent of all global CO<sub>2</sub> emissions,<sup>7</sup> the president should use policy incentives and bilateral assistance to support Reduced Emissions from Deforestation and Degradation (REDD) initiatives, with an emphasis on building strong forest measuring and monitoring systems and good governance capacities in key forested countries. We need to work in partnership with the private sector, and with bilateral and multilateral donors, to leverage the resources needed for REDD programs and projects. We should also make it clear at the December climate talks in Poland that the United States supports the creation of incentives to encourage emissions reductions from deforestation.
- ✓ ***Immediately begin to work with Congress to lay groundwork for the legislation that will be needed to implement the new treaty.*** This framework should include financial support for international climate change adaptation, technology transfer and reductions in emissions from deforestation. With implementing legislation cutting across most major congressional committees, strong, direct and bipartisan engagement by the president will be essential.

## 1.2. Lead by Example at Home

Taking the lead in confronting climate change globally will be possible only if we demonstrate to the world that we practice at home what we preach abroad. Historically the world's largest consumer of energy and biggest emitter of greenhouse gases, the United States must make a major effort to reduce its own CO<sub>2</sub> emissions. This in turn will require a comprehensive policy to discourage the use of fossil fuels, encourage the development and use of low-carbon alternatives and formulate better energy efficiency and conservation standards. Steps must also be taken to assess and prepare for the potential impacts of unavoidable climate changes. The president should:

- ✓ ***Implement the Clean Air Act as mandated by the Supreme Court and approve California's waiver under the Clean Air Act.*** The new president needs to take proactive measures to ensure the Environmental Protection Agency (EPA) regulates greenhouse gases under the Clean Air Act as mandated by the Supreme Court. To avoid being caught up in litigation at the outset of his administration, the president should instruct the EPA to exercise its authority in this area until such time as Congress enacts a different approach to reducing greenhouse gas emissions.

- ✓ ***Commit—and without delay act—to implement a 10-year plan to advance renewable and clean energy in our electrical grid.*** We have the technology we need to meet this goal; the next president must supply the political will.
- ✓ ***Propose legislation to Congress to establish a cap-and-trade program that puts a price on greenhouse gas emissions and promotes the creation of a low-carbon economy.*** This legislation should seek to keep temperature increases under the 2°C threshold by putting a price on carbon emissions. In addition to market-based reductions, it should auction all carbon permits and use the proceeds to fund technology development, climate change preparedness, and programs to reduce emissions from deforestation.
- ✓ ***Establish a commission to recommend removal of specific regulatory barriers to energy efficiency and to identify policies that promote efficiency and renewable energy.*** The commission should complete its work within 90 days with recommendations for executive orders and actions at the federal, state and local levels.
- ✓ ***Establish a goal of zero net emissions for the executive branch by 2020.*** Federal agencies should be required to reduce their emissions through energy conservation and efficiency targets in buildings, automobile fleets, human resource policies, and procurement.
- ✓ ***Develop a preparedness strategy to cope with the impacts of climate change.*** This strategy needs to incorporate a formal, science-based process for assessing the impacts of climate change in the United States. An urgent priority should be an assessment of the impacts of the rapid decline in Arctic sea ice.

## **2. ENSURE FOOD FOR ALL**

Agriculture has a bigger economic and environmental impact on the world than any other human enterprise. It is the main driver of terrestrial habitat conversion and species loss. Seven out of every 10 gallons of water we consume are used for agriculture—which is also a major emitter of greenhouse gases. Rice and livestock production, for instance, are two of the world’s largest generators of methane—a greenhouse gas far more potent than carbon dioxide. Yet, for all the effort we put into agriculture, and in spite of record-breaking grain harvests in recent years, demand continues to rise faster than supply. Chronic hunger affects more than 1 billion people and will get worse as climate impacts grow more severe. At the same time, our fisheries—the primary source of protein for a billion of the world’s poor—are in crisis. Clearly, we have to find better, more efficient and sustainable ways of providing more food. To help do this, the next administration should:

## 2.1. Take the Lead Globally

- ✓ ***Increase assistance for environmentally sustainable agriculture in poor countries and reform trade policies that hurt farmers in the developing world.*** U.S. assistance for agricultural development has been cut in half since the 1980s and now represents only four percent of our total Overseas Development Assistance. In the face of soaring global food prices, the administration should increase support both for emergency food aid and, more importantly, for long-term agricultural development. The focus should be on the development of environmentally friendly, sustainable methods of production and on the creation of policies and market institutions benefiting small farmers and the rural poor. The administration should also review its trade policies and work with its partners in the World Trade Organization (WTO) and elsewhere to promote trade rules that support sustainable farming in the developing world.
- ✓ ***Prepare a plan of action to save the world's fisheries.*** Fisheries are the main source of protein for 1 billion people,<sup>8</sup> yet global catch has been steadily declining since the late 1980s, with the UN Food and Agriculture Organization estimating that 7 out of 10 fisheries are now either being exploited to maximum capacity or overexploited to the point of near collapse. The president should direct the State Department and National Oceanic and Atmospheric Administration (NOAA) to draft a rights-based management plan to reform Regional Fishery Management Organizations. The rights-based approach, in which stakeholders receive tradeable permits and catch shares or other incentives to ensure the sustainability of fisheries, has proven more successful than other schemes at reducing overfishing, bycatch and illegal fishing. With rights-based management, for instance, the Northern Australian prawn trawl fishery has increased its profitability while reducing both its impact on bottom habitat and its carbon footprint by more than 80 percent. Closer to home, successful examples include the Alaska pollack trawl fishery, the U.S. Mid-Atlantic surf clam dredge fishery and the U.S. Pacific halibut bottom longline fishery.

## 2.2. Lead by Example at Home

If the president is to succeed in addressing the global food crisis through multilateral efforts, he will also need to look at how our domestic policies have contributed to that crisis. The president should:

- ✓ ***Rethink the rush to biofuels—especially corn ethanol—which is pushing up food prices while doing very little to reduce CO<sub>2</sub> emissions.*** Biofuels can play an important role in reducing our dependence on imported oil and moving us away from climate-changing fossil fuels. But the headlong rush to produce ethanol has been premature and ill-considered. Before encouraging further production, the president should appoint a commission to review and develop performance-based standards for biofuels that address their impacts on food availability and the environment.

The commission should consider investments in cellulosic ethanol technology, which has the potential for greater energy benefits with fewer negative environmental impacts than corn-based ethanol. It should also look at tax incentives and disincentives for protecting lands that would otherwise be converted to biofuels production and should report back to the president within a year. In the meantime, the president should work with Congress to temporarily suspend the Renewable Fuel Standard (RFS) mandate and eventually amend it to reflect the commission's recommendations.

- ✓ ***Work with Congress on the next Farm Bill to modernize and reform agricultural policies.*** This effort must promote environmentally sound food production domestically and internationally and eliminate market-distorting commodity subsidies for domestic production that have a negative impact on producers in the developing world. Some of the savings should then be transferred to land conservation programs and used to support sustainable agricultural development, supporting small producers wherever possible.

### **3. SECURE WATER FOR LIFE**

More than 1 billion people lack access to safe drinking water, while another 2 billion lack sanitation, resulting in water-borne diseases that annually claim the lives of more than 2 million people—the vast majority of them children. As population and pollution pressures mount and as climate change impacts the hydrology of river basins, these numbers are growing.<sup>9</sup> Freshwater species and ecosystems— natural systems upon which we depend—are also at risk. Indeed, freshwater species are among the most endangered on Earth. Tapping into the considerable expertise that exists but is scattered throughout various government agencies like the Environmental Protection Agency, the Agriculture and Interior departments, and the Army Corps of Engineers, the president should formulate a comprehensive and integrated global water policy with the aim of ensuring enough clean water for people and ecosystems within 25 years. To attain that goal, the new administration should:

#### **3.1. Take the Lead Globally**

- ✓ ***Lead the convening of an international panel of experts to assess the status and trends of global water resources, especially in light of climate change.*** The president should also direct relevant federal agencies to develop science-based tools to predict where water scarcity is likely to arise, how long it will last, who will be affected, and how the world can best address these challenges. There are still too many gaps in our knowledge of these issues. We must close them.
- ✓ ***Take the lead in convening a series of regional river-basin-wide water strategy forums.*** Expanding and extending the work of the global panel, these forums

should address water needs for people, food production, and biodiversity across international boundaries and on the scale of river basins and aquifers, starting with priority water basins under imminent threat, such as the major rivers of south Asia and the major rivers of sub-Saharan Africa.

- ✓ ***Prepare legislation on global water security.*** The administration should work closely with Congress to enact legislation that would establish a program to assist in sustainable water management across the globe, to support the strategies developed above. This would complement the Water for the Poor Act by addressing basin-wide water management and ensuring adequate access to water.

### **3.2 Lead by Example at Home**

- ✓ ***Form an interagency task force to work with states to resolve long-standing interstate and state/federal water issues.*** For too long, issues such as Rio Grande restoration, interstate water conflicts in the Southeastern United States, clashes over water rights versus endangered species protection, and potential removal of uneconomical and environmentally destructive dams have gone unresolved. A new administration should make resolution of these issues through cooperation and improved natural resource management a top priority.

## **4. PROTECT NATURE AND MANAGE RESOURCES SUSTAINABLY**

Driven by the inexorably expanding human footprint—by population growth, rising demand, climate change, pollution and ever more unsustainable rates of consumption—the natural world is dying. Biologists estimate species are disappearing 100 to 1,000 times faster than the normal “background” rate of extinction that occurred before the advent of humans.<sup>10</sup> People care about polar bears, tigers and pandas—all of which are threatened—but far more is at stake than just these flagship species. For in losing nature we are also losing the essential services it provides in filtering water, generating oxygen and storing carbon, to name but three on a long list of things we would be extremely hard pressed to do without.

Beyond the biological argument is a moral one: Fueled in part by our consumption, the highest rates of biodiversity loss are occurring in the places where people can least afford them—in the developing world, where the poor rely directly on what nature provides for their survival. In many places around the world, the true price paid for our consumptive demand is far higher than the \$4 we now pay for a gallon of gas.

The United States has been a leader in global conservation for more than 100 years, our parks systems and environmental laws serving as models for other nations to emulate. Along with fighting poverty and defending human rights, conservation has long been part of the ethos underpinning our foreign policies. It must be so again.

#### 4.1. Take the Lead Globally

- ✓ ***Integrate conservation into U.S. foreign assistance.*** Foreign aid is the most important tool we have to alleviate poverty and ensure sustainable development around the world. Yet most of our Cold War-era assistance programs have become so outdated that using them to fix today's problems is like trying to repair a computer with a hammer and a saw. The consensus among foreign policy experts is that both the laws governing foreign assistance and the bureaucracy that oversees it need to be streamlined and strengthened. A number of thoughtful proposals have been advanced to do this. With any option, however, the president should recognize that natural resource depletion, biological degradation, and climate change are major drivers of hunger, poverty and instability, and must be addressed across all aspects of foreign assistance. The comparatively minor role that conservation has played here needs to be expanded and fully integrated into all relevant aid programs in order to promote prosperity that is lasting, through development that is truly sustainable.
- ✓ ***Undertake a new engagement with China.*** How China develops over the next decade will significantly shape the future of both the global economy and the environment. Unmanaged, the growth in Chinese demand for timber, metals, oil and other global resources will place significant strains on the planet. But the opportunity also exists for China to develop while using its influence and its trade and investment policies to help reduce the global ecological footprint. The president should seek a new "opening" with China to pursue this objective. A first step could involve initiating a new Sustainable Trade Dialogue to promote bilateral and public-private sector cooperation on energy conservation and green supply chain issues such as responsible sourcing of raw materials and low-carbon and water-efficient forms of production.
- ✓ ***Convene a global summit to shape the international financial architecture for the environment.*** Not waiting for us to act, other countries have pledged more than \$12 billion over the past five years to various bilateral and multilateral initiatives to address climate change and other environmental concerns.<sup>11</sup> This level of funding represents a major opportunity—but it is one that risks being squandered unless these initiatives are better directed and coordinated to reinforce, rather than duplicate, one another. Governance and accountability standards need to be harmonized and decisions more effectively prioritized to make the most of this new funding. The president should take the lead by convening a summit to coordinate and leverage these funds to ensure their effectiveness in assisting countries most in need.
- ✓ ***Assume our duties as a global citizen.*** To be a leading citizen of the world, we must first be a responsible one by keeping our commitments and honoring our financial obligations. The president should push the Senate to ratify key agreements protecting some of the world's most important resources, including the *Convention on Biological Diversity*, the *Law of the Sea Convention* and the *Convention on the Non-Navigational Uses of Transboundary Watercourses*. He

should also work closely with multilateral funding institutions like the World Bank, which have a critical role to play in environmental conservation and stewardship, and press for full payment of dues, including arrears, to the Global Environment Facility (GEF).

- ✓ ***Ensure healthy oceans by protecting coral reefs.*** A sea without coral is like a forest without trees. Coral reefs nurture and support the fish we eat, protect coastlines from storms and generate some \$375 billion a year in goods and services, yet they are under assault from climate change, pollution and destructive fishing practices.<sup>12</sup> A major effort is required to save them. The Coral Reef Task Force, co-chaired by the Departments of Commerce and the Interior, has accomplished much since its establishment by Executive Order, but its work has been limited largely to domestic efforts. A similar effort is needed for coral reef conservation outside U.S. waters, where the most important reef systems exist. None is more important to the world's resources than the Coral Triangle—the Indo-Pacific waters of Indonesia, Malaysia, the Philippines, Papua New Guinea, Timor-Leste and the Solomon Islands, which together represent the epicenter of the world's marine biodiversity. Supporting efforts by the countries of the Coral Triangle to protect the marine resources on which more than 120 million people depend would create a model for regional marine conservation for the rest of the world.

#### **4.2. Lead by Example at Home**

Conservation, like most things, begins at home. If we want the world to take better care of its resources, we must take better care of our own. How can we ask India to save its tigers, or China its giant pandas, if we disregard or try to weaken the Endangered Species Act? If we expect other countries to protect their globally important natural habitats, we must not ignore threats to our own—especially those in Alaska and in the Northern Great Plains, one of the most outstanding and ecologically important grasslands left in the world. To protect our domestic environmental heritage for future generations of Americans, the president should:

- ✓ ***Declare critical Alaskan fisheries and ecosystems off limits to oil and gas drilling.*** Presidential withdrawal of lands from potential oil and gas exploration should be reinstated and extended to include Alaskan waters, where oil spills would cause irreparable damage to fisheries and wildlife. In particular, Bristol Bay, one of the most productive fisheries in the world, and the Beaufort and Chukchi Seas, home to one-fifth of the world's threatened polar bears, should be included in the ban. The Arctic National Wildlife Refuge, known as “America's Serengeti,” also should be permanently protected from drilling.
- ✓ ***Lead the convening of an international conference toward strengthening Arctic governance and establishing an Arctic-wide moratorium on commercial fisheries.*** As climate change melts sea ice, opening up previously inaccessible areas, the Arctic is threatened by a global, modern-day version of the California

gold rush. Its resources and marine life are too precious and sensitive to let a free-for-all happen in the absence of rules to govern expanded fishing, shipping and resource extraction. The United States must provide leadership in the creation of a strengthened system of governance for the Arctic. The president should call for a summit of Arctic nations in 2009 to negotiate a new Arctic Framework Convention by the end of 2012. The convention should be guided by sound science to establish safe levels of exploitation and commerce by all nations using the Arctic.

- ✓ ***Save our native grasslands.*** Steeped in history and rich in natural wonder, the Northern Great Plains are among our nation's most iconic and storied landscapes. They also represent one of the world's most threatened habitats. The monarch of this realm is the American bison, but it is also home to pronghorn sheep and the endangered black-footed ferret. More than a cultural icon, however, the Great Plains are vital to watershed protection and carbon sequestration—services that are being undermined by agricultural subsidies that encourage ranchers to plow up their grasslands for uses such as biofuel production. The president should coordinate an effort among government agencies and private partners to save these disappearing grasslands through innovative approaches to public land acquisition and public-private partnerships that increase incentives for conservation.
  
- ✓ ***Depoliticize science and restore integrity to government decision making.*** Enforcement of our environmental laws has suffered over the past eight years as strong regulations were weakened and weak ones were promulgated. Often this was against the advice of government scientists, whose findings were ignored, suppressed or sometimes distorted to conform to policy positions. Nearly 300 species proposed for listing languish on the Endangered Species Act waiting list, while protections for some already classified as threatened or endangered have been weakened. Regulations under both the Clean Water Act and the Clean Air Act have been weakened or curtailed, while the issuance of permits to drill for oil and gas on public lands has soared. The next president should order a review of all policies and regulations issued since 2001 with a view toward revising or replacing them with regulations that ensure scientific integrity and withstand public scrutiny. In particular, the president should review and narrow the wholesale list of legal waivers granted for border fence construction and disaster recovery.

## 5. ENDNOTE: THE PARADOX OF VALUE

Throughout much of our history, things of great use to us, such as water, have been accorded little value compared to things of limited practical use to us, such as diamonds. This is the classic paradox of value that Adam Smith described in *The Wealth of Nations*—a paradox that has held true across the more than two centuries that have passed since that foundational text for modern economics was written.<sup>13</sup> With the 21<sup>st</sup> century, however, has come a period of accounting. The human footprint, as measured by our increasing numbers and consumptive demands, has grown too big to allow us to continue taking for granted the resources on which life depends simply because they seemed so plentiful in the past.

We are entering a period in which the true value of what we take for granted will, unless we are very careful, start to become all too painfully apparent. It is time to start valuing nature for the life-sustaining services and resources it provides to us. It is time to take a hard look at our priorities: Water is becoming a far more strategic resource than oil. We can learn to do with less of the latter. Indeed, there are already alternatives in the form of solar, wind and geothermal energies, among other replacements for fossil fuels. No one, however, is likely to come up with an alternative to water for sustaining life.

The next president of the United States has a historic opportunity. We still have time to meet the challenge of climate change, time to manage our resources sustainably, time to preserve nature for both the wonders that inspire us and the services that sustain us. We still have time, but not all that much of it, for decisions deferred today will prove far costlier for our children to make tomorrow. This greenprint is offered in the hopes that the next president will seize the opportunity while there is still time by demonstrating the vision, resolve and leadership required to help guide the world toward a truly safer, sustainable and more prosperous future.

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