UNITED STATES CONGRESS BICAMERAL TASK FORCE ON CLIMATE CHANGE

IMPLEMENTING THE PRESIDENT'S CLIMATE ACTION PLAN: U.S. DEPARTMENT OF THE INTERIOR

ACTIONS THE DEPARTMENT OF THE INTERIOR SHOULD TAKE TO ADDRESS CLIMATE CHANGE

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Executive Summary

In June 2013, President Obama announced a plan to address climate change using the existing authorities of the Executive Branch. The President's Climate Action Plan contains domestic measures that are designed to reduce U.S. carbon emissions approximately 17 percent below 2005 levels by 2020. The plan also called for the United States to be better prepared for the effects of climate change, and in November 2013, the President signed an Executive Order advancing this effort. The Department of the Interior (DOI) is an important partner in implementing the President's Climate Action Plan. The plan calls on DOI to reduce methane emissions; accelerate clean energy permitting; contribute to efforts that prepare the U.S. for the effects of climate change; protect wildlife; develop actionable climate science; and help Indian tribes adapt to climate change.

This report recommends several specific actions DOI should take in carrying out the President's Climate Action Plan. These recommendations are based on suggestions submitted to the Bicameral Task Force on Climate Change by over 200 groups ranging from environmental organizations and efficiency advocates to electric utilities and Fortune 500 companies. They also reflect input from leading academics and experts.

Reduce Methane Pollution from Oil, Gas, and Coal Production

Methane is the second-largest type of U.S. anthropogenic carbon pollution. Natural gas systems, petroleum systems, and coal mining are among the largest sources of U.S. methane emissions. A significant amount of emissions from these sources occur on lands and the Outer Continental Shelf administered by the Bureau of Land Management (BLM) and the Bureau of Ocean Energy Management (BOEM), respectively. About 40 percent of natural gas vented or flared on federal onshore leases could be economically captured with currently available control technology. To meet the Climate Action Plan's goal of cutting methane emissions, BLM and BOEM should reduce the wasteful practice of venting and flaring gas on federal lands onshore and offshore, assess and address leaks from pipelines on federal lands, and enact standards for methane emissions from coal mining on federal land.

Increase Clean Energy Deployment on Federal Land and Revise Policies that Subsidize Fossil Fuels

BLM has made significant progress in advancing clean energy projects on federal land. Between 2005 and 2012, BLM approved more than 10 gigawatts of non-hydropower clean energy projects. The President's Climate Action Plan calls for 10 additional gigawatts to be permitted on federal land by 2020. To meet this goal, BLM should continue to improve the permitting

process and fast-track promising renewable energy projects proposed for development on public lands where minimal wildlife and land-use conflicts exist. BLM should also revisit policies that subsidize fossil fuel development on federal land by increasing royalty rates for federal coal leases, reviewing its procedures for determining "fair market value" during its coal leasing process, and reforming its leasing practices in the Powder River Basin. The Interior Department should also work with Congress to close loopholes that currently allow oil companies to produce significant quantities of oil and natural gas from public lands offshore in the Gulf of Mexico without paying royalties to American taxpayers.

Advance Government-wide Adaptation Planning

The President's Climate Action Plan states that, as the U.S. curbs carbon pollution, we must also prepare for the effects of climate change that cannot be avoided. The U.S. Fish & Wildlife (FWS) Service should take a lead role in implementing Executive Order 13653, and particularly the *National Fish, Wildlife, and Plants Climate Adaptation Strategy (Strategy)*, a government-wide adaptation plan for ecosystems and natural resources. In addition to other implementation steps outlined in the *Strategy*, FWS should work with the National Oceanic and Atmospheric Administration (NOAA) and the Association of Fish & Wildlife Agencies (AFWA) to establish a coordinating body to meet biannually, monitor implementation of the *Strategy*, and report its findings to the public.

Protect Habitat for Endangered and Threatened Species

Climate change poses a major threat to fish and wildlife species. One study suggests that 15 to 37 percent of terrestrial species may be "committed to extinction" by 2050 due to climate change. According to the *Strategy*, habitat conservation is the most effective way to help endangered species adapt to climate change. FWS should work with other federal land management agencies to identify lands that could provide habitat corridors and migration pathways and then manage them accordingly. FWS should also use its authority under the Endangered Species Act (ESA) to protect habitat for endangered and threatened species. FWS should develop recovery plans for the conservation of species that are imperiled due to climate change; require agencies to consider carbon emissions when determining if agency actions affect endangered and threatened species; clarify when effects of climate change trigger certain obligations under the ESA; and engage in assisted migration of species that are endangered or threatened due to climate change.

Assist American Indian Tribes with Climate Adaptation

Climate change poses unique threats to American Indian tribes due to the vulnerable locations of many tribal lands; the extent to which tribes depend on their lands and natural resources to

sustain economic, cultural, and spiritual practices; the state of tribal infrastructure; and a lack of financial and technical resources. The President's Climate Action Plan responds to these challenges by affirming that the Administration will help tribes with preparedness efforts. We recommend that the Bureau of Indian Affairs (BIA) provide tribes with expertise and funding to create their own climate adaptation plans and collaborate closely with tribes in the development of those plans. BIA should also develop a workable program to assist communities whose continued existence is imperiled by climate change.

Bolster USGS Climate Research

The President's Climate Action Plan identifies the need for scientific data and insights to "help government officials, communities, and businesses better understand and manage the risks associated with climate change." As a leading U.S. science agency, the U.S. Geological Survey (USGS) will play an important role in this effort. We recommend that, given the urgency of the climate crisis and the climate science needs articulated in the President's Climate Action Plan, USGS focus a greater amount of its research on climate change science. Areas of specific need include maintaining and expanding long-term data collection and long-term modeling and predicting capability.

Encourage Timely Release of Related Climate Measures

To achieve the goals established in the Climate Action Plan and related executive orders, DOI relies on timely action from other agencies such as the Office of Management and Budget (OMB) and the White House Council on Environmental Quality (CEQ). We recommend that the Secretary of the Interior encourage the Administration to expedite the timely release of measures from other agencies that help DOI advance its climate agenda, particularly those that have been subject to excessively long review. We recommend that the Administration:

- Finalize the Draft National Environmental Policy Act Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions;
- Expedite Office of Management and Budget review of climate related rules, for example the Waste Mine Methane Capture, Sale, or Destruction Advanced Notice of Proposed Rulemaking which has been under review since May 2012; and
- Release an aggressive timeline for making changes to policies, programs, and regulations consistent with Executive Order 13653.

Introduction

The Bicameral Task Force on Climate Change is dedicated to focusing congressional and public attention on climate change and developing effective policy responses. The Bicameral Task Force's goals are to raise awareness of the dangers of climate change; provide a forum for the development of effective policies; and put in place new measures—both legislative and administrative—to reduce carbon pollution, spur new technologies, and enhance resiliency to climatic disruption.

The Growing Threat of Climate Change

According to the Draft National Climate Assessment, average U.S. temperatures have increased about 1.5°F since 1895, with more than 80 percent of this increase occurring since 1980. More heavy downpours, wildfires, and heat waves are occurring in parts of the United States. Snow and ice cover has diminished in some regions of the United States. Sea levels have risen about eight inches over the past century. Carbon pollution has caused a nearly 30 percent increase in the acidity of the surface waters of the ocean.

These developments are consistent with scientists' projections about the effects of rising global temperatures. Scientists warn that in the future, carbon pollution could cause much more extreme effects. U.S. temperatures are predicted to increase between three and eleven degrees Fahrenheit by the end of the century. This dramatic rise in global temperatures would severely disrupt the global climate, radically altering our way of life. As President Obama stated in his 2013 Inaugural Address, the failure to address climate change "would betray our children and future generations." We have a moral obligation to act.

The Federal Response

The Executive Branch has broad authority under existing law to reduce carbon emissions, spur research and development into clean energy technologies, and develop adaptation strategies.

¹ U.S. Global Change Research Program, *Draft National Climate Assessment* (2013) at 3, http://ncadac.globalchange.gov/download/NCAJan11-2013-publicreviewdraft-chap1-execsum.pdf.

 $^{^{2}}$ *Id*. at 3-5.

³ *Id.* at 66.

⁴ *Id*. at 4.

⁵ *Id*.

⁶ *Id.* at 3–7.

⁷ *Id.* at 20.

⁸ *Id.* at 10.

⁹ President Barack Obama, Inaugural Address (Jan. 21, 2013), http://www.whitehouse.gov/the-press-office/2013/01/21/inaugural-address-president-barack-obama.

Under President Obama's leadership, important steps have already been taken to address climate change and more are underway.

In 2009, President Obama pledged that the United States would reduce its carbon pollution by approximately 17 percent by 2020 and by more than 80 percent by 2050, from a 2005 baseline. 10 Over the past four years, the United States has made progress toward this goal. Investments in energy efficiency and renewable energy have doubled U.S. capacity to generate renewable electricity from wind and solar resources, reinvigorated domestic clean energy manufacturing, and helped return Americans to work. 11 The Administration's carbon pollution standards for automobiles will double fuel economy and produce major reductions in carbon pollution from passenger vehicles.¹² These steps are likely to bring the United States halfway toward the 2020 carbon pollution reduction goal.

In his State of the Union address in February, the President told the nation, "if Congress won't act soon to protect future generations, I will direct my Cabinet to come up with executive actions we can take, now and in the future, to reduce pollution, prepare our communities for the consequences of climate change, and speed the transition to more sustainable sources of energy." When Congress failed to respond, the President announced his Climate Action Plan on June 25, 2013.¹⁴ The plan consists of a wide range of executive actions involving at least 20 federal agencies.

The Department of the Interior is playing a key role in implementing the Climate Action Plan. Under the plan, DOI has several responsibilities, including reducing reduce methane emissions; accelerating clean energy permitting; contributing to efforts to prepare the U.S. for the effects of climate change; protecting wildlife; helping Indian tribes adapt to climate change; and developing actionable climate science.

Purpose and Methodology

The purpose of this report is to recommend specific actions that DOI can take in carrying out the President's Climate Action Plan. However, these recommendations are not intended to be an exhaustive list of all actions DOI should take to address climate change.

¹⁰ President Barack Obama, Remarks by the President at the Morning Plenary Session of the United Nations Climate Change Conference (Dec. 18, 2009), http://www.whitehouse.gov/the-press-office/remarks-president-morningplenary-session-united-nations-climate-change-conference.

11 Department of Energy, *Energy Economy*, http://energy.gov/public-services/energy-economy.

¹² National Highway Traffic Safety Administration, CAFE—Fuel Economy, http://www.nhtsa.gov/fuel-economy.

¹³ President Barack Obama, Remarks by the President in the State of the Union Address (Feb. 12, 2013), http://www.whitehouse.gov/the-press-office/2013/02/12/remarks-president-state-union-address.

¹⁴ The President's Climate Action Plan (June 2013),

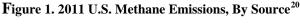
http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf.

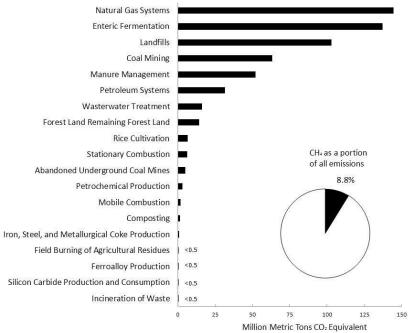
The report is based on the input of a wide range of organizations. In January 2013, the Bicameral Task Force on Climate Change sent letters to corporations, unions, nongovernmental organizations, academia, trade associations, public health groups, and faith-based organizations to solicit their views on actions the federal government can take to address climate change. Over 200 organizations responded. The recommendations in this report reflect many of the suggestions in those responses as well as feedback from leading academics and experts. The Bicameral Task Force thanks the many organizations and individuals who provided input used in this report.

Recommendations

I. Reduce Methane Pollution from Oil, Gas, and Coal Production

As the President's Climate Action Plan states, "Curbing emissions of methane is critical to our overall effort to address global climate change." Methane is the second largest type of anthropogenic carbon pollution in the U.S. While its lifetime in the atmosphere is much shorter than carbon dioxide, methane is 28 times as effective at trapping heat in the atmosphere over a 100-year period, and 84 times as effective over a 20-year period. In 2011 the United States emitted 587.2 million metric tons of carbon dioxide equivalent of methane into the atmosphere accounting for 8.8 percent of all U.S. greenhouse gas (GHG) emissions. Natural gas systems are the largest source of U.S. methane emissions; coal mining is the fourth-largest source; and petroleum systems are the sixth-largest source (Figure 1).





¹⁵ *Id.* at 10.

¹⁶ Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2011* (2013) at ES-12.

¹⁷Intergovernmental Panel on Climate Change, Working Group I Contribution to the IPCC Fifth Assessment Report Climate Change 2013: The Physical Science Basis, Final Draft Underlying Scientific Technical Assessment, (2013) at 8-58.

¹⁸ Environmental Protection Agency, *supra* note 16 at ES-13.

¹⁹ *Id*.

²⁰ *Id*.

The Administration has already taken important steps toward limiting methane pollution. EPA estimates that new air pollution limits for the oil and gas industry will reduce annual methane pollution from the industry by 7 percent.²¹ The President's Climate Action Plan proposes to build on these efforts through the development of a comprehensive strategy to reduce methane emissions.²² An interagency working group—made up of EPA and the Departments of Agriculture, Energy, Interior, Labor, and Transportation—has been charged with "identifying existing authorities and incentive-based opportunities to reduce methane emissions."²³

DOI has significant authority to reduce methane emissions. BLM, an agency within DOI that administers federal lands, is responsible for 700 million acres of mineral estate underlying both federal and non-federal lands.²⁴ A sizable amount of methane emissions from oil, gas, and coal production occurs on BLM land.²⁵ The Government Accountability Office (GAO) estimates that 40 percent of natural gas estimated to be vented or flared on federal onshore leases could be captured with available control technology in an economically efficient manner.²⁶

Additionally, the DOI's BOEM manages oil and gas development on the Outer Continental Shelf. Research suggests that methane emissions from offshore oil and gas production can be reduced by up to 85 percent using cost effective emissions controls and practices.²⁷ A Natural Resources Defense Council report estimates that the use of widely available technologies across the industry – from production through distribution – could cut emissions by 80 percent.²⁸

Requiring the use of these technologies would not only reduce methane emissions but also increase federal royalty receipts by \$23 million for onshore production alone, according to GAO.²⁹ Congress has provided BLM with executive authority to require holders of energy leases on federal land to limit methane emissions.³⁰ Similarly, BOEM may also take action to limit methane emissions from oil and gas systems on the Outer Continental Shelf.³¹

²⁴ Bureau of Land Management, *Mineral and Surface Acreage Managed by the BLM*, http://www.blm.gov/wo/st/en/info/About BLM/subsurface.html.

²¹ Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49490, 49535 (Aug. 16, 2012).

²² The President's Climate Action Plan, *supra* note 14 at 10 - 11.

 $^{^{23}}$ Id

²⁵ Bureau of Land Management, *Oil and Gas*, http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas.html (stating that domestic production from federal onshore oil and gas wells accounts for about 11 percent of U.S. natural gas production and about 5 percent of oil production); CRS Report 7-5700, *U.S. and World Coal Production, Federal Taxes, and Incentives*, by Marc Humphries and Molly F. Sherlock, at 8 (March 14, 2013) (stating that coal production on federal lands accounts for about 43 percent of U.S. production).

²⁶ Government Accountability Office, Federal Oil and Gas Leases: Opportunities Exist to Capture Vented and Flared Natural Gas, Which Would Increase Royalty Payments and Reduce Greenhouse Gas Emissions, 19 (2010). ²⁷ Carey Bylin, Zachary Schaffer, Vivek Donald Robinson, Alexandre do N. Campos & Fernando Borensztein,

Designing the Ideal Offshore Platform Methane Mitigation Strategy SPE 126964, 14 (2010).

²⁸ Natural Resources Defense Council, *Leaking Profits* (2012) at 3.

²⁹ GAO Report, *supra* note 26 at 24–25.

³⁰ The Mineral Leasing Act (MLA) provides the Secretary of the Interior with a broad grant of authority to carry out the purposes of the Act. 30 U.S.C. § 189. This broad grant of authority includes the authority to administer federal

We urge BLM and BOEM to utilize their authorities to limit methane pollution from oil and gas production on federal land and the Outer Continental Shelf. In the fall of 2009, BLM announced that, by November 2010, it would propose Onshore Oil & Gas Order No. 9, which would, "establish standards to limit the waste of vented and flared gas and define the appropriate use of oil and gas for beneficial use." The Order would, among other things, "spell out which activities qualify for beneficial use, minimize the amount of venting and flaring that takes place on oil and gas production facilities on Federal and Indian lands, and set standards for determining avoidable versus unavoidable losses." Unfortunately, BLM has repeatedly delayed the Order. In the spring 2013 Unified Regulatory Agenda, BLM pushed back the proposal date to May 2014. DOI and OMB should work out any concerns regarding Onshore Order No. 9, issue a notice of proposed rulemaking, and work expeditiously to finalize the Order.

A recent study³⁷ has used sensors to directly measure natural gas leaking from pipelines. This research indicates that more work is needed to understand the extent of fugitive methane emissions from pipelines. BLM should assess the extent of leakage of pipelines (from production areas and those crossing through right-of-ways) on federal lands and use its authorities to limit methane leaks from existing and proposed pipelines.

We also urge BLM to limit methane emissions from coal mining on federal land. As with oil and gas facilities, technology to capture methane emissions from coal mines is readily available.³⁸ In the fall of 2011, BLM announced that it was considering, "proposing regulations concerning the capture, sale, or destruction of waste mine methane," and that it would be issuing

leases and prescribe regulations governing leases. *Independent Petroleum Ass'n of America v. DeWitt*, 279 F.3d 1036, 1039–40 (D.C. Cir. 2002).

http://www.reginfo.gov/public/servlet/ForwardServlet? Search Target = Agenda & text field = 1004-AE14.

³¹ Section 4(a)(1) (43 U.S.C. § 1333(a)(1)) of the Outer Continental Shelf Lands Act (OCSLA) grants the DOI broad authority to regulate installations and other devices that enable resource exploration, development, production, or transportation. OCSLA section 21(b) (43 U.S.C. § 1347(b)) provides that the Secretary of the Interior must require all new drilling and production operations, and where practicable, existing operations to use "the best available and safest technologies which the Secretary determines to be economically feasible, whenever failure of equipment would have a significant effect on safety, health, or the environment."

³² Reginfo.gov, Onshore Oil and Gas Order 9: Waste Prevention and Use of Produced Oil and Gas for Beneficial Purposes (Fall 2009), http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=200910&RIN=1004-AE14.

³³ *Id.*

³⁴ Reginfo.gov, Unified Agenda and Regulatory Plan Search Results,

³⁵ Federal Register, *Onshore Oil and Gas Order 9: Waste Prevention and Use of Produced Oil and Gas for Beneficial Purposes*, https://www.federalregister.gov/regulations/1004-AE14/onshore-oil-and-gas-order-9-waste-prevention-and-use-of-produced-oil-and-gas-for-beneficial-purposes.

³⁶ Reginfo.gov, Onshore Oil and Gas Order 9: Waste Prevention and Use of Produced Oil and Gas for Beneficial Purposes (Spring 2013), http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201304&RIN=1004-AE14. ³⁷ Nathan G. Phillips et al., *Mapping urban pipeline leas: Methane leaks across Boston*, Environmental Pollution, 173, (2013) at 1-4.

³⁸ Environmental Protection Agency, *Coalbed Methane Outreach Program (CMOP)*, http://www.epa.gov/cmop/basic.html.

a Notice of Proposed Rulemaking in December 2011.³⁹ BLM sent the proposal to OMB for review on May 3, 2012, and the proposal remains under review at OMB.⁴⁰ BLM has now pushed the proposal date back further, to May 2014, and stated that it will merely be releasing an Advance Notice of Proposed Rulemaking instead of a proposed rule.⁴¹ BLM and OMB should resolve any differences and work quickly to propose standards for waste mine methane.

Delays such as this fail to meet the goals for expeditious and transparent regulatory review set forth in Executive Order 12866 and restated in Executive Order 13563. These orders instruct OMB to review submissions from an agency within 90 days, with two possible routes to extend that timeline – one is a 30-day extension requested by the Office of Information and Regulatory Affairs (OIRA) and the second is an extension of undefined length at the request of the Secretary of Interior. To maximize reductions, DOI needs to prioritize work on standards that curb carbon emissions and OMB must accelerate its regulatory review.

II. Increase Clean Energy Deployment on Federal Lands

Solving the climate challenge will require the large-scale deployment of clean energy sources. BLM is uniquely positioned to advance this effort, because the development of renewable energy projects on federal lands occurs primarily on BLM lands. BLM estimates that 20.6 million acres of federal land onshore have commercial wind energy potential, 20 million acres have commercial solar energy potential, and 111 million acres have geothermal energy potential.

BLM has already made significant progress in approving clean energy projects on federal land. In the Energy Policy Act of 2005 ("EPAct 2005"), Congress directed the Secretary of the Interior to approve 10 gigawatts of non-hydropower clean energy projects on federal lands by 2015. BLM announced that it had met this target in October 2012. BLM achieved this goal by prioritizing clean energy and transmission development and implementing an effective permitting process. In 2010, then-Secretary of the Interior Ken Salazar issued Order No. 3285,

http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201210&RIN=1004-AE23.

http://www.doi.gov/budget/appropriations/2013/highlights/upload/DH027.pdf.

³⁹ Reginfo.gov, Waste Mine Methane Capture, Sale, or Destruction (Fall 2011),

http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201110&RIN=1004-AE23.

⁴⁰ Reginfo.gov, Waste Mine Methane Capture, Sale, or Destruction (2012),

Reginfo.gov, Waste Mine Methane Capture, Sale, or Destruction (Spring 2013), http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201304&RIN=1004-AE23.

⁴² Exec. Order No. 13563, 76 Fed. Reg. 3821; Exec. Order No. 12866, 58 Fed. Reg. 51735, at § 6(b)(2)(A)–(C).

⁴³ Government Accountability Office, No. GAO-13-189, *Renewable Energy: Agencies Have Taken Steps Aimed at Improving the Permitting Process for Development on Federal Lands* (2013) at 4.

⁴⁴ Department of the Interior, *New Energy Frontier*, at DH-32,

⁴⁵ Energy Policy Act of 2005, Pub. L. No. 109-58, § 211, 119 Stat. 593, 660 (2005).

⁴⁶ Bureau of Land Management, Press Release, Salazar Authorizes Landmark Wyoming Wind Project Site, Reaches President's Goal of Authorizing 10,000 Megawatts of Renewable Energy (Oct. 9, 2012).

establishing clean energy development as a departmental priority.⁴⁷ BLM has completed Programmatic Environmental Impact Statements for solar, wind, and geothermal, which have streamlined the permitting process.⁴⁸ To further improve the process, BLM established a system for prioritizing projects and increasing coordination with its field offices and other agencies.⁴⁹ BLM also decreased permitting times by increasing staff in key areas; for example, BLM tripled the size of its staff devoted to processing wind and solar energy applications.⁵⁰

The President's Climate Action Plan sets a new target for clean energy deployment: 10 additional gigawatts of clean energy projects on federal land by 2020, enough to power 7.5 million homes. The Administration and DOI can achieve this goal by continuing to improve the permitting process and fast-tracking promising renewable energy projects proposed for development on public lands where minimal wildlife and land-use conflicts exist. Moreover, as DOI increases clean energy deployment on public land, it should also revisit policies that subsidize fossil fuel development on public land by increasing royalty rates for federal coal leases, review its procedures for determining "fair market value" during its leasing process, and reforming its leasing practices in the Powder River Basin.

We support BLM moving forward on the landscape-level permitting process it has developed for solar energy projects on federal land. In 2012, BLM identified 17 Solar Energy Zones (SEZs) on about 285,000 acres of federal land with high resource potential and few conflicts with environmental and cultural resources.⁵² BLM then created incentives to guide development toward these areas and away from environmentally sensitive areas.⁵³

This approach speeds the permitting process and reduces costs by "pre-approving" large areas of land for solar development and avoiding the controversies over resource conflicts that can delay project applications.⁵⁴ It also ensures that areas with significant environmental and cultural resources are protected, fulfilling the agency's mandate under the Federal Land Policy Management Act (FLPMA) to respect competing uses.⁵⁵ Similarly, DOI has identified Wind Energy Areas for offshore renewable energy development in the Atlantic using "smart from the

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⁴⁷ Bureau of Land Management, Secretarial Order No. 3285, *Renewable Energy Development by the Department of the Interior* (March 11, 2009).

⁴⁸ Bureau of Land Management, *New Energy for America*, http://www.blm.gov/wo/st/en/prog/energy/renewable energy.html.

⁴⁹ Government Accountability Office, No. GAO-13-189, *Renewable Energy: Agencies Have Taken Steps Aimed at Improving the Permitting Process for Development on Federal Lands* (2013) at 24-25.
⁵⁰ *Id.* at 1, 15.

⁵¹ The President's Climate Action Plan, *supra* note 14 at 7.

⁵² Bureau of Land Management, *Renewable Energy and the BLM: SOLAR*, http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS__REALTY__AND_RESOURCE_PROTECTION_/e nergy/solar_and_wind.Par.99571.File.dat/fact_Solar_12_2012.pdf.

⁵⁴ The Wilderness Society, *Smart Steps to Establish a Responsible Program for Renewable Energy on Public Lands* (2013) at 4–6. ⁵⁵ *Id.*

start" development principles that encourage collaboration between agencies, applicants, states, tribes, and other stakeholders. These policies have been helpful in resolving conflicts early in the application process and should continue to be a focus. In addition, DOI should consider the creation of a specific target for offshore wind development as it has done for renewables for all public lands.

III. Revise Policies that Subsidize Fossil Fuels

In addition to increasing clean energy deployment on federal land, DOI can also address climate change by revisiting policies that effectively subsidize fossil fuel development on public land, including artificially low royalty rates and systematic undervaluing of coal leases. These policies are counterproductive to the goals of the President's Climate Action Plan because they subsidize a high-carbon energy source at the very time the U.S. needs to reduce its carbon pollution and because they fail to provide taxpayers with a proper return on these publically-owned mineral resources.

We urge DOI to increase royalty rates for new coal, oil, and gas leases, as well as for existing leases that come up for readjustment. DOI has the authority to set royalty rates for oil, gas, and coal leases on federal lands and to readjust them for existing leases.⁵⁷ Currently, the rate for federal onshore oil and gas leases, as well as surface coal mines, is 12.5 percent, and the rate for underground coal mines is 8 percent.⁵⁸ These rates are considerably lower than the rate DOI charges for offshore oil and gas drilling, which is 18.75 percent for new leases.⁵⁹ According to a recent report by the Center for Western Priorities, federal royalty rates are also lower than most rates charged by states for onshore oil and gas development; for example, Texas charges a rate of up to 25 percent.⁶⁰

DOI should also take all steps within its authority and work with the Congress to end the royalty-free drilling that is happening in the Gulf of Mexico. As the result of an oil company court challenge to the Deepwater Royalty Relief Act of 1995, oil companies are currently able to drill on some leases in the Gulf of Mexico without paying any royalties to American taxpayers.⁶¹ Roughly one-quarter of all offshore oil produced in the United States is now produced royalty-

⁵⁶ Bureau of Land Management, *Smart from the Start*, http://www.boem.gov/Renewable-Energy-Program/Smartfrom-the-Start/Index.aspx.

⁵⁷ 30 U.S.C. § 207(a) (a lease shall require payment of a royalty "in such amount as the Secretary shall determine of not less that [sic] 12 ½ per centum"); 30 U.S.C. § 226(b)(1)(A) ("A lease shall be conditioned upon the payment of a royalty at a rate of not less than 12.5 percent").

⁵⁸ 30 U.S.C. § 207(a) (surface coal mines); 43 C.F.R. § 3473.3-2 (underground coal mines); 30 U.S.C. § 226(b)(1)(A) (oil and gas).

⁵⁹ Center for Western Priorities, A Fair Share: The Case for Updating Federal Royalties (2013) at 7.

⁶¹ Kerr-McGee Oil & Gas Corp. v. Allred, No. 2:06-CV-0439 (W.D. La. October 30, 2007) (citing P.L. 104-58).

free and DOI estimates that this loophole will cost taxpayers more than \$15 billion over the next decade. This loophole is a massive subsidy to the offshore oil industry and should be ended.

BLM should also undertake a comprehensive review of its coal leasing process and reform the process as necessary to ensure that taxpayers are receiving fair market value. While BLM is required to secure fair market value for coal on public land, 62 there is significant evidence that BLM is systematically undervaluing coal leases. A June 2013 report from the DOI Inspector General identified several aspects of the current sale process that put the federal government at risk of not receiving full market value. The Inspector General found, among other things, that over 80 percent of lease sales in the coal-rich Powder River Basin over the past 20 years received only one bid and that BLM policies allow companies to significantly expand their holdings with no competitive bidding. The report identified lost bonuses of \$2 million from recent lease sales and \$60 million in potentially undervalued lease modifications. A 2012 report published by the Institute for Energy Economics & Financial Analysis estimates that the federal government lost \$28.9 billion in revenues over 30 years due to BLM's failure to receive fair market value for coal mined in the Powder River Basin, which produces 43 percent of the nation's coal.

IV. Advance Government-wide Adaptation Planning

The President's Climate Action Plan states, "As we act to curb the greenhouse gas pollution that is driving climate change, we must also prepare for the impacts that are too late to avoid." In November 2013, the President signed Executive Order 13653: Preparing the United States for the Impacts of Climate Change. Like the Plan, the Executive Order calls for the federal government to support community-based preparedness efforts; protect infrastructure and public resources; secure federal operations and facilities; and develop actionable science and research. Given its broad authorities relating to public lands, energy, fish and wildlife, and scientific research, DOI is playing a central role in climate adaptation.

The President's Climate Action Plan tasked DOI with launching a \$100 million competitive grant program to, "foster partnerships and promote resilient natural systems while enhancing green spaces and wildlife habitat near urban populations," in the region affected by Hurricane Sandy. The Administration is also investing \$250 million to support coastal restoration and

⁶⁶ Tom Sanzillo, Institute for Energy Economics & Financial Analysis, *The Great Giveaway: An Analysis of the Costly Failure of Federal Coal Leasing in the Powder River Basin* (2012) at 3.

⁶² 43 U.S.C. §§ 1701(a)(9), 1719(b)(2).

⁶³ Department of the Interior, Office of the Inspector General, Report No. CR-EV-BLM-0001-2012, *Coal Management Program: U.S. Department of the Interior* (June 2013).

⁶⁴ *Id.* at 8 (Powder River Basin), 13 (lease modifications).

⁶³ *Id*. at 6.

⁶⁷ The President's Climate Action Plan, *supra* note 14 at 12.

⁶⁸ Exec. Order No. 13653, 78 Fed. Reg. 66817 (Nov. 1, 2013).

⁶⁹ *Id.* at 12–16

⁷⁰ The President's Climate Action Plan, *supra* note 14 at 14.

resilience projects across the region.⁷¹ In addition to these important efforts, the recent Executive Order instructs DOI, in collaboration with other agencies, to complete an inventory and assessment of proposed and completed changes to regulations and policy necessary to make our natural resources more resilient to climate change.⁷² This includes policies, like land preservation and restoration, that also lead to carbon sequestration.

Carbon emissions from coal, oil, and natural gas extraction on public lands are outpacing the ability of those lands to absorb them. A recent analysis from the Center for American Progress determined that due to fossil fuel extraction in the continental U.S. "nearly 4.5 times more carbon is being emitted from [onshore] public lands than these places can absorb naturally."

DOI should ensure that the timeline and plan includes steps to implement the *Strategy*, ⁷⁴ as agencies are required to build off existing strategies.

Congress directed FWS and CEQ to develop a government-wide adaptation strategy for fish, wildlife, plants, and ecosystems in 2009.⁷⁵ FWS and CEQ convened an inter-governmental working group of federal, state, and tribal agency representatives and, in 2012, released the *Strategy*.⁷⁶ The *Strategy* is not a detailed operational plan; rather, it is an overarching analysis of "why, what, and when" the U.S. must do to assist our living resources to cope with climate change.⁷⁷

In addition to implementing the *Strategy* within DOI, the agency should assume a leading role in coordinating adaptation planning across the federal government. The *Strategy* tasks FWS, the National Oceanic and Atmospheric Administration (NOAA), and the Association of Fish & Wildlife Agencies (AFWA) with overseeing the integration of the *Strategy* into existing planning processes.⁷⁸ We recommend that, as the *Strategy* requests, FWS, NOAA, and AFWA establish a coordinating body to meet biannually, monitor implementation of the *Strategy*, and report its findings to the public.

FWS, NOAA, and AFWA should also take the other implementation steps outlined in the *Strategy*, including revising the *Strategy* by June 2015 to incorporate the findings of the 2013

⁷¹ *Id*.

⁷² Exec. Order No. 13653, *supra* note 68 at § 3.

⁷³Jessica Goad and Matt Lee-Ashley, Center for American Progress, *The Clogged Carbon Sink: U.S. Public Lands Are the Source of 4.5 Times More Carbon Pollution Than They Can Absorb* (Dec. 5, 2013), http://www.americanprogress.org/issues/green/news/2013/12/05/80277/the-clogged-carbon-sink-u-s-public-lands-are-the-source-of-4-5-times-more-carbon-pollution-than-they-can-absorb/.

⁷⁴ National Fish, Wildlife, and Plants Climate Adaptation Partnership, *National Fish, Wildlife, and Plants Climate Adaptation Strategy* (2012).

⁷⁵ *Id.* at 2–3.

⁷⁶ *Id*.

⁷⁷ *Id.* at 8.

⁷⁸ *Id.* at 91–92.

National Climate Assessment; establish a mechanism for engaging external stakeholders, including corporations, landowners, and non-profit organizations; integrate the *Strategy* into local planning efforts by working with Landscape Conservation Cooperatives (LCCs) and other groups. This body should be coordinated with or be integrated into the Council on Climate Preparedness and Resilience established by Executive Order 13653. Additionally, DOI representation on the Council should include or coordinate closely with senior officials familiar with the LCCs, whose regional and collaborative approach could serve as a model for facilitating efficient communication and coordination between agencies and stakeholders.

V. Protect Habitat for Endangered and Threatened Species

The President's Climate Action Plan and Executive Order 13653 direct federal agencies to take steps to promote resilience in fish and wildlife populations. ⁸¹ Climate change poses a major threat to fish and wildlife species. In 2007, the Intergovernmental Panel on Climate Change (IPCC) projected that a temperature increase of 2.7 to 4.5°F (1.5 to 2.5°C)—likely to be achieved in this century under certain emission scenarios ⁸²—would cause major changes in ecosystem structure and function, species' ecological interactions, and shifts in species' geographical ranges, with negative consequences for biodiversity. ⁸³ The IPCC estimated that such a temperature increase would place 20 percent to 30 percent of plant and animal species at increased risk of extinction. ⁸⁴ An International Union for Conservation of Nature study suggests that 15 percent to 37 percent of terrestrial species may be "committed to extinction" by 2050 due to climate change. ⁸⁵

According to the *Strategy*, the most effective way to help endangered species adapt to climate change is habitat conservation. ⁸⁶ FWS will need to provide well-connected networks of conservation areas to allow for the movement of species in response to climate change. ⁸⁷ To that end, we encourage FWS to work with other federal land management agencies to identify lands that could provide such networks and manage them accordingly.

We urge FWS to use its authority under the Endangered Species Act (ESA) to protect habitat for endangered and threatened species. FWS should develop recovery plans for the conservation of species that are imperiled due to climate change; require agencies to consider climate change

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⁷⁹ *Id.* at 91–92.

⁸⁰ Exec. Order No. 13653, *supra* note 68 at § 6.

⁸¹ The President's Climate Action Plan, *supra* note 14 at 15. Exec. Order No. 13653, *supra* note 68.

⁸² Intergovernmental Panel on Climate Change, *Climate Change 2013, The Physical Science Basis, Summary for Policymakers* (2013) at 18.

⁸³ Intergovernmental Panel on Climate Change, Fourth Assessment Report, Synthesis Report (2007) at 48.

⁸⁴ *Id*.

⁸⁵ Wendy Foden et al., International Union for Conservation of Nature, Species Survival Commission, *Species Susceptibility to Climate Change Impacts* (2008) at 1.

⁸⁶ National Fish, Wildlife, and Plants Climate Partnership, *supra* note 74 at 55–56.

⁸⁷ *Id.* at 56.

when determining whether their actions affect endangered and threatened species; clarify when effects of climate change trigger certain obligations under the ESA; and engage in assisted migration of species that are endangered or threatened due to climate change.

ESA Section 4(f) recovery plans, for example, have historically influenced judicial determinations regarding important issues under the ESA, such as whether an activity causes a "taking" or "jeopardizes" a species and whether a species should be reclassified from endangered to threatened.⁸⁸ Recovery plans can also guide federal, state, local, and private efforts to respond to the effects of climate change on the species.⁸⁹

We also recommend that FWS require the consideration of climate change in "consultations" under ESA § 7 and issue guidance to agencies explaining when effects of climate change trigger obligations related to the consultation process. 90 Under the ESA, where a federal action "jeopardizes" endangered or threatened species or results in the "destruction or adverse modification" of their "critical habitat," the relevant federal agency must "consult" with FWS to determine whether and/or how the federal action must be modified. 91 Agencies must consider climate change where scientific evidence shows that it may affect a species' habitat. 92 However, the scope of agencies' obligations remains unclear. FWS should clarify that consideration of climate change is required, and also issue guidance explaining when agencies must consult with FWS if a species is affected by climate change, and when federal actions that contribute to climate change would be considered to destroy or adversely modify a species' "critical habitat."

FWS should also clarify when the effects of climate change trigger the ESA's "take" provision. ESA § 9 prohibits actions, whether governmental or private, that "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" an endangered or threatened species. 93 The term "harm" includes modification of the species' habitat that results in "actual death or injury" to a species, "by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." ⁹⁴ This would appear to implicate the effects of climate change. In 2008, FWS enacted a special rule under ESA § 4(d)⁹⁵ classifying the polar bear as a threatened species due climate change but excluding carbon pollution from the reach of § 9. 96 Rather than addressing

⁸⁸ J.B. Ruhl, Climate Change and the Endangered Species Act: Building Bridges to the No-Analog Future, 88 B. U. L. REV. 1, 38 (2008).

⁸⁹ *Id*.

⁹⁰ 16 U.S.C. § 1536.

⁹¹ *Id.* at (a)(2)–1536(a)(3).

⁹² NRDC v. Kempthorne, 506 F. Supp. 2d 322, 369–70 (E.D. Cal. 2007).

^{93 16} U.S.C. § 1538(a)(1)(B) (prohibiting the "take" of endangered species), § 1532(19) (defining "take" to include "kill" and "harm").

⁹⁴ Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687, 691 (1995).

⁹⁵ 16 U.S.C. § 1533(d) (stating that FWS has the authority to issue such regulations as it deems necessary and advisable to provide for the conservation of the species).

⁹⁶ Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants; Special Rule for the Polar Bear, 73 Fed. Reg. 76249, 76249 (Dec. 16, 2008), codified at 50 C.F.R. pt. 17. FWS re-issued rule in February 2013. Fish

climate change effects on species on an *ad hoc* basis, FWS should issue guidance clarifying when the effects of climate change triggers the ESA's "take" provision. For instance, FWS may find that actions constitute a "taking" when they make it harder for a climate-threatened species to survive a likely climate change transition.⁹⁷

Finally, FWS should exercise its authority under the ESA to engage in assisted migration of species that are endangered or threatened due to climate change. ESA § 10(j) permits FWS to help endangered or threatened species migrate to new areas as "experimental populations" if FWS "determines that such release will further the conservation" of the species. Such assisted migration can be particularly helpful to species in the context of climate change, in which changes in ecosystem will require migrations on a large scale. 99

VI. Assist American Indian Tribes with Climate Adaptation

Climate change poses unique threats to American Indians and Native Alaskans. A 2011 study found that many effects of climate change—including drought, wildfire, flooding, winter storms, weather extremes, and ecological shifts—disproportionately harm tribes, "due to the often marginal nature and/or location of many Tribal lands." For example, the Bering Sea is rising so rapidly that the Yup'ik village of Newtok in Alaska could be completely underwater by 2017. If the people of Newtok cannot move to a new site in time, the community will disappear. American Indian tribes are also especially vulnerable to climate change due to tribes' high dependence on their lands and natural resources to sustain their economic, cultural, and spiritual practices; the state of tribal infrastructure; and a lack of financial and technical resources.

The President's Climate Action Plan responds to these challenges by affirming that the Administration will help tribes with preparedness efforts. Specifically, the Plan calls for the BIA, an agency within DOI, to conduct pilot projects and support participation in federal initiatives that assess tribes' vulnerabilities to climate change and develop regional solutions. Executive Order 13653 also requires tribal representation on the established State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience and requires the Council on

and Wildlife Service, *Endangered and Threatened Wildlife and Plants; Special Rule for the Polar Bear Under Section 4(d) of the Endangered Species Act*, 78 Fed. Reg. 11766 (Feb. 20, 2013), codified at 50 C.F.R. pt. 17. ⁹⁷ Ruhl, *supra* note 88 at 42.

99 National Fish, Wildlife, and Plants Climate Partnership, *supra* note 74 at 56.

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⁹⁸ 16 U.S.C. § 1539(j)(2)(A).

¹⁰⁰ National Wildlife Federation et al., Facing the Storm: Indian Tribes, Climate-Induced Weather Extremes, and the Future for Indian Country (2011) at 2–21.

¹⁰¹ Suzanne Goldenberg, *America's First Climate Refugees*, THE GUARDIAN (May 13, 2013), http://www.guardian.co.uk/environment/interactive/2013/may/13/alaskan-family-newtok-mertarvik.

¹⁰² National Wildlife Federation et al., *supra* note 100 at 2.

¹⁰³ The President's Climate Action Plan, *supra* note 14 at 13.

Climate Preparedness and Resilience to partner with tribal governments to adapt and prepare for climate change. 104

We recommend that BIA provide tribes with expertise and funding to create their own climate adaptation plans, and that BIA collaborate closely with tribes in the development of those plans. We also recommend that the Administration devote special attention to the problems of communities that decide they have little choice but to relocate in the face of the impacts of climate change. Because the relocation of entire communities due to climate change is such an unprecedented need, there is no institutional framework within the U.S. to relocate communities, and agencies lack technical, organizational, and financial means to do so. 105 The Administration should develop a program for assisting imperiled communities and inform Congress if additional legal authority and funding are needed.

VII. Bolster USGS Climate Research

As the President's Climate Action Plan states, "[s]cientific data and insights are essential to help government officials, communities, and businesses better understand and manage the risks associated with climate change." The Plan calls for development of actionable climate science; refining the assessment of climate change effects on the U.S.; making climate science and data more widely available to support preparedness and entrepreneurship; and developing a climate resilience toolkit. 107

As one of the federal government's leading science agencies, the U.S. Geological Survey (USGS) will play an important role in this effort. USGS has identified climate change adaptation as a priority and has established several adaptation-related goals. 109 However, out of a total FY 2012 budget of about \$1.07 billion, USGS devoted only \$58.2 million, or 5.4 percent, to climate change programs. The President's FY 2014 Budget requests \$71.7 million for climate change programs out of a total budget request of \$1.12 billion. While this is an improvement, climate change programs would still account for only 6.4 percent of USGS funding.

We recommend, given the urgency of the climate crisis and the climate science needs articulated in the President's Climate Action Plan, that USGS focus a greater amount of its research on climate change science. Areas of specific need include maintaining and expanding long-term data collection and long-term modeling and predicting capability. Climate monitoring, like the Alaska and American Drylands Monitoring Stations, should be expanded to include additional

¹⁰⁴ Exec. Order No. 13653, *supra* note 68 at §§ 6 (e)(ii), 7.

¹⁰⁵ Robin Bronen, Climate-Induced Community Relocations: Creating an Adaptive Governance Framework Based in Human Rights Doctrine, 35 N.Y.U. REV. L. & SOC. CHANGE 356, 391 (2011).

¹⁰⁶ The President's Climate Action Plan, *supra* note 14 at 16.

¹⁰⁸ U.S. Geological Survey, *About USGS*, http://www.usgs.gov/aboutusgs/.

¹⁰⁹ U.S. Geological Survey, FY 14 Budget Justifications (2013) at A-8.

networks in other ecosystems. Mapping, updating, and predicting shifts in ecosystem boundaries should also be a priority. For example, predicting new wetlands areas in coastal and Great Lakes regions at risk from sea-level change will be necessary to protect critical habitat. Also, streamgauge stations throughout the country have been shut down due to sequestration, jeopardizing not only public safety but the continuity and thus integrity of long-term data sets. This type of data collection should be prioritized even in challenging fiscal years. An example of a highly valuable research effort currently underway at USGS is the climate vulnerability assessment. Through these assessments, DOI is determining, on a nationwide basis, natural resources that are most vulnerable to climate change and assessing the threats to resources that may be exacerbated by climate change. 110 USGS is on track to complete 96 climate change vulnerability assessments by the end of 2013. 111 USGS will also be acting as a registry for vulnerability assessments done not only at the federal level, but also assessments done by state, local and tribal governments. 112

Encourage Timely Release of Related Climate Measures

To achieve the goals established in the Climate Action Plan and related executive orders, DOI relies on timely action from other agencies such as OMB and CEQ. We recommend that the Secretary of the Interior encourage the Administration to expedite the timely release of measures from other agencies that help DOI advance its climate agenda, particularly those that have been subject to excessively long review.

The National Environmental Policy Act (NEPA) was enacted in 1970 after being passed with overwhelming support in both chambers of Congress and signed into law by President Richard Nixon. 113 In February 2010, CEQ released the NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions. 114 For nearly the past four years CEQ has been collecting and reviewing comments. We recommend that the Administration finalize the guidance as proposed.

Under the proposed guidance, federal agencies would have to estimate the greenhouse gas emissions that would result from proposed federal actions that are subject to NEPA review. 115 If those projected emissions exceed 25,000 tons each year, agencies would need to analyze the action's climate change effects in the Environmental Impact Statement. Many energy projects on federal lands overseen by BOEM and BLM are subject to NEPA review. Estimating the greenhouse gas effects of projects undergoing NEPA review will help the federal government

¹¹⁰ *Id*.

¹¹² Agency Information Collection Activities: Common Request, 78 Fed. Reg. 51740 (Aug. 21, 2013).

¹¹³ 42 U.S.C. 4321 et. seq.

¹¹⁴ National Environmental Policy Act (NEPA) Draft Guidance, "Consideration of the Effects of Climate Change and Greenhouse Gas Emissions." 75 Fed. Reg. 8046 (Feb. 23, 2010). 115 *Id.*

and public understand the full range of impacts associated with energy development on federal lands.

During the Obama Administration's first term, excessively long regulatory review by OMB, in some cases lasting years, stalled the issuance of several climate related standards and created a sizable regulatory backlog. Executive Order 12866 instructs OMB to review regulations within 90 days, with two possible routes to extend that timeline – one is a one-time 30-day extension requested by OIRA and the second is an extension of undefined length at the request of the issuing agency's Secretary or Administrator. 116 Under the leadership of OMB Director Sylvia Burwell, the Bicameral Task Force on Climate Change has been initially impressed by how quickly the backlog has been diminished. However, several standards are still held up due to extended review. For example, DOI's Waste Mine Methane Capture, Sale, or Destruction Advanced Notice of Proposed Rulemaking (ANPRM) has been under review at OMB since May 2012. According to the ANPRM's abstract, BLM is considering proposing this regulation in response to Executive Order 13514 and Secretarial Order 3289 regarding impacts of climate change. ¹¹⁷ In order for DOI and other agencies to accelerate their work on climate related standards, OMB must review standards expeditiously in order to avoid unnecessary delays.

We also recommend setting aggressive timelines for making changes to policies, programs, and regulations as required by Executive Order 13653. As previously stated, the Executive Order requires the heads of agencies, including DOI, to complete an inventory and assessment of proposed and completed changes to regulations and policy necessary to make our natural resources more resilient to climate change. The Executive Order requires that timelines be included in the assessment. 118 We recommend DOI to encourage agencies involved to set aggressive timelines for proposed changes to policies and regulations, especially those that govern preservation of open spaces, habitat connectivity, and ecosystem integrity in the face of climate change.

Conclusion

Congress has provided DOI with broad legal authority that can be used to address climate change. DOI will play a crucial role in executing the President's Climate Action Plan. The Bicameral Task Force on Climate Change encourages the Secretary of the Interior to consider the recommendations presented in this report as she implements the President' plan. Reducing

¹¹⁶ Exec. Order No. 12866 supra note 42 at § 6(b)(2)(A)–(C); See also Exec. Order No. 13563, supra note 42 at § 1(b) (stating that Executive Order 13563 "is supplemental to and reaffirms the principles, structures, and definitions governing contemporary regulatory review" established in Exec. Order No. 12866). ¹¹⁷ Federal Register, *Waste Mine Methane Capture, Sale, or Destruction*,

https://www.federal register.gov/regulations/1004-AE23/waste-mine-methane-capture-sale-or-destruction.

¹¹⁸Exec. Order No. 13653, *supra* note 68 at § 3.

methane pollution; increasing clean energy deployment on federal land; advancing government-wide adaptation planning; protecting habitat for endangered and threatened species; assisting American Indian tribes with climate adaptation; bolstering USGS climate research programs; and encouraging the timely release of measures from other agencies that help DOI advance its climate agenda would represent meaningful progress in responding to the threat of climate change.