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Natural Resources Adaptation Provisions of HR. 2454, America's Clean Energy and Security Act of 2009

On May 21, 2009, the House Energy and Commerce Committee voted to approve HR. 2454, the America's Clean Energy and Security Act of 2009. This was a landmark step on the path toward solving the global warming crisis. The bill limits carbon pollution and creates incentives to build a new, domestic manufacturing base that supplies wind, solar, and other renewable energy. It also sets forth the most comprehensive program ever contemplated in legislation for protecting and restoring U.S. species, habitats, ecosystems, and ecological processes threatened by climate change and the related phenomenon of ocean acidification. This memo summarizes these so-called "natural resources adaptation" provisions of the bill. My NWF colleagues will be circulating information about other key provisions.

The most important feature of H.R. 2454's natural resources adaptation program – its funding mechanism - is also the one on which additional work is needed. As discussed in more detail below, H.R. 2454 would create a funding stream for this program using polluter payments. However, to effectively safeguard America's natural heritage in the face of climate change impacts, Congress must increase the share of polluter payments allocated to this program, and it must state that these payments will flow directly to federal agencies (as it has done for state agencies) rather than giving appropriators the ability to divert the payments to other purposes.

The leadership of the House of Representatives has now referred H.R. 2454 to other committees and has made clear that the work of these committees on the bill will proceed expeditiously. A vote in the full House will likely take place before Congress departs for its August recess. It will be crucial for conservationists to work in partnership with Representatives Pelosi and Hoyer, as well as with Representatives Waxman, Markey, Dingell and Rahall, to strengthen the funding mechanism for natural resources adaptation and to defeat any weakening amendments.

Background

H.R. 2454 establishes a cap-and-trade program under which the EPA Administrator would annually distribute permits (called "allowances") to release greenhouse gas pollution to industries and government entities, with the number of allowances declining each year (hence the "caps" on emissions). Some of these allowances may be given away

free and others may be sold at an auction; in either case, they can then be sold on a secondary market (this is the "trade" part of cap-and-trade). EPA analyses suggest that the total payments by polluters for these allowances will be in the trillions of dollars over the 38-year life of the program.

Creating this price on carbon emissions is the key to the entire bill's architecture. By setting declining caps on emissions each year, the bill gradually drives up the cost of emission allowances and thereby creates incentives for private companies and public agencies to meet their economic objectives with lower emissions. Those who can accomplish economic objectives by polluting less than allowable levels can benefit financially by selling unused allowances.

H.R. 2454 would make a significant contribution to the world-wide effort to reduce greenhouse gas pollution to levels needed to avoid the worst impacts of climate change. For example, the caps would reduce greenhouse gas pollution 17 percent below 2005 levels by 2020; this equates to a 15 percent economy-wide reduction. Another 13 to 18 percent of additional reductions would be achieved within this time frame through supplemental measures such as reducing carbon emissions from forests in developing countries.[1] Such aggressive pollution reductions will be essential to avoid the worst effects of global warming on wildlife and other natural resources.

Even assuming the U.S. rapidly enacts aggressive pollution reductions in its domestic legislation and secures significant commitments from other countries in international negotiations, substantial ecosystem disruptions are inevitable due to greenhouse gas emissions already committed to the atmosphere and the related phenomenon of excessive carbon deposition into the oceans. Scientists project that this pollution will lead to increased sea level rise, intensified storms, floods and droughts, disappearing mountain snowpack and altered stream flows, evaporating lakes and wetlands, ocean acidification, and numerous other disruptions. Substantial dedicated funding – focused on implementing carefully designed natural resources adaptation strategies – will be essential to safeguard wildlife and other natural resources from these impacts.

Funding Levels for Natural Resources Adaptation

H.R. 2454 takes a crucial first step toward providing the large-scale funding that will be needed for safeguarding U.S. natural resources from climate change impacts. It allocates a small percentage of total allowance value toward natural resources adaptation – 1 percent from 2012 through 2021, 2 percent from 2022 through 2026, and 4 percent from 2027 through 2050 -- and it makes clear that a portion of this funding (the portion allocated to states) is not dependent on future decisions by appropriators.

In evaluating the adequacy of this allocation, it is important to focus on the early years of the natural resources adaptation program. Near-term investments will be essential to

[1] World Resources Institute, *Emission Reductions under the American Climate Security Act of 2009* (May 19, 2007).

stave off widespread species extinctions and large-scale ecosystem disruptions. Long-term funding provisions will likely be revisited by Congress within one or two decades and therefore cannot be relied upon.

Using EPA modeling of allowance prices, we can estimate the value of H.R. 2454's natural resources allocations in the early years of the program as follows:

2012: $550 million
2015: $670 million
2020: $850 million
2025: $1.88 billion
2030: $4.07 billion

Average Annual Funding Through 2030: $1.71 billion

The decision by the bill's sponsors to allocate just 1 percent of allowance value to natural resources adaptation in the first 10 years of the program, and to never exceed 4 percent over the life of the program, was not due to hostility to ecosystem conservation. To the contrary, Representatives Waxman and Markey are longstanding conservation champions. However, in seeking the votes needed to win a majority of the House Energy and Commerce Committee, they acceded to pressure from key swing votes to allocate allowance value to fossil fuel-dependent industry sectors disadvantaged by the bill's shift toward a clean energy economy.

The National Wildlife Federation's view is that any decision on allocating dollars from the sale of emissions allowances must follow the principles of Clean, Green and Fair. Allocations should be "Clean" in that they should contribute significantly to reduction of global warming pollution. They should be "Green" in that they should ensure that wildlife and natural resources are conserved to maintain a healthy economy and quality of life for future generations. (The longstanding legal principle of "polluter pays" is a strong reason for using these polluter payments to address natural resources damages from climate change.) Finally, allocations should be "Fair" in that they should ensure that communities most vulnerable to climate change impacts, including those abroad, are given a rightful share of assistance.

As climate change legislation advances through Congress, NWF will be advocating that Congress adhere to these principles and shift some of the shares of allowance value from polluters toward natural resources adaptation. At a very minimum, 5 percent of total allowance value must be allocated toward this fundamental conservation need. This would produce an average of roughly $4.2 billion annually for natural resources adaptation over the first 19 years of the program, while leaving a large percentage of the total allowance value for other important public purposes. Although no study has yet tabulated the full cost of conserving species and ecosystems in the face of climate change, it is clear that the cost will be far greater than $4.2 billion annually. For example, a series of studies on the costs of restoring the Everglades, Chesapeake Bay and Great Lakes suggests that the cost over five years ranges from at least $10 billion to $20

billion each.[2] Another study found that $350 billion would be needed over 30 years to make up a viable habitat conservation network across the lower 48 states (using conservation easements to acquire interests in land).[3]

Mixed Results on Dedicated Funding

The initial version of H.R. 2454, introduced several weeks ago, stated that the allowance value allocated to natural resources adaptation would be deposited into a fund and would then be available to the enumerated conservation programs "without further appropriation or fiscal year limitation." This dedicated funding mechanism was crucial because it ensured that allowance value (polluter payments) would actually spent on natural resources adaptation and not diverted to other purposes. If these payments are diverted, conservation programs would likely never have the funds needed to address the enormous challenge of safeguarding natural resources from climate change impacts. Moreover, as noted above, it is appropriate that polluter payments are used to repair the damage caused by the pollution.

As H.R. 2454 was being considered by the House Energy and Commerce Committee, the bill's sponsors decided to address appropriators concerns over lack of control over polluter payments by removing the "without further appropriation or fiscal year limitation" provision. The bill now takes a dual approach to ensuring that allowances allocated to natural resources adaptation are spent on their intended purpose. With respect to the share of natural resources adaptation allowances allocated to state agencies (38.5 percent), the bill states that those allowances will simply be distributed to the state agencies. The state agencies therefore may sell them and use the proceeds for the natural resources adaptation activities specified in the bill without any involvement by appropriators. In other words, the bill retains an effective dedicated funding mechanism for state-based conservation programs.

In contrast, the bill states that the share of natural resources adaptation allowances allocated to federal agencies (61.5 percent) must be auctioned and the proceeds must be deposited in the Natural Resources Climate Change Adaptation Fund established by the bill. The bill then authorizes Congress to appropriate taxpayer dollars to federal agencies for the natural resources adaptation activities specified in the bill and states that the amounts appropriated shall be no less than the amount of allowance value deposited into the Fund. The allowance value in the Fund will then be used to replenish the taxpayer dollars used by the appropriators.

H.R. 2454's approach to federal conservation programs is problematic because, despite the bill's instructions to appropriators to spend "no less" than the allowance value in the Fund, appropriators remain free to divert allowance value toward purposes unrelated to

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[2] CRS Report for Congress: Ecosystem Restoration in the Great Lakes: The Great Lakes Regional Collaboration Strategy (January 30, 2008).

[3] Casey, F., et al., *The Cost of a Comprehensive National Wildlife Habitat Conservation System* (Defenders of Wildlife, 2008). The study drew from a sample of maps prepared by state and fish wildlife agencies in developing State Wildlife Action Plans, which are largely oriented toward terrestrial habitats.

natural resources adaptation. Once future appropriators have access to the funds, there is nothing that today's Congress can do to stop those appropriators from passing legislation that overrides its instructions on how those funds must be utilized.

Conservationists will need to work on amending H.R. 2454 so that it truly ensures that funding will be available to federal agencies and their partners to meet the urgency and severity of the climate change threat to wildlife and ecosystems.

Four-Pronged Approach to Adaptation

H.R. 2454 has four sections on adaptation: Subpart 1A creates a national adaptation program designed to address the full array of impacts of climate change in the U.S.; Subpart 1B calls for a national strategy on reducing the impacts of climate change on public health in the U.S.; Subpart 1C creates a U.S. natural resources adaptation program; and Part 2 creates an international adaptation program.

1. National Adaptation Program (Subpart 1A - Sec 451-453)

H.R. 2454 calls for the President to establish a National Climate Change Adaptation Program within the U.S. Global Change Research Program (GCRP) to increase the effectiveness of federal adaptation efforts. This is a departure from the previous draft of the legislation, which called for this effort to be led by NOAA. Although headquartered at EPA, the GCRP is dispersed broadly across the federal government.

The bill also calls for NOAA to establish a National Climate Service, which will provide climate forecasts and other information to various stakeholders and advise other federal agencies on adaptation planning.

H.R. 2454 also provides a share of allowance value to the states, equivalent to that provided to federal, state and tribal agencies for natural resources adaptation, so that the states can prepare and implement State Climate Change Adaptation Plans.

This subpart of H.R. 2454 was substantially improved in the committee markup process with addition of language requiring that State Climate Change Adaptation Plans be consistent with federal environmental laws and requiring that these plans, to the maximum extent practicable, avoid environmental degradation. The bill also was amended to require that these plans reflect and are fully consistent with natural resources adaptation plans under Subpart 1C. The bill also now requires that states consider and undertake, to the maximum extent practicable, initiatives that protect or enhance natural ecosystem functions and enhance natural hydrological processes.

2. Adaptation for Public Health (Subpart 1B - Sec 461-467)

H.R. 2454 states that it is federal policy to use all practicable means to adapt health systems to address impacts of climate change, and it calls upon the Secretary of Health

and Human Services to develop a strategy for mitigating those impacts, in coordination with other relevant health officials.

3. Natural Resources Adaptation (Subpart 1C - Sec 471-482)

H.R. 2454's provisions for natural resources adaptation are nearly identical to those in HR. 2192, the Climate Change Safeguards for Natural Resources Conservation Act of 2009, introduced a few weeks ago by Representatives Raul Grijalva (D-AZ), Nick Rahall (D-WV), John Dingell (D-MI) and others. H.R. 2192 built upon and improved the natural resources adaptation language included in the Dingell-Boucher discussion draft climate legislation in fall 2008, which was in turn built upon the Climate Security Act considered by the Senate in May 2008. The approach taken toward natural resources adaptation in each of these bills – relying upon a wide array of natural resource agencies to deliver adaptation work through existing conservation programs, pursuant to science-based adaptation strategies and plans – is sound public policy and is broadly supported by the conservation community.

Funding Allocations

As noted above, H.R. 2454 provides a gradually increasing share of total allowance value to natural resources adaptation: 1 percent from 2012 through 2021, 2 percent from 2022 through 2026, and 4 percent from 2027 through 2050. These shares are further allocated among the following federal, state and tribal agencies and programs:

- **DOI (wildlife/land/water programs): 17%**
- **DOI (cooperative grants): 5%**
- **DOI (LWCF – federal): 4%**
- **DOI (LWCF – state/tribal): 2%**
- **USFS (nat'l forest/grasslands): 5%**
- **USFS (LWCF – federal): 4%**
- **USFS (LWCF – Forest Legacy (state/tribal)): 2%**
- **EPA (aquatic ecosystems): 7.5%**
- **Army Corps of Engineers(aquatic ecosystems): 5%**
- **NOAA (coastal/estuarine/marine ecosystems): 7%**
- **State Fish and Wildlife Agencies 32.5%**
- **State Coastal Agencies 6%**
- **Tribes (Tribal Wildlife Grants): 3%**

By allocating funding in this manner, H.R. 2454 properly recognizes that a wide array of species and ecosystems is threatened by global warming and that the best delivery mechanism for adaptation strategies and projects is the suite of federal, state and tribal agencies currently leading conservation of the various U.S. ecosystem types.

Strategic Approaches to Adaptation

H.R. 2454 ensures that funds for adaptation are targeted toward strategic approaches to adaptation. It does so by making clear that federal adaptation activities qualify for funding only if they are consistent with a Federal Natural Resource Agency Adaptation Plan "detailing the agency's current and projected efforts to address the potential impacts of climate change and ocean acidification on natural resources." Similarly, state adaptation activities must be consistent with a State Natural Resources Adaptation Plan for assisting natural resources in becoming more resilient and adapting to the impacts of climate change and ocean acidification. Both the federal agency and state plans must be consistent with a national Natural Resources Climate Change Adaptation Strategy.

H.R. 2454 sets forth a host of procedural and substantive requirements for the strategy and plans. For example, the national strategy must include prioritized goals and measures, a schedule for identifying, monitoring and conserving natural resources threatened by climate change and ocean acidification. The strategy must be developed within 2 years and updated every 5 years. The federal and state plans must be completed within one year thereafter. During that three-year period, adaptation projects are eligible for funding only if consistent with interim workplans developed by federal and state agencies. All of these strategic documents must be developed with public and scientific input.

Adaptation activities in the states' plans must be consistent with the state's comprehensive wildlife strategy, also known as the State Wildlife Action Plan (SWAP), and the strategy must be incorporated into the SWAP itself. These requirements will help ensure that SWAPs continue to serve as the blueprints for wildlife conservation in the states.

H.R. 2454 also creates a Natural Resources Climate Change Adaptation Panel, led by the Chair of the Council on Environmental Quality, to coordinate all of the federal government's natural resources adaptation strategies, plans and programs.

Ensuring that Projects Have a Legitimate Conservation Purpose

H.R. 2454 provides a strong definition of the natural resources that must be the focus of conservation actions in order to qualify for funding under the federal and state plans. It defines "natural resources" as "the terrestrial, freshwater, estuarine, marine fish, wildlife, plants, land, water, habitats, and ecosystems of the United States." Equally important, the bill defines "natural resources adaptation" as "protection, restoration or conservation of natural resources to enable them to become more resilient, adapt to, and withstand the impacts of climate change and ocean acidification," and it provides funding only to natural resource adaptation activities carried out pursuant to state or federal natural resource adaptation plans.

Ensuring Scientific Integrity

A key provision of H.R. 2454 creates a Scientific Advisory Board (SAB), which will help to ensure the scientific integrity of federal adaptation planning and implementation.

Comprised of 10 to 20 scientists recommended by the president of the National Academies of Science and appointed by the Secretary of the Interior, the SAB is charged with advising the President and federal agencies on the best available science regarding the impacts of climate change and ocean acidification on wildlife and natural resources, adaptation responses, and research needs. The national strategy must utilize the best available science identified by the SAB.

H.R. 2454 also creates a Natural Resources Climate Change Adaptation Science and Information Program to be co-led by NOAA and Interior. This program would provide technical assistance, conduct and sponsor research, and assist in adaptation plan development. H.R. 2454 bill could be improved by clarifying the relationship between this program and the National Climate Service established under subpart 1A.

H.R. 2454 also creates a National Wildlife Habitat and Corridors Information system. Led by the Interior Department, this system will be built collaboratively by federal agencies, states and tribes and will provide maps, descriptions of projected shifts in fish and wildlife habitats and corridors, and other data to inform land use plans and other key resource management decisions. The Secretary of the Interior will make recommendations on how these data can be used to maximize landscape connectivity for fish, wildlife and plants and to avoid habitat fragmentation and other negative impacts of economic activity on these resources.

Habitat Acquisitions

Acquisition of interests in land (in fee title or conservation easements) and water rights is a crucial tool for helping wildlife and ecosystems survive global warming. As noted above, H.R. 2454 dedicates 12 percent of natural resources funding toward habitat acquisitions through the Land and Water Conservation Fund (LWCF).

The remaining 88 percent of funding for natural resources adaptation that is not tied to LWCF is also available for habitat acquisitions where appropriate. Agencies have the discretion to target their allocated funds toward habitat acquisitions so long as those acquisitions fall within the definition of adaptation activities funded by the legislation and are consistent with adaptation strategies prepared pursuant to the legislation.

Private Land Conservation

Although the legislation does not create a specific allocation of funds for conservation of wildlife and natural resources on private lands, the bill makes clear that federal and state agencies may use allocated funds to help private landowners conserve wildlife and wildlife habitats. Among the many private land conservation programs highlighted in the bill are the cooperative endangered species conservation fund administered by the Department of the Interior, cooperative programs administered by the Interior and Agriculture departments as part of LWCF, and coastal and estuarine land conservation programs administered by the EPA, the Corps and NOAA.

Forests and Soils Sequestration

Sequestration of new carbon, and maintenance of existing high-value carbon stocks, in forests and soils will be an important part of the U.S. strategy for reducing greenhouse gas emissions. In addition, by enhancing ecosystem resiliency, it will help further natural resources adaptation. Although H.R. 2454 specifies that 5 percent of allowances will be allocated toward international forest carbon sequestration, it does not provide any allowances for U.S.-based forest and soil carbon. Instead, it relies primarily on offsets to promote U.S. forest and soil carbon sequestration. The bill could be improved by supplementing offsets with guaranteed allowances, targeted at protecting high value carbon stocks in mature forests and grasslands.

The bill provides for domestic and international offsets of roughly 2 billion tons per year for the first 10 years. NWF estimates that this could provide roughly $2 to $3 billion annually to U.S. farmers and foresters engaged in carbon sequestration. However, because project types must be in compliance with EPA's project integrity rules and projects must be approved by the EPA, and EPA has not yet established its rules and methodologies, estimating how many U.S. forest and soil carbon projects will qualify for offsets is very difficult at this juncture.

Tribal Conservation

Federally-recognized tribes, which have sovereign rights to natural resources under the Constitution, treaties and legal precedents, are currently experiencing some of the most dramatic negative impacts of global warming. For example, the natural resources of Native villages in coastal Alaska are severely threatened by melting sea ice and sea level rise, and the disappearance of mountain snowpack could cause Pacific Northwest tribes to lose salmon runs that have been central to their cultures and economies for centuries. This legislation begins to address this problem by dedicating 3 percent of auction revenues to tribes for adaptation activities, to be distributed on a competitive basis through the Tribal Wildlife Grants program administered by the Department of the Interior.

In addition, one-third of LWCF funds will go to states and tribes for adaptation activities. The Interior Department and Forest Service will allocate these dollars among states and tribes through competitive grant programs.

4. International Adaptation (Part 2 – Sec. 491-95)

H.R. 2454 creates an International Climate Change Adaptation Program within the U.S. Agency for International Development to help the most vulnerable developing countries adapt to climate change. Among the projects eligible for funding under this program are development of national and regional adaptation plans, promotion of renewable energy and energy efficiency technologies, and protection and rehabilitation of natural

ecosystems. H.R. 2454 includes a number of measures to ensure public participation in adaptation projects.

The bill provides the same share of allowances for international adaptation and promotion of renewable energy and energy efficiency technologies as it provides of U.S. natural resources adaptation and U.S. general adaptation combined. Although it does not specify an exact percentage for natural resources adaptation, some of these financial resources will inevitably will be used to support developing countries' efforts to protect and restore ecosystems threatened by climate change and ocean acidification.

In summary, H.R. 2454's provisions on natural resources adaptation will help society prepare for and respond to the enormous impacts of climate change and ocean acidification on wildlife and other natural resources. NWF looks forward to working with its conservation partners on moving H.R. 2454 through the House of Representatives and ultimately increasing the share for dedicated funding allocated to this crucial task. Enactment of H.R. 2454's natural resources adaptation provisions with adequate dedicated funding would represent a major landmark in the history of wildlife and natural resources conservation.