

KIMBALL, LOPEZ, AND REGALBUTO NOMINATIONS

HEARING BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE ONE HUNDRED THIRTEENTH CONGRESS SECOND SESSION

ON

THE NOMINATIONS OF DR. SUZETTE M. KIMBALL, TO BE DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY; MR. ESTEVAN R. LOPEZ, TO BE COMMISSIONER OF RECLAMATION; AND DR. MONICA C. REGALBUTO, TO BE AN ASSISTANT SECRETARY OF ENERGY (ENVIRONMENTAL MANAGEMENT)

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KIMBALL, LOPEZ, AND REGALBUTO NOMINATIONS

TUESDAY, MAY 13, 2014

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 10:06 a.m. in room SD-366, Dirksen Senate Office Building, Hon. Mary Landrieu, chair, presiding.

OPENING STATEMENT OF HON. MARY L. LANDRIEU, U.S. SENATOR FROM LOUISIANA

The CHAIR. Good morning.

Let me call the Energy and Natural Resources Committee to order this morning. I thank the members for their help and attendance. This committee meets this morning to consider 3 important nominations.

First, Dr. Suzette Kimball, to be Director of the United States Geological Survey.

Next, Mr. Estevan Lopez, to be Commissioner of Reclamation.

Finally, Dr. Monica Regalbuto, to be Assistant Secretary of Energy for Environmental Management.

These are 3 very, very important offices.

First, USGS is an agency that helps keep our country safe from natural disasters and has been doing so for a long time with accurate mapping and scientific research. With a staff of over 8,000 people, USGS provides real time information critical to minimizing loss of life and property from earthquakes, volcanoes, floods, droughts, wildfires and coastal erosion, all problems this committee is very intimately familiar with.

We are proud, particularly in Louisiana, to host a number of USGS facilities that do important work. There are many around the country.

Dr. Kimball has a Ph.D., in Environmental Science in Coastal Oceanography processes. I was pleased to spend some time talking with her about coastal issues. She began her career working for the Army Corps of Engineers in Vicksburg, Mississippi. She will be introduced more fully later by a member of the committee.

Mr. Lopez, Bureau of Reclamation.

Congress established this Bureau in 1902 to construct and operate the dams, reservoirs and canals needed to provide water to allow people to live and prosper on land in the 17 Western States. At the same time Congress established a Reclamation fund in Treasury which was originally funded by the sale of public land

and water in Western States to pay for these Reclamation projects. Later, 40 percent of the royalties from mineral leases on public lands were dedicated to the Reclamation fund.

Mr. Lopez has been the Director in New Mexico, will be introduced further by Senator Udall, as such he clearly understands western water issues. We look forward to hearing more from him.

But let me make a comment of personal privilege. I hope as this committee listens to the work that the Bureau of Reclamation has done for Western States, the committee will realize the current injustice that exists between the 17 Western States and the 30 plus coastal States. Three producing coastal States have sent \$218 billion to the Federal Treasury and have received virtually nothing back to keep water out of our homes.

The Reclamation Fund is trying to keep water in homes and in fields and in businesses. We're trying to keep water out. We look forward to that discussion at a later date in this committee.

Finally, Dr. Regalbuto, Assistant Secretary of Energy for Environmental Management, oversees the Department of Energy's program to clean up retroactive and chemical contamination left behind after a half of century of nuclear weapons production. It accounts for \$5.8 billion of the Department of Energy's \$27 billion budget, nearly a quarter of the budget. She has a Ph.D., in Chemical Engineering and is recognized as an expert in nuclear fuel technology.

Let me welcome all 3 of our nominees to the committee.

I'd like to turn it over for brief opening remarks to Senator Murkowski. Thank you so much for your help.

Then they'll be more formally introduced by the Senators present.

Senator.

**STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR
FROM ALASKA**

Senator MURKOWSKI. Thank you, Madame Chairman. I appreciate the opportunity to have these nominees in front of us today. I welcome each of you.

Beginning with Dr. Kimball, I note that you have been with the USGS since 1999. You have served as its Acting Director for over a year now. Your background is solid, an advanced degree in geology and geophysics, previously served as Associate Director for Geology. So again, I am encouraged by your background and your qualifications.

I received a letter from a former Alaskan and friend and former head of USGS, Dr. Mark Myers and he speaks very highly of you.

At the same time, Dr. Kimball, if you are confirmed as Director, you still have a pretty considerable task ahead of you. I think you recognize that. Many of us believe that USGS has suffered from no small amount of mission creep in recent years. I am concerned that some of the agency's newer priorities are perhaps pushing its core foundational missions to the margin. I think we see that particularly when it comes to the Minerals Resource Program where funding has been cut by roughly one third over the past decade.

I am also concerned that USGS seems to be deemphasizing the budget for its core mission in natural hazard forecasting and warn-

ing, whether it's earthquake, volcano or flood hydrology programs. I consider those deserving of budget priorities since they are so vital for the health and safety of Americans, especially Alaskans. On Saturday morning I woke up to a 5.5 rattler that shook everybody in town. It was just one of those reminders that seismologists look at Alaska with great interest.

In my questions I am going to very briefly touch upon the King Cove road issue. As you know this is an issue of major significance for me, not only because of its impact on the health and safety of Alaskans in King Cove, but because, in my view, it's emblematic of what I think is a need for more balance from Fish and Wildlife Service. The Secretary, unfortunately, has shown little regard for the people of King Cove and not much interest in finding a solution at this point in time.

I understand that you did not make a decision with regards to rejecting the road, but I do want to ask you about the Black Brant because I know that USGS has studied it extensively.

Mr. Lopez, you have been nominated to be Commissioner of an agency with a \$1 billion budget, 5,000 employees in facilities across 17 Western States. The Bureau and its leadership confront, on a daily basis, many challenging policy issues. Chief among them are the Bureau's efforts to strike a balance between its mission of water delivery and compliance with environmental laws and regulations at both the State and the Federal levels. Requirements under the Endangered Species Act have emerged as a strong concern and are no small undertaking at a time of continuous drought in so many States across the West.

Mr. Lopez, you have spent many years helping manage water delivery in a drought racked State so I am curious as to how you plan to balance the need for water delivery with the limits imposed by environmental regulations. I do not know if you have viewed my energy water nexus white paper that I released last week, but I would be interested in your views on that.

Finally, Dr. Regalbuto, you are nominated to lead the Department of Energy's environmental cleanup efforts. Your extensive expertise working on nuclear waste related issues should be valuable in addressing the pressing challenges to the Office of Environmental Management, including the situation at the Waste Isolation Pilot Plant and ongoing, overall nuclear material cleanup efforts. I am interested in hearing your thoughts on how best to proceed on issues related to the back end of the nuclear fuel cycle.

Madame Chairman, again I want to say how pleased I am to have these well qualified nominees. I think most of them appear to be pretty non-controversial. So if the hearing goes well and we do not have any significant concerns emerge, I believe we will be able to report them from our committee soon.

The CHAIR. Thank you very much.

Let's begin with Senator Manchin, who is a member of the committee and would like to introduce further, Dr. Kimball.

**STATEMENT OF HON. JOE MANCHIN, U.S. SENATOR FROM
WEST VIRGINIA**

Senator MANCHIN. Thank you, Madame Chairman.

I would thank all of you for having this important hearing today because we have fine people, I believe, that will serve and have served very, very applicably and very well.

I'm happy to be able to introduce Dr. Suzette Kimball today.

Last month I had the pleasure of meeting with Dr. Kimball, who has lived in Summit Point, West Virginia for almost 16 years. We both have a passion for the rich history of our shared State. Dr. Kimball is an active member of the Eastern Panhandle's farmland and the historic preservation communities.

In fact, she and her husband, Curt, live at White House Farm. It's a local landmark built in the 1740s and used during the Revolutionary War to aid American troops. The farm was even surveyed by George Washington.

Beyond our personal connection, Dr. Kimball impressed me with her dedication to the scientific mission of the U.S. Geological Survey. We had in depth talks about that and also what we do overseas. The USGS services a vital role working to understand and improve responses to national disasters, providing needed information on energy and mineral resources, monitoring our waters and many other indispensable services.

In her testimony Dr. Kimball details her upbringing in a family that prioritized public service both in military and civilian life, something West Virginians pride themselves on. I believe she will bring this to her role as Director of the USGS. I'm delighted that Dr. Kimball has chosen West Virginia her home. I encourage my colleagues to support her nomination.

Thank you, Madame Chairman.

The CHAIR. Thank you so much, Senator Manchin.

Senator Udall and Senator Heinrich wanted to give additional remarks in reference to Mr. Lopez's nomination.

Senator Udall, why don't you proceed?

**STATEMENT OF HON. TOM UDALL, U.S. SENATOR
FROM NEW MEXICO**

Senator UDALL. Thank you very much, Chairwoman Landrieu and Ranking Member Senator Murkowski. Good to be with you here today.

I'm pleased to be here along with Senator Heinrich to introduce Estevan Lopez of New Mexico for this committee's consideration as the next Commissioner for the Bureau of Reclamation.

As we all know water is a defining issue of today's American West. We're in the midst of a historic drought, the worst drought in half a century in my State. The harsh realities of climate change raise troubling questions whether this is a drought or the new normal, sustainable water is crucial.

Failure is not an option because it means that our communities may run out of safe drinking water.

That our farmers will not be able to provide the food we put on the table.

That species that depend on the land and rivers will not be able to thrive.

That our forests will be ravaged more frequently by massive wildfires.

That when the rain does come our homes are threatened by catastrophic floods.

These are great challenges. The Bureau of Reclamation plays a pivotal role. The selection of its Commissioner is not something to be taken lightly. That is why I'm honored to introduce Mr. Lopez today.

First and foremost, Estevan is a veteran water manager. For more than 2 decades he has been engaged in water issues in government and in the private sector. At the local and State level as a public utility engineer, as a county manager in Santa Fe, New Mexico, Estevan has always been—has always brought a command of policy, a sharp intellect and deep rooted desire to resolve problems.

Since 2003 Estevan has led the New Mexico Interstate Stream Commission. As the Executive Director and Deputy State Engineer he has helped direct New Mexico water policy. let me tell you water issues in New Mexico aren't easy.

Estevan has worked for 2 different administrations, one Democratic, Governor Bill Richardson, who many of you on this panel know and one Republican, Governor Susana Martinez and in one of the most important appointed positions in the State. Very few people can say that. He has shown great ability to work with all commerce to identify complex problems and to find solutions.

One of the words I've heard used to describe Estevan is unflappable. That quality has served him and us well allowing him to work with diverse interest groups and at times to disagree without being disagreeable. I expect that unflappable will be on display today. Unflappability will be on display today.

I regret that New Mexico will be losing the benefit of Estevan's service to the State. But I know he will ably follow in the footsteps of my good friend, Mike Connor, as the next great Commissioner for the Bureau of Reclamation from New Mexico.

I look forward to continuing to work with Estevan on the challenges facing our State and the entire West. I'm very pleased to support his confirmation.

Thank you very much, Madame Chair.

The CHAIR. Thank you very much for that thoughtful introduction.

Senator Heinrich.

**STATEMENT OF HON. MARTIN HEINRICH, U.S. SENATOR
FROM NEW MEXICO**

Senator HEINRICH. Madame Chair and Ranking Member Murkowski, I'm very pleased to join Senator Udall today in introducing Mr. Estevan R. Lopez as the nominee for Director of the Bureau of Reclamation.

Mr. Lopez's qualifications are exemplary.

He has served as Director of the New Mexico Interstate Stream Commission since 2003. In this capacity Mr. Lopez has played a key role in implementing the Taos and Aamodt Indian Water Settlements insuring that our tribes and pueblos have fair access to water rights. His nomination, I would note, has overwhelming support from New Mexico's tribal communities.

Mr. Lopez has also served as Land Use and Utilities Director of Santa Fe County from 2000 until 2001. As Utilities Department Director of Santa Fe County from 1998 to 2000 and as Utilities Division Deputy Director of Santa Fe County from 1997 to 1998. Was a public utility engineer at the New Mexico Public Utility Commission from 1990 until 1997.

Mr. Lopez has additional private sector experience as well working as an operations engineer and well work supervisor for Arco Alaska Incorporated.

As we all know the Bureau of Reclamation is of critical importance to the entire Western United States providing water to more than 31 million people. In New Mexico today State, local and tribal authorities are currently working with the Bureau of Reclamation on some incredibly important water supply projects. These efforts include the Navajo Gallup Water Supply Project which will provide clean, reliable water to 43 Navajo chapters, the city of Gallup and the Jicarilla Apache Nation, serving a quarter million people by 2040.

The Bureau is also a critical partner in the Eastern New Mexico Rural Water System project which will provide long term water security for the citizens of Curry and Roosevelt Counties as well as Cannon Air Force Base.

With the Western United States experiencing severe drought and increased wildfire conditions and water levels decreasing to dangerously low levels in nearly every river basin, the Bureau of Reclamation's responsibilities underscore the importance of having a skilled and experienced leader as Commissioner. While Deputy Secretary Mike Connor has left some big shoes to fill at Reclamation, Estevan Lopez has extensive experience with water management in New Mexico make him an ideal candidate to step into those shoes.

Madame Chair, thank you for holding this hearing today for the committee to consider all of these important nominations. I yield back the balance of my time.

The CHAIR. Thank you very much, Senator.

If the nominees would take their seats at the table, please and then stand for your oath of testimony?

Oath of testimony?

[Laughter.]

The CHAIR. If you all would please stand and raise your right hands? Raise your right hand.

The rules of the committee which apply to all nominees require that they be sworn in in connection with their testimony.

Do you all solemnly swear that the testimony you are about to give this committee, Senate and Energy Natural Resources, shall be the truth, the whole truth and nothing but the truth, so help you God?

[Witnesses respond, I do.]

The CHAIR. Please stay standing.

Before you begin your statement I will ask these 3 questions to each nominee.

Will you be available to appear before this committee and other Congressional Committees to represent departmental positions and respond to issues of concern to Congress?

[Witnesses respond, I will.]

The CHAIR. Are you aware of any personal holdings, investments or interests that could constitute a conflict of interest or create the appearance of such a conflict should you be confirmed and assume the office to which you have been nominated by the President?

[Witnesses respond, no.]

The CHAIR. Are you involved or do you have any assets held in a blind trust?

[Witnesses respond, no.]

The CHAIR. Please be seated.

OK, at this time we will hear your opening statements. If you could limit it to the time allotted, we would appreciate it.

Let's begin with Dr. Kimball.

**TESTIMONY OF SUZETTE M. KIMBALL, NOMINEE TO BE
DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY**

Ms. KIMBALL. Chair Landrieu, Ranking Member Murkowski and members of the committee, I'm honored to appear before you today as President Obama's nominee to be the Director of the U.S. Geological Survey.

My husband and I are proud West Virginia residents, not by birth, but by choice. I very much appreciate Senator Manchin's kind introduction. Thank you.

I was raised to not only value public service, but also to see it as a responsibility. My heart beats faster watching the troops passing in review, seeing the flag or riding in a Fourth of July parade in our small town.

My father and brother had military careers. My mother was a teacher. Both my uncles were in civil service. Most of my cousins served in the military or civil service or are educators. For me, public service is kind of like the family business.

Unlike many of the Interior nominees that appear before this committee, I cannot point to a childhood steeped in outdoor experiences that set the stage for my career path. Despite the focus on science brought by my father, a physicist and engineer with the Army Signal Corps and my mother, who taught Health Sciences, I started my academic career in English Literature. However, I had the good fortune to take a Geology course from an extraordinary educator, Dr. Gerry Johnson. His compelling lectures engaged my imagination and passion for understanding the processes that drive Earth systems and the impacts of natural hazards.

My master's degree program focused on field geology and geophysics. Important issues addressed by USGS science incorporate those fundamental aspects, the understanding of the processes that drive both the physical and biological systems and understanding the risk imposed by potential impacts of those processes.

My Ph.D., program at the University of Virginia showed me the value of an integrated Environmental Sciences context that forces one out of narrow academic boundaries and requires competence in a spectrum of disciplines. My particular research area, Coastal Beaches and Barrier Islands, is the poster child for an integrated approach. This perspective will serve me well if confirmed as the USGS Director as the questions we face today also transcend traditional academic fields and ask us to understand not only the geologic foundation and the operative physical processes but also the

potential impacts to biological systems and to the human environment.

I've had the good fortune to serve in both academia and in the Federal Government. My years with the National Park Service gave me an understanding of the pressures that land managers face and the types of information that can be most useful to them. This experience gives me a unique perspective to support and partner with the entire department.

Since coming to the USGS in 1998 I've had the opportunity to see the breadth and depth of this outstanding organization from many perspectives. USGS is an unusual Federal agency. The longevity of careers here is remarkable.

But also noteworthy is that unlike many of our sister bureaus at Interior, we do not issue regulations nor do we manage resources. Without a regulatory or management mandate the USGS provides impartial science that meets the demands of the changing world around us. This scientific nature of the USGS, its national perspective and its non regulatory role enable USGS science to be both policy relevant and policy neutral.

Since its founding in 1879 the USGS has made enormous contributions to the health and well being of the country and to the world. These achievements include the science that has delineated the mineral and energy resource base of the Nation.

That helps protect lives and livelihoods from the effects of natural hazards.

That ensures safe public water supplies.

That supports the restoration of ecosystems.

Provides assistance to the Nation and other Nations for resource and hazard issues.

Our society faces pressing issues that science can and must help address. Challenges like ensuring sustainable development of energy and mineral resources, dealing with climate change, coping with natural disasters and ensuring water and food security. We live in a global economy. Understanding the worldwide distribution of both resources and risks is essential to the country's security and to its economic health.

Looking to the future we need to continue these efforts for which we have unique capabilities and on which the public relies such as the stream gauge network or mineral and energy assessments, our seismic networks, just to name a few. But we also need to be responsive to emerging needs.

We are increasing the involvement of sociologists and economists in our studies in order to provide better products for the American people.

We are providing new technologies to protect public health and safety and new tools for communities to become resilient in the face of challenges such as changing climates or water scarcity.

We are engaging young scientists to be part of our future.

I'm deeply grateful that Secretary Jewell and President Obama have chosen to nominate me to lead this outstanding scientific organization. If confirmed, I look forward to working with you to address the challenges facing our Nation.

Thank you for this opportunity to appear before you. I will be happy to respond to your questions.

[The prepared statement of Ms. Kimball follows:]

PREPARED STATEMENT OF SUZETTE KIMBALL NOMINEE TO BE DIRECTOR OF THE U.S.
GEOLOGICAL SURVEY, DEPARTMENT OF THE INTERIOR

Chair Landrieu, Ranking Member Murkowski, and Members of the Committee, I am honored to appear before you today as President Obama's nominee to be the Director of the U.S. Geological Survey. I would not be able to appear before you today without the encouragement of my family and the love and support of my husband, Curt Mason, who rescheduled major surgery so he could be here with me today. I am also grateful to my other family: the employees of the USGS. Every day, I am inspired by their dedication of time, talent, energy, and intellect. It has been a privilege to serve as their Acting Director, and it is an honor to be offered the opportunity to lead this outstanding organization.

I was raised to not only value public service but also see it as a responsibility to our country. I am one of those whose hearts beat faster watching the troops passing in review, hearing the Washington Post March, seeing the flag, or riding in a small town 4th of July parade, which is one of the privileges I have enjoyed living in West Virginia. My father and brother both had military careers; my mother was a teacher; both my uncles were in the civil service; and most of my cousins have served in the military or civil service, or are educators. For me, public service is kind of like the family business.

Unlike many of the Department of the Interior nominees who have come before this Committee, I cannot point to a childhood steeped in outdoor experiences that set the stage for my career path. With the exception of our family vacations at the beach, I tended to spend my spare time in the library. And despite the focus on science brought by my father, a physicist and engineer with the Army Signal Corps, and my mother, who taught health sciences, I started my academic career in English literature. But as I approached my senior year, I had the singular good fortune to take a geology course from an extraordinary educator, Dr. Gerry Johnson, and my world view changed. His compelling lectures brought to life the extraordinary forces that shaped the earth and engaged my imagination and passion for understanding the processes that drive earth systems and the impacts of natural events.

My Master's degree program focused on field geophysics and impressed upon me two things that have been valuable in my tenure at USGS: I studied the transport of contaminants in ground water which shifted my focus from the purely theoretical sciences to an appreciation for the applications that science can bring to the human environment. Almost all the issues addressed by USGS science incorporate two fundamental aspects: understanding how physical processes drive both the physical and biological systems; and how that basic knowledge can be applied to management or policy decisions. Second, at the time I received my M.S., very few women were graduating with degrees in geophysics. Having experienced being a minority in my field of study, I am compelled to reach back—to provide opportunities for the next generation of scientists, especially from underserved communities, to create a mentoring culture and an inclusive workplace.

My Ph.D., program at the University of Virginia provided the third transformative experience that will serve me well if confirmed as the USGS Director. UVA's earth science program was presented in an integrated environmental sciences context that forced one out of narrow academic boundaries and required competence in a spectrum of disciplines. My particular research area, coastal beaches and barrier islands, is the poster child for an integrated approach. The questions that are posed of a USGS scientist today also transcend traditional academic fields and ask us to understand not only the geologic foundation and the operative physical processes, but also the potential impacts to the biological systems and to the human environment. My academic training and subsequent professional positions at the Virginia Institute of Marine Science (another integrated program) and back at UVA are particularly suited to understanding and advocating for a comprehensive, multidisciplinary science program.

I have had the good fortune to work in both academia and in the federal government, both of which satisfy my public service ethic. Immediately prior to USGS, I worked for the National Park Service, first as a research scientist and, ultimately, as the Associate Regional Director for Resource Stewardship and Science in the Southeast. This experience, besides having the opportunity to work in some of the most beautiful places in the country, gave me an intrinsic understanding of the pressures that land managers face and the types of information that can be most useful to them considering the types of decisions that need to be made. Given that

USGS sits in the Department of the Interior with some of the world's most respected land and resource management agencies, I believe this experience will give me a unique perspective to create a coordinated science framework to support and partner with the entire Department.

I came to the USGS in 1998. Since then I have had the opportunity to see the breadth and depth of this organization from many perspectives. First as Regional Executive for Biology, then as Regional Director, Associate Director for Geology, Deputy Director and Acting Director, I have been able to be engaged with all parts and all mission areas of this organization and to participate in some of the transformative enterprises of this great agency. Recently, I participated in a celebration of the first USGS streamgage, still in operation 125 years later, on the Rio Grande in Embudo, New Mexico. While celebrating our history and one of our iconic monitoring systems, I have also had the opportunity to work with a group of our scientists to design and deliver a Center for Innovation in the Earth Sciences which takes advantage of private sector capabilities and advances in technologies for the 21st century and beyond. I have been able to work with local communities to bring community-driven water sampling projects to fruition as exemplified by the USGS partnership with the Yukon River Intertribal Watershed Council, connecting with Alaskan native communities; and on the international landscape to address critical mineral and rare earth concerns, global mapping and data sharing, and hazards response. I was privileged to watch the flawless launch and deployment of Landsat 8, which continues a 42-year history of earth observations. And I have had the opportunity to apply my own research expertise in coastal systems and catastrophic storms as we responded to such events as Hurricane Katrina and Hurricane Sandy.

I have heard some say that Federal workers are not pulling their weight. I see just the opposite at the USGS: in small things, like offering to take extra furlough days last year in order to save their colleagues from financial hardship, or staying late to collect that last sample— or big things, like dedicating their careers to providing the information that is used by decision makers and the public to save lives, enhance quality of life, sustain communities, and support the resources everyone needs. Just last week I participated in the annual USGS Honor Awards ceremony and presented a record number of 40-year service awards—and in past years we have recognized 50 and 60 years of service. Even after they retire, many of our scientists keep working as volunteers, publishing their research and mentoring younger scientists. This has always been a great strength of the USGS: the loyalty and dedication to mission that keeps our employees working productively when they are 70, 80, or 90 years old and the mentoring culture that nurtures the next generation of scientists.

USGS is an unusual Federal agency in many ways. The longevity of careers here is remarkable (my 15 years puts me less than halfway through the average USGS scientist's career) but also noteworthy, unlike many of our sister bureaus at Interior, we do not issue regulations nor do we manage resources. Without a regulatory or management mandate, the USGS provides impartial science that meets the demands of the changing world around us. USGS scientists work to describe and understand the Earth, its processes, and its living resources, providing reliable, timely scientific information that serves the Department of the Interior, the Nation, and the world. Field investigations, direct observations of natural science processes, and monitoring and data collection at scales from local to national and even global are the foundation of USGS research. The scientific nature of the USGS, its national perspective, and its non-regulatory role enable USGS science to be both policy relevant and policy neutral.

Since its founding in 1879, the USGS has made enormous contributions to the health and wellbeing of the country—and the world. These achievements include the science that has delineated the mineral and energy resource base of the Nation; that helps protect lives and livelihoods from the effects of earthquakes, wildfires, volcanic eruptions, landslides, and floods; that continues to provide safe public water supplies; that supports restoration of ecosystems throughout the United States; and that provides assistance to other nations for resource and hazard issues. The diversity of scientific expertise within the USGS enables it to carry out large-scale, multi-disciplinary investigations that build our knowledge about the Earth and give decision makers at all levels of government, and citizens in all walks of life, the science information they need.

Our growing and expanding society faces pressing issues that science can and must help address -issues like ensuring sustainable development of energy and mineral resources, dealing with climate change, coping with natural disasters, and ensuring water and food security. We live in a global economy; understanding the worldwide distribution of both resources and risks is essential to the country's security and economic health.

Looking to the future, we need to continue those efforts for which we have unique capabilities and on which the public relies, such as the streamgauge network, but we also need to look at ways to be relevant to the public's emerging needs. Consequently, we are engaging our sociologists and economists to an ever increasing degree in our studies in order to bring our science to the American people; we are providing new tools and technologies to protect public health and safety, whether that is earthquake early warning, or our focus on environmental health including the impacts of extractive resource development; we are providing new tools for communities to become sustainable and resilient in the face of challenges such as changing climates or demands affecting water use and availability; and if we are to also be resilient and sustainable, we need to engage young scientists to be part of our future.

We have a 135-year long and storied history at USGS, and still a lot of work and contributions to make in the next 135 years.

I am deeply grateful that Secretary Jewell and President Obama have chosen to nominate me to lead this outstanding scientific organization. If confirmed, I look forward to working with you to address the challenges facing our Nation.

Thank you for the opportunity to appear before you. I will be happy to respond to your questions.

The CHAIR. Thank you very much, Dr. Kimball.

Mr. Lopez.

Turn on your mic and speak closely into it.

**TESTIMONY OF ESTEVAN R. LOPEZ, NOMINEE TO BE
COMMISSIONER OF THE BUREAU OF RECLAMATION**

Mr. LOPEZ. Chair Landrieu, Ranking Member Murkowski and members of the committee, good morning. Thank you also for the opportunity to meet with several of you in person over the last few days.

Unfortunately my family is not able to join me here today. Nonetheless I want to acknowledge the importance of my family. I remain grateful for the love and the continuing support of my wife, Suzanne, and our children, Victoria and Juan.

I greatly appreciate that New Mexico Senators Heinrich and Udall were gracious enough to introduce me to this committee. I also sincerely appreciate the letters submitted on my behalf by retired New Mexico Senators Bingaman and Domenici.

I'm a professional engineer, who has served as Director for the New Mexico Interstate Stream Commission under both Republican and Democratic Governors in New Mexico. With over 2 decades of water resource management experience I have worked directly on many of the issues that affect water management throughout the Western United States.

By way of telling you a little bit about myself, I am a native New Mexican and have lived most of my life in New Mexico. I grew up irrigating pastures from centuries-old acequias, community irrigation systems, that are fed by the Rio Santa Barbara, a small tributary of the Rio Grande originating in the Sangre de Cristo Mountains thus beginning a lifetime of work in water management. I attended New Mexico Tech in Socorro, New Mexico and was conferred a Bachelor of Science degrees in petroleum engineering and chemistry in 1979.

Upon graduation I went to work in oil production in Prudhoe Bay, Alaska working for Arco Alaska.

A few years later I went to work in the New Mexico Public Utility Commission reviewing the sufficiency of water rights portfolios

and the adequacy of water management policies of the privately owned public utilities that we regulated.

After a few years I had an opportunity to help the County of Santa Fe start a new water utility. At Santa Fe County, I led the County Utility Department, then the County's Land Use and Utility Department and ultimately I became the County Manager.

When Governor Richardson was elected I was asked to be the Director of the New Mexico Interstate Stream Commission in 2003.

When Governor Martinez was elected she reappointed me in 2011.

My time at the Interstate Stream Commission has been a fascinating mix of technical, legal, financial and political challenges. It has been a perfect training ground for someone asked to serve as Commissioner of Reclamation allowing me to learn about and deal with many of the issues Reclamation is faced with, albeit, at a regional scale.

I have had the privilege to represent New Mexico as Governor Martinez's representative to the Colorado River Compact, New Mexico's Commissioner to the Upper Colorado River Compact and Canadian River Compact Commissions and New Mexico's Engineer Advisor to the Rio Grande Compact Commission.

I have been involved in finding river management solutions to difficult endangered species issues on the Rio Grande, Colorado, San Juan, Pecos and Canadian Rivers. These efforts for balancing the preservation of endangered species with other resource goals, most importantly the protection of water users in the arid Southwest, has required innovation, collaboration and perseverance.

My work with colleagues in New Mexico—I have worked on settlements of Indian Water Rights Claims of 6 of the States, Indian Nations and Pueblos. Successful resolution of Native American Water Rights Claims is critical to water security for all Americans, not just for our Native American communities.

I have worked on the development of Eastern New Mexico Rural Water Supply Project to deliver renewable surface water from Ute Reservoir on the Canadian River to communities like Clovis and Portales, New Mexico. Without this water supply project these communities are expected to begin running out of water within 10 years.

During my tenure New Mexico completed the last of 16 regional water plans as well as its first formal State water plan. All these water plans are currently being updated.

I am proud of the work that we have done during my time with the Commission helping to assure water security for our people, particularly in the last several years of record setting drought. These efforts have required establishment of strong relationships with diverse stakeholders including our neighboring States, local governments, Indian tribes, agriculture and municipal water users, power users and environmental interests.

Interestingly one of our key partners in almost all our efforts I have described has been the Bureau of Reclamation. Now President Obama and Secretary Jewell have seen fit to nominate me to serve as Commissioner.

As you know, Michael Connor, who was recently confirmed as Deputy Secretary for the Department of Interior, most recently

held the position of Commissioner of Reclamation. I know Mr. Connor well and realize that he leaves large shoes to fill. I am excited by the challenge this presents and believe that my professional experience has prepared me for the challenge.

I'm also comforted in knowing that I will be joining a strong team.

If confirmed I am committed to working with the public, affected stakeholders and Congress to collaborate to find balanced solutions to the water resource and hydropower generation challenges facing the Western United States.

Thank you for the opportunity to address my nomination. I look forward to continuing to work with you. I will be happy to respond to questions at the appropriate time.

[The prepared statement of Mr. Lopez follows:]

PREPARED STATEMENT OF ESTEVAN LÓPEZ, NOMINEE TO BE COMMISSIONER OF THE
BUREAU OF RECLAMATION

Chair Landrieu, Ranking Member Murkowski, and members of the Committee, I am honored to appear before you today. Thank you also for the opportunity to meet with many of you in person over the last few days. Unfortunately, given work and school commitments, my family could not join me today. Nonetheless, in their absence, I want to acknowledge the importance of my family in whatever professional success I have had to date. I remain grateful for the love and continuing support of my wife Suzanne and our children Victoria and Juan.

I greatly appreciate that New Mexico Senators Heinrich and Udall were gracious enough to offer to introduce me to this Committee. I also sincerely appreciate the letters of support submitted on my behalf by retired New Mexico Senators Bingham and Dominici, both of whom previously served on this Committee.

I am honored to appear before you today as President Obama's nominee to be the Commissioner of the Bureau of Reclamation. I am a professional engineer who has served as Director of the New Mexico Interstate Stream Commission under both Republican and Democratic Governors in the State of New Mexico. With over two decades of water resources management experience, I have worked directly on many issues that affect water management throughout the entire western United States, including interstate stream compacts, endangered species, drought, Indian water rights, rural water projects, water conservation and river management for multiple resource goals.

By way of telling you a little about myself, I am a native New Mexican and have lived most of my life in New Mexico. I grew up working on my father's small ranch, irrigating pastures from centuries-old acequias, community irrigation systems, that are fed by the Rio Santa Barbara, a small tributary of the Rio Grande originating in the Sangre de Cristo Mountains, thus beginning a lifetime of work in water management. I attended New Mexico Institute of Mining and Technology in Socorro, New Mexico and was conferred Bachelor of Science degrees in Petroleum Engineering and Chemistry in 1979. Upon graduation, I went to work in oil production in Prudhoe Bay, Alaska working for Arco Alaska, Inc. I loved Alaska and the work was challenging and exhilarating, but I wanted to move back to New Mexico, back to family and to the state that I wanted to make a difference in.

After a few years doing construction work and traveling abroad, I went to work as a Utility Engineer for the New Mexico Public Utility Commission. Here, I once again began working on water management as I reviewed the sufficiency of the water rights portfolios and the adequacy of water management policies of the privately owned water utilities that the state regulated. After a few years, I had an opportunity to help the County of Santa Fe start up a new water utility in the fast growing area around the city of Santa Fe. Before long, the County created a County Utility Department that I led, then that Department was merged with the County's Land Use Department and I got to lead the County's Land Use and Utilities Department, managing firsthand the interconnectedness of water availability and development potential. By this time, I was completely engaged in the complexities of managing New Mexico's scarce water resources. When Governor Richardson was elected, I was asked to be Director of the New Mexico Interstate Stream Commission and Deputy State Engineer in 2003. When Governor Martinez was elected, she reappointed me as Director of the Interstate Stream Commission in 2011. My time

at the Interstate Stream Commission has been a fascinating mix of technical, legal, policy, financial and political challenges. It has been a perfect training ground for someone asked to serve as Commissioner of the Bureau of Reclamation.

I believe that my tenure as Director for the New Mexico Interstate Stream Commission has allowed me to learn about and deal with many of the issues that the Commissioner of the Bureau of Reclamation is faced with, albeit at a regional scale. The New Mexico Interstate Stream Commission, created by the New Mexico legislature in 1935, has broad powers to investigate, protect, conserve and develop New Mexico's waters including both interstate and intrastate stream systems. The Commission is responsible for ensuring compliance with New Mexico's eight interstate stream compacts, and is also responsible for regional and state water planning in New Mexico.

My service as Director of the New Mexico Interstate Stream Commission for the last 11 years has been a tremendously rewarding experience. I have had the privilege to represent New Mexico as Governor Martinez's Representative to the Colorado River; New Mexico's Commissioner to the Upper Colorado River Compact and Canadian River Compact Commissions; and New Mexico's Engineer Adviser to the Rio Grande Compact Commission. I have also represented New Mexico on water issues in both the US/Mexico Border Governors Conference and the New Mexico/Chihuahua Commission.

Given the Interstate Stream Commission's broad statutory responsibilities, I have been involved in finding river management solutions to difficult endangered species issues on the Rio Grande, as well as the San Juan, Pecos and Canadian Rivers. I have served as New Mexico's representative on the Glen Canyon Dam Adaptive Management Work Group, a federal advisory committee to the Department of Interior on managing multiple resource objectives in the reach of the Colorado River between Glen Canyon Dam and Lake Mead. These efforts for balancing the preservation of endangered species with other resource goals, including the protection of water users in the arid southwest, has required innovation, collaboration and perseverance.

Working with my colleagues at the New Mexico Interstate Stream Commission and Office of the State Engineer, I have worked to promote and implement settlement of Indian water rights claims of six of the state's Indian Nations and Pueblos. I also helped draft and testified in favor of New Mexico legislation to create a New Mexico Indian Water Rights Settlement Fund to set aside state cost share funds needed for implementation of those settlements. To date, New Mexico has provided about \$65 million toward a \$130 million cost share obligation. Successful resolution of Native American water rights claims is critical to the water security of all New Mexicans, not just for our Native American communities.

The Interstate Stream Commission has also been a strong advocate for assuring a long-term water supply for New Mexicans in the eastern part of the state where ground water supplies in the Ogallala aquifer are rapidly dwindling. In that vein, I have supported development of the Eastern New Mexico Rural Water Supply Project to deliver renewable water from Ute Reservoir on the Canadian River to communities like Clovis and Portales New Mexico. Without this water supply project, these communities could begin running out of water within 10 years. The Interstate Stream Commission has been at the forefront of water planning efforts in New Mexico through its management of the state and regional water planning programs in the state. During my tenure as Director, New Mexico completed the last of 16 regional water plans as well as its first formal state water plan and all of these water plans are currently being updated.

I am proud of the work that we have done during my time as Director the New Mexico Interstate Stream Commission. All told, we have helped assure water security for our people, while improving the operation of our river systems for the benefit of the endangered species and other resources and the natural ecology generally. Particularly in the last several years of record setting drought, we have found innovative ways to conserve and stretch the utility of this scarce but vital resource. All of these efforts have required establishment of strong relationships with diverse stakeholders, including our neighboring states, local governments, Indian tribes, agricultural and municipal water users, power users, and environmental interests.

Interestingly, one of our key partners in almost all of the efforts I have described is the Bureau of Reclamation and now, if confirmed, I would have the opportunity to serve as the Commissioner for the Bureau of Reclamation. I am deeply honored and appreciative that President Obama and Secretary Jewell have seen fit to nominate me for this important position.

As you know, Michael Connor who used to staff this Committee and was recently confirmed as Deputy Secretary of the Department of Interior most recently held the position of Commissioner of Reclamation. I know Mr. Connor well and realize that

he leaves large shoes to fill. I am excited by the challenge this presents and believe that my professional experience has prepared me for the challenge. I am also comforted knowing that Mr. Connor will still be at Interior to advise and guide me; and knowing the capabilities of many of the people in leadership positions at Reclamation and the Department of Interior. I realize that I will be joining a strong and capable team.

If confirmed, I am committed to working with the public, affected stakeholders and Congress to collaborate to find balanced solutions to the water resource and hydropower generation challenges facing the western United States.

Thank you for the opportunity to address my nomination. I look forward to continuing to work with you and will be happy to respond to questions at the appropriate time.

The CHAIR. Thank you very much, Mr. Lopez.
Dr. Regalbuto.

TESTIMONY OF MONICA C. REGALBUTO, NOMINEE TO BE ASSISTANT SECRETARY OF ENERGY FOR ENVIRONMENTAL MANAGEMENT

Ms. REGALBUTO. Chair Landrieu, Ranking Member Murkowski and the members of the committee.

The CHAIR. Can you pull the microphone closer to you, please?

Ms. REGALBUTO. Yes.

The CHAIR. Thank you.

Mr. REGALBUTO. I appreciate the opportunity to appear before you as President Obama's nominee for Assistant Secretary for Environmental Management at the United States Department of Energy.

I would like to begin my statement by expressing my gratitude to the President for his confidence demonstrated by this nomination. I am honored and humbled to be here. Should I be confirmed I will do my best to meet that confidence.

I would also like to thank Secretary Moniz for his support and for his leadership of the Department of Energy.

Professional achievement is seldomly an individual effort. I have the privilege of working with a multitude of talented people throughout my career as a chemical engineer. There are countless family members, friends, mentors and colleagues who have done so much over the years to make this day possible. I want to especially thank and recognize my husband, John, for always being supportive and patient. To my adult children, Ricky, Carol and Robby, for their sense of humor as they grew up in a hybrid culture hearing my daily use of science based Spanglish.

Last, I would not be here without the loving support of my parents, Horacio and Conchita, for instilling in me great values during my childhood and for my parents-in-law, John and Carole, who I consider my second set of parents.

Madame Chair, I began my studies in Mexico where through a great economic sacrifice of my family, I attended private schools which offer a better education. In high school I discovered an interest and gift in math and science and started college seeking a degree in chemical engineering and computer science at the Monterrey Tech.

At the time there were very few women in engineering with limited job opportunities. This reality has heavily influenced me. As such, I have always supported and led efforts that substantially enhance employment and opportunity for women and minorities.

I met my husband, John, while I was a student and eventually married him and moved to the United States and proudly acquired my U.S. citizenship.

After completing my Ph.D., at the University of Notre Dame, I joined Argonne National Laboratory in 1998. I started my career supporting the development of technologies for the treatment of high level waste at the Department of Energy Plutonium Production sites. After developing strong technical skills I joined BP-AMOCO in 1996 where I enhanced my skills at managing complex projects, large budgets and multi-disciplinary staff in an industrial setting. I returned to Argonne in 2001 and became the head of the Process Chemistry and Engineering Department where I worked on new technologies for the treatment of used nuclear fuel.

In addition I was a member of the fuel cycle team at the Massachusetts Institute of Technology. My participation in the study not only allowed me to gain experience working with high level officials and non-governmental organizations, but brought to my attention the need for the safe, permanent disposal of all types of radioactive waste.

In 2008 I had the unique opportunity to join DOE's Office of Environmental Management where I served as the Senior Program Manager supporting their strategic mission in waste processing area.

I currently serve as the Deputy Assistant Secretary for fuel cycle technologies within the Office of Nuclear Energy. In this position I am responsible for directing research and development programs involving 10 national laboratories, 32 universities, over 400 scientists and 300 professors.

The last few years have been an eventful period with respect to nuclear energy. I was directly involved in providing and coordinating emergency responses to the Fukushima Dai-ichi nuclear power plant disaster focusing on options to mitigate the highly contaminated water resulting from the emergency cooling of reactors damaged by the earthquake and subsequent tsunami.

Over the past decades I have seen various nuclear waste management programs from a variety of vantage points.

As a scientist at Argonne I have worked on and led efforts to identify technical solutions to difficult waste management issues.

In my current role, I have been responsible for formulating and articulating strategic options to expedite the resolution of our waste management needs. I have also experienced the intricacies of nuclear waste management from a perspective of being a waste generator and from a waste disposal specialist during my time at DOE.

Madame Chair, the Manhattan Project was a critical component of the success of World War II and the cold war. The communities and regions that were home to these sites have made sacrifices for our Nation and the environmental remediation is both a legal and moral obligation.

2014 marks the 25th anniversary of the EM program. During my tenure at Argonne and now at DOE I have watched EM complete 91 sites and have made successful progress toward the remaining 16. But great challenges still remain that require innovative strate-

gies to cleanup efforts while ensuring the work is completely done safely.

I believe my background, experience and commitment have prepared me to lead the Office of Environmental Management during this particular critical time and I welcome the opportunity to continue my service to the Nation as Assistant Secretary for EM.

If confirmed, I pledge to work closely with this committee and others in Congress to assure that we continue the safe cleanup of the environmental legacy.

Madame Chair, thank you for the opportunity to appear before you and your committee today. I look forward to answering any questions.

[The prepared statement of Ms. Regalbuto follows:]

PREPARED STATEMENT OF MONICA C. REGALBUTO, NOMINEE TO BE ASSISTANT SECRETARY OF ENERGY FOR ENVIRONMENTAL MANAGEMENT, DEPARTMENT OF ENERGY

Chair Landrieu, Ranking Member Murkowski, Members of the Committee: I appreciate the opportunity to appear before you today as President Obama's nominee for Assistant Secretary for Environmental Management at the United States Department of Energy.

I would like to begin my statement by expressing my gratitude to the President for the confidence in me that he has demonstrated in his nomination. I am honored, and humbled to be here, and should I be confirmed, I will do my best to meet that confidence.

I would also like to thank Secretary Moniz for his support and for his leadership of the Department of Energy.

Professional achievement is seldom an individual effort. I have had the privilege of working with a multitude of talented people throughout my career as a chemical engineer. There are countless family members, friends, mentors and colleagues who have done so much over the years to make this day possible.

I want to especially thank and recognize my husband John for always being supportive and patient and to my adult children, Ricky, Carol, and Robby for their sense of humor as they grew up in a hybrid culture, where they learned my unique daily use of science-based "Spanglish." Lastly, I would not be here without the loving support of my parents, Horacio and Conchita, for instilling in me great values during my childhood and for my parents-in-law, John and Carole, whom I consider my second set of parents.

Madam Chair, I began my studies in Mexico where through the great economic sacrifice of my family, I attended private schools which offered a better education. In high school, I discovered an intense interest and gift in math and science, and started college seeking a degree in chemical engineering and computer science at Monterrey Tech (ITESM). At the time there were very few women in engineering with limited job opportunities. This reality has heavily influenced me, and as such I have always supported and led efforts that substantially enhanced employment of and opportunities for women and minorities. I met my husband John while I was a student and eventually married him and moved to the United States and proudly acquired my U.S. citizenship.

After completing my Ph.D. at the University of Notre Dame, I joined Argonne National Laboratory in 1988. I started my career supporting the development of technologies for the treatment of high-level waste at the Department of Energy plutonium production sites. After developing strong technical skills, I joined BP-AMOCO in 1996, where I enhanced my skills at managing complex projects, large budgets and a multi-disciplinary staff in an industrial setting. I returned to Argonne in 2001, and became the Head of the Process Chemistry and Engineering Department where I worked on new technologies for the treatment of used nuclear fuel.

In addition, I was invited by the Massachusetts Institute of Technology to be part of its three-year Fuel Cycle Study Team. The study was published in 2010 and considers economics, risk, nonproliferation, institutional structures and technology readiness in meeting U.S. energy and environmental needs. My participation in the study not only allowed me to gain experience working with high level officials and nongovernment organizations, but brought to my attention the need for the safe, permanent disposal of all types of radioactive wastes.

In 2008, I had the unique opportunity to join DOE's Office of Environmental Management, where I served as a senior program manager supporting their strategic mission in the waste processing area.

I currently serve as the Deputy Assistant Secretary for Fuel Cycle Technologies within the Office of Nuclear Energy. In this position I am responsible for directing the research and development program involving 10 national laboratories, 32 universities, over 400 scientists and 300 professors.

The last few years have been an eventful period with respect to nuclear energy. I was directly involved in providing and coordinating emergency responses to the Fukushima Dai-ichi nuclear power plant disaster. I assembled a multi-office team within DOE to evaluate potential near-term options to mitigate the highly contaminated water in Japan's plant resulting from the emergency cooling of reactors damaged by the earthquake and subsequent tsunami.

Over the past few decades, I have studied our various nuclear waste management programs from a variety of vantage points. As a scientist at Argonne, I have worked on and led efforts to identify technical solutions to difficult waste management issues. In my current role, I have been responsible for formulating and articulating strategic options to expedite the resolution of waste management issues. I have also experienced the intricacies of nuclear waste management from the perspective of a waste generator and from a waste disposal specialist during my time at DOE. One of Nation's biggest challenges remains to ensure the public that the government is able to fulfill its responsibility regarding the timely handling and cleanup of the nuclear waste originated from both its defense and civilian programs.

Madam Chair, the Manhattan Project was a critical component of our success in World War II and the Cold War. The communities and regions that were home to these sites have made sacrifices for our Nation, and the cleanup mission of the Environmental Management program is both a legal and moral obligation.

2014 marks the 25th anniversary of the EM program. During my time at Argonne National Laboratory and now at DOE, I have watched as EM completed 91 sites and has made significant progress at the remaining 16. The Environmental Management program has before it some of the most complex, challenging cleanup work, and accomplishing our goals will mean applying innovative strategies to one-of-a-kind challenges—all while ensuring that work is completed safely.

I believe my background, experience and commitment have prepared me to lead the Office of Environmental Management during this particularly critical time and I welcome the opportunity to continue my service to the Nation as Assistant Secretary for EM. If confirmed, I pledge to work closely with this committee and others in the Congress to ensure that we continue the safe cleanup of the environmental legacy.

Madam Chair, thank you again for the opportunity to appear before you and your committee today. I look forward to answering any questions you and the committee may have.

The CHAIR. Thank you all very much.

Let me begin with some questions and one is both national and somewhat local in nature.

First to you, Dr. Kimball.

The Water Resources Research Act of 1964 established the State Water Resources Research Institute. These institutes are located at land grant universities throughout the United States and as you know, are USGS managed. They are partnerships between Federal Government and States.

This July marks the 50th anniversary of the signing of the Water Resources Act. These institutes were created to fulfill several objectives: research and development of new technologies, more efficient methods of resolving local, State and water resource problems, training water scientists and engineers, etcetera.

We have one such program in Louisiana. The Louisiana Water Resource Research Institute is located at LSU. It sponsored several research projects on the health of Lake Pontchartrain and other important issues.

Can you talk for a minute about your understanding of these resource centers, their level of funding, the importance or efficacy of

their work and what are your views about continuing these partnerships? Do you think they bring value to the mission of your agency?

Ms. KIMBALL. Thank you very much, Senator, for that question.

The short answer is I think they're very valuable and I think the partnership is becoming stronger every day. We have had some challenges within funding in the past. Part of that was because we had difficulty clearly linking the activities within the institutes to the mission of the USGS.

However, we've worked very, very closely with the leadership of the institutes. We have put together a strategic plan that gives us ways to closely link and to very easily articulate the connection between the institutes and the USGS.

I think going forward into the future we will be able to demonstrate the value of these partnerships. We'll be able to demonstrate the utility of the projects that are being conducted at the various water resource research institutes. I look forward to a very productive relationship going into the future.

The CHAIR. How many such institutes do we have? Do you know or can the staff let us know?

Ms. KIMBALL. Um, it's in the neighborhood of 30, but that is not a number that I know exactly.

We will be happy to provide the response for the record.

The CHAIR. OK.

Along that line, in Lafayette at the National Wetlands Research Center that was established by my predecessor, Senator Johnson and Senator Brough, when they served here. That wetlands research center has become an extraordinary, regional, outside of Louisiana, regional resource for scientists all over the Gulf Coast, in studying and recognizing the potential threat to the wetlands, particularly along the Gulf Coast. But I think they do work all over the Nation.

Are you familiar with the work they do there? Do you have any ideas in your mind how you can step up the collaboration in addition to what you just mentioned with some of these facilities around the country?

Ms. KIMBALL. I'm very familiar with the work at the National Wetlands Research Center. For that matter, I started my professional career working on issues in the coastal area, North Central Gulf coastal areas, of Louisiana and Mississippi. That center has a long history of providing valuable information, not just on the North Central Gulf areas, but issues associated with deltas and wetlands worldwide.

I think that we will see in the future as we look to the restoration activities in the Gulf following the Deep Water Horizon Institute, a significant contribution by that center and not only by that center, but by the suite of partners both in academia and in other non-profit groups and other Federal research facilities across the country.

The CHAIR. OK.

One more question to you and then I'll ask the other panelists.

As somewhat of a surprise to the members of the delegation from the Gulf Coast States the Justice Department last year allocated \$2.5 billion in penalties and fees to the Gulf Coast States. Put it

in a semi-private organization which had been established under the Bush Administration called the National Fish and Wildlife Foundation.

According to the Justice Department directives \$1.2 billion for barrier islands and river diversion projects will be sent off the coast of Louisiana, \$356 million each for Alabama, Florida and Mississippi and \$203 million for Texas. This is not actually money under your jurisdiction, but your mission is very similar.

So, A, are you aware of this funding that's available with the National Federation of Wildlife?

Are you understanding that there could be some complementary work done, particularly because it seems under the Justice Department directive that this is restricted to barrier island restoration and river diversion which is what your thesis was on?

Ms. KIMBALL. Yes, Senator, we are aware of this funding stream. We are aware of the parameters under which the National Fish and Wildlife Foundation is operating.

The USGS, along with other bureaus within the Department of the Interior, are working closely together in the Gulf area and working closely with the States to identify the appropriate projects that could be funded under this activity.

The CHAIR. OK.

I'm going to be following up specifically on these barrier islands since this fund is restricted, not at our request, but it was done by the Justice Department in settlement with the court. Not that we don't have great needs for barrier islands, but there are other needs, as you are well aware. But we've got to make sure that, you know, this is a lot of money and that it's spend wisely and it's spent in a coordinated fashion with the other agencies that are, you know, tasked with these barrier island challenges which are all over the country, of course, not just in the Gulf of Mexico.

Let me ask Dr. Regalbuto real quick.

What immediate challenges do you see in the EM program that are right before you? I know this is many sites throughout the country. I've got a map here of the sites that we're still working on. They're in California, Nevada, South Carolina, Kentucky, Tennessee, Idaho, New York. I mean they really range from West to East facilities.

What do you think some of the immediate challenges are? If you could list them No. 1, 2 and 3.

Ms. REGALBUTO. Thank you for your question, Senator.

I am aware of the number of sites at the Department of Energy Environmental Management program. The program is 25 years old. It has been focusing more in the first 25 years on the low hanging fruit.

The next number of years really the sites that remain to be treated are the most, more challenging of all.

In addition to the existing inventory of radioactive waste that is currently in assistance and was part of the prioritization process through EM, we have a number of incidents this year that makes it switch in priorities.

The incident at WIPP is No. 1 priority. We had to restart the facility. This facility is incredibly necessary for the Department of Energy and for the Nation as it is the only working repository in

the world and is the only place where we can bring our waste. So it has an impact across the whole country.

So that has to be No. 1 priority.

No. 2 priority is the work at Hanford. Hanford is one of the largest sites. As such, a lot of work still needs to be done. We are working with the State currently to assess a stage approach that will allow us to move forward.

The number 3 priority is to continue the great work that we have been doing in the State of South Carolina at the Savannah River National Plant. Savannah River is the only working site that produces glass today in this country. That is critically important that we continue to work on those issues.

The CHAIR. Thank you very much.

Senator Murkowski.

Senator MURKOWSKI. Thank you, Madame Chair.

Dr. Kimball, I have a question for you about priorities within USGS. I noted in my opening comments my concern about the natural disaster monitorings, specifically volcanos, and earthquakes. If you look at the President's budget, we do see a slight increase in funding for natural hazards, but it does not sufficiently fund the Alaska Volcano Observatory System of Seismic Monitors.

It's my understanding that within a year or 2, without maintenance funds for system repair and transportation to the remote facilities, that we could see about half of this network offline, which of course, would be a concern.

Another area where—I am just trying to get a sense of priorities within the agency.

In 2007 I was successful in advancing a bill called the Alaska Water Resources Act which called for USGS to increase the number of streams in the State that have river and stream gauges on them. We only have 100 USGS stream gauging stations, one per ten thousand square miles. In the Pacific Northwest the States average one gauge for each 365 square miles. I think you understand very well the significance and the importance of these stream monitoring gauges.

Alaska just did not see the funds that were prioritized to implement this 2007 act. Instead the act expired last year without even one new stream gauging station that was added. Again, an area, just in terms of understanding what our resource is, which is critically important whether it's for the health and safety or whether it's for understanding our ability to develop in areas.

So the question to you and I know it's broad, but how will you fight for those priorities for funding that are really very much within USGS' core mission? How do you determine where you place that priority when it comes to natural hazards monitoring and science and other base science spending?

Ms. KIMBALL. Thank you for the question, Senator Murkowski.

I know that you've been quite a supporter of USGS activities in the realm of natural hazards and basic monitoring and data collection. I share your concerns about funding. I share your sense of priorities for these basic data collection efforts that are essential for us to have in order to understand the system, how the system operates. Hence, provide the information that will result in enhancing public health, safety and welfare.

The USGS, over the past few years, has approached the budget process in these times of very constrained fiscal constraints by in each year identifying 1 or 2 of those fundamental activities that we would promote and push because there simply were not enough dollars in constrained fiscal times to be able to raise that bar for everyone and every program. So we've been approaching it in a step wise process.

This year in 2014 we were able to gain some additional funds to support the stream gauging network, specifically. To support our natural hazards work.

We were fortunate during the Stimulus bill to be able to have enough resources to develop some of the monitoring capabilities for volcanoes and earthquakes, but again, not enough to fully implement our strategic plan for the system.

If confirmed I can commit to you that we'll be working with you and with our partners across the country to identify those funding sources to stabilize our basic data collection activities and to enhance those activities so they can meet a standard for protecting public health and safety.

Senator MURKOWSKI. I appreciate your response. I look forward to working with you on those very basic areas which, I think, far too often get pushed to the back when there is something brighter and shinier that occupies this space. thus, my concern about this mission creep. So I ask you to be sensitive to that.

I mentioned in my opening wanting to inquire a little bit about the Black Brant. I am trying to figure out where these birds go after they leave the Izembek Refuge. It's my understanding they go down to Baha. They are in an area near San Quintin Bay, Mexico. They must be pretty smart birds to summer in Alaska and winter in Mexico.

But, of course, the concern I have is there are disturbances in Baha whether it is people, hunters, aircraft, roads, or avian predators. I am trying to understand where they are on the other end because I can not see that a ten mile, one lane, gravel, non-commercial use road is going to so horribly disturb these animals, that these birds can not make the journey south. So I want to get a little more background and data from you. We can do that offline.

Thank you, Madame Chair.

The CHAIR. Thank you, Senator.

Senator Johnson.

Senator JOHNSON. Thank you, Madame Chair and Ranking Member Murkowski.

Congratulations to each of the nominees.

Mr. Lopez, this committee has discussed rural water projects like Lewis and Clark regional water system and the Mni Wiconi water system on numerous occasions. Unfortunately the regular budgeting process seems to be continuously underinvested in these and other rural water projects.

For example, the Administration's FY2015 budget provides just \$22 million for construction across all 6 projects with only \$2.4 million designated for Lewis and Clark in South Dakota. There are significant benefits and substantial returns in investment from rural water projects. This slow pace on uncertainty of construction

funding has a number of negative consequences and leads to significant inefficiencies.

In your new position how will you prioritize rural water projects within Reclamation's budget so that they can make meaningful progress each year toward connecting communities in their service area?

Mr. LOPEZ. Thank you for your question, Senator Johnson. Also I wanted to thank you for the opportunity to meet with you in your office a few days ago where this issue came up.

I recognize and I understand, kind of, the frustration with the pace of these important rural water projects. As I mentioned in my opening statement I've been involved in supporting the Eastern New Mexico Rural Water Project and that project, like Lewis and Clark and Mni Wiconi are both—it is absolutely critical for the communities that are going to depend on it.

Unfortunately the—we worked with a constrained budget and we—I understand that Reclamation has some criteria by which to allocate the available funds such that it meets the greatest needs and completes useable portions of projects in the time that are allotted.

If confirmed, I would look forward to learning more about your specific projects and more specifically, to work with you and this committee and to try and find additional funding resources to finish all these very worthy projects in a useful timeframe.

Senator JOHNSON. Dr. Kimball, do you agree that maintaining Landsat data continuity should be a priority for your agency and are you able to share any updates about the status of the discussions between USGS and NASA concerning the future of the Landsat program and the anticipated timing of the next Landsat launch?

Ms. KIMBALL. Yes, I do share the sense of priority for Landsat. We have 42 years of unbroken record of information that is vitally important to agriculture, vitally important to forestry, vitally important to looking at issues associated with drought and climate change. Maintaining that data continuity is very important.

The architecture study team, a joint effort of USGS and NASA, is in the process of finalizing the report that was requested by Congress. We anticipate seeing that report sometime around the end of May. We'll be happy to provide more information when that report is available.

Senator JOHNSON. I yield.

The CHAIR. Thank you so much.

Senator Risch.

Senator RISCH. Thank you, Madame Chairman.

Dr. Regalbuto, thanks so much for taking the time to meet with me.

Your work is incredibly important to the State of Idaho, particularly at the Idaho National Laboratory. I have to tell you after looking at your qualifications, we don't see very often people who are nominated for these positions that have the kind of qualifications you do that fit into that spot so perfectly as yours do. So we look forward to working with you in the future.

You're familiar, of course, with the Idaho National Laboratory and the 2 missions that are going on there?

One, of course, is as a laboratory doing some incredibly good and important research for the country.

But also, as you mentioned, we've got a cold war legacy that we're cleaning up. We were the unhappy and unwilling recipients of a lot of the waste that took place in other places. It really wasn't handled very well, as you know. It was buried in the backyard, if you would.

The history, as you know, is that the State attempted to negotiate with the Department about the cleanup. It didn't work very well. We wound up in court. That didn't work very well either.

But what did work is while we were in court the 2 parties sat down, negotiated a settlement agreement and that has worked very well. Four of us have been Governors since the initiation of that particular agreement. Regularly we have hiccups, defugalties, issues and we resolve them within the 4 corners of the agreement. It's been working incredibly well.

So in given that, I want to talk about the future. We've had the distant past which hasn't been very good, the recent past which has been very good. Now as the Department moves into the next phase of the cleanup work in Idaho, I want to urge you to work with us, with the Congressional delegation, who really, kind of, work as an allies in between the State and the Federal Government and also with the State officials, who are anxious to work in good faith to try to move forward and complete the work that's going to take a long time out there.

So I'd like to get your thoughts and your comments in that regard, please.

Mr. REGALBUTO. Thank you, Senator Risch, for your kind words and also for the opportunity to visit with you and learn more about the programs in your State and the communities surrounding it.

I am a product of a national laboratory system and as such I have experience understanding the valuable work, the research and development, that is conducted at the national laboratories. I also understand that Secretary Moniz is a great supporter of the work that comes from the national laboratory not only for the Office of Environmental Management, for the whole DOE. We look forward to continue that high level of work.

Regarding the cold war waste I do understand that Idaho is one of the most successful sites that we have in terms of meeting their goals and putting to resolution the cold war waste. I certainly am aware of the settlement agreement. I thank you and your colleagues for your willingness to work with the Department throughout these many years.

If confirmed, I look forward to continuing that valuable relationship with, not only the laboratory, the site and the State, but also with the communities in your purview.

Senator RISCH. Thank you, Doctor.

I appreciate those kind words about the laboratory.

You're right, we have been very successful. The contractors that are working at the site have done an excellent job. It's a great success story.

I think it is the result of the collaborative work between the State of Idaho and the Department of Energy that has resulted in these successes. I hope we can all agree that we're going to use

that as a model as we move forward. It works so much better if we work hand in hand and we collaborate to get these things done. I think that's what's been—that's why we have the result we have in Idaho.

It helps the other mission of the laboratory. We can focus on the other missions of the laboratory. This is a great place. They do fantastic work there. But we have both missions that we have to pay attention to.

So, thank you so much for agreeing to do this. I look forward to the partnership as we move forward together.

Mr. Lopez and Dr. Kimball, thank you 2 also for meeting with me. Appreciate the matters that you bring to the table also.

Mr. Lopez, I appreciate seeing in your resume the collaborative systems that you've used in the past. I explained to you a unique situation we had at Deer Flat Wildlife Refuge which is now really a recreation area near a large population center in Idaho. We've moved forward in some of the challenges as far as management that's concerned. We'll be talking about that in the future as we go forward.

Thank you for agreeing to serve.

My time is up.

Thank you very much, Madame Chairman.

The CHAIR. Thank you, Senator.

Senator Manchin.

Senator MANCHIN. Thank you, Madame Chairman.

I'm going to start with Dr. Kimball, if I may.

Let me see here.

Dr. Kimball, you know that USGS is currently engaging critical mineral research. We often hear about our growing demand for rare earth elements and their use in the modern, civilian and defense technologies. Can you update us on the status and progress of the USGS' research in this area?

Yes. USGS is—has, in fact, received a budget increase to look at rare earth minerals. We have a strategic plan in place that we're following.

One of the new aspects of our work, looking at these minerals and developing these assessments, is to approach it from a life cycle perspective for use, reuse, recycling.

We are committed to continue with our work on global assessments. We are committed to providing the kind of information that's needed knowing that this is a global resource issue and connecting with our colleagues about that.

Senator MANCHIN. When you're doing your research on that would you be able to provide me or maybe so I can provide the committee with the ownerships, countries that are most aggressive in the ownerships and the percent of ownership of the rare earth resources in the world?

Ms. KIMBALL. Yes, sir.

We have commodity summaries for approximately 100 commodities including rare earth materials. We can provide some additional information for the record.

Senator MANCHIN. I think it might be interesting for the committee to have that report.²¹ Senator MANCHIN. If I may go to Mr. Lopez?

You know the Bureau of Reclamation is one of the largest producer of hydropower in the United States. If confirmed, what would your priorities for this program be for hydropower?

Mr. LOPEZ. Thank you for your question, Senator.

Yes, Reclamation is, I believe, the second largest hydropower producer in the United States. One of the things that I've learned in preparing for this job is that there remains a great deal of opportunity for additional power, hydropower production, within existing reservoirs or dams. I think we have to do everything that we can to try and maximize the availability of hydropower.

Similarly there's availability or an opportunity to look into developing a low head power production even in canals. Anything that moves water has a potential for generating hydropower. I look forward to trying to maximize all options.

Senator MANCHIN. Let me just say this.

What I would ask you to do, again on behalf of our committee, Energy Committee, is to tell me what the deferred maintenance is on the existing plants because everyone can build a new plant. But I'm understanding if this is falling apart the same as our infrastructure is around the country, then we have a deferred maintenance that we haven't maintained. So we could have our current hydropower production depleted because of a lack of maintenance.

If you could or your office would be able to do that as quickly as possible, give us an update on the condition of the hydropower infrastructure that we currently have in place, it would be greatly appreciated and most helpful as we move forward because I'm concerned about our ability to continue with a lack of maintenance.

Mr. LOPEZ. Thank you, Senator.

I will, if confirmed, I will work on producing that report for this committee.

Senator MANCHIN. I appreciate that.

Senator MANCHIN. Dr. Regalbuto.

While the Office of Environment Management does not oversee any sites in my State, budget overruns from the office do affect the DOE's programs in West Virginia. How do you plan to prevent cost overruns in this multibillion dollar budget?

Ms. REGALBUTO. Thank you for your question, Senator.

I recognize that the cost overruns in the Department of Energy have been significant and not only in the Department of Energy Environmental Management Program but in other programs. That does affect the overall well being of the taxpayer's money.

Secretary Moniz is committed to addressing this issue. It is one of the No. 1 priorities in the department. He has created the Under Secretary for Management and Performance where EM is currently located.

With that we plan to move forward into much more well thought out programs, not any shape construction of anything until we're ready in order to make sure that the taxpayer money is put to well use.

If confirmed, I'll be happy to work with you and any other member of the committee—

Senator MANCHIN. One final thing I will just—my time is running out. Real quickly, if I could ask you?

The Department of Energy has about \$8 billion, as I understand, in clean coal technology?

Ms. REGALBUTO. Yes.

Senator MANCHIN. That has not been distributed for since 2009?

Ms. REGALBUTO. I am not—thank you for your question, Senator.

Senator MANCHIN. No, the only thing I'm saying on that can you tell me why there has not been any movement on this? Why the private sector hasn't stepped to the plate? Your evaluation of why this money is not going in for the technology that would allow us to burn the most abundant, affordable energy that we have in a much cleaner fashion?

I really want to hear that from you, if I can.

Ms. REGALBUTO. Thank you for your question, Sir.

The development of clean technologies, unfortunately is not in my purview and is one area that I have personally not worked on.

I am well aware that the possibility of new technologies exist but I will have to get back to you on the record on this specific question.

Senator MANCHIN. Thank you.

The CHAIR. Thank you.

Senator Scott.

Senator SCOTT. Thank you, Madame Chairwoman.

Dr. Regalbuto, thank you for being here today and thank you for your testimony and also I hear your husband is a professor on faculty at the University of South Carolina. So go gamecocks. Good to have you—

[Indistinguishable sound from audience.]

Senator SCOTT. Thank you. I'll tell them you said so.

[Laughter.]

Senator SCOTT. My question really is about the latest report. Two weeks ago the DOE released its study on alternatives to the MOX facility at Savannah River site. As you know the Obama Administration has decided to put the facility on cold stand by in FY2015.

I'm trying to think of the alternatives. Obviously we've seen the 4 alternatives or the 5 alternatives to the MOX facility. One being the WIPP facility in New Mexico which is currently recovering from a radiation leak and it's going to be closed for some period of time.

Do you have an idea of how long the facility is going to be closed?

Ms. REGALBUTO. Thank you for your question, Senator.

Yes, go gamecocks.

[Laughter.]

Ms. REGALBUTO. I've been to many games and it's fun.

Regarding the study on the MOX option studies, I am aware that it was a preliminary study and that no decisions have been made. With that, I recognize that one of the options that they looked at was disposal at a WIPP like type facility.

Senator SCOTT. Yes.

Ms. REGALBUTO. So it was used as a baseline because that's where the information is known.

I do not believe that the intention is to, you know, make that decision at this point. If anything, there will be further studies before they address anything going forward because the true cost has not really been determined in, you know, options studies.

Senator SCOTT. Yes, ma'am.

Ms. REGALBUTO. Regarding when is WIPP going to be open?

Right now WIPP is going through investigation. Right now they are obtaining the characterization data. Once the characterization data and the real reason for the release is known, then an action plan is to be put together and a remediation path goes forward.

I don't think we can specifically say how long it's going to take because we really don't know exactly what happened. There is clear understanding right now about some material incompatibility in some of the boxes. But we need to determine what was the exact source of that incompatibility before we can move forward. Of course, we have to do it efficiently, but also in a safe manner.

Senator SCOTT. Do you know if the Obama Administration took into consideration the radiation leak when they proposed it as one of the alternative sites for the MOX program?

Ms. REGALBUTO. Oh, I will not know the answer to that question but, you know, from the Obama Administration point of view all I can tell you is that some of the options were probably analyzed, you know, before the release happened.

I'm not sure.

Senator SCOTT. OK.

Ms. REGALBUTO. About exactly the time table.

But if confirmed I look forward to working with you on this issue.

Senator SCOTT. Given the unique work being done at the Savannah River site. If you think about the fact that it's the Nation's only tritium recycling mission, the Nation's only chemical separation facility, the Nation's only site where high level waste is treated and the tanks are actually closed. How do you plan to use this strategic national treasure to help the country and how will the future budgets reflect the real work going on at the Savannah River site?

Ms. REGALBUTO. Thank you, Senator, for your question.

The Savannah River site has certainly been one of the best sites with a very complex mission. I am certainly impressed with the work that has been conducted in H canyon. We went from producing plutonium in that facility to now supporting national security mission and disposing of weapons grade materials.

So to me that is one of the stories that we need to implement in other parts of the complex where we take the facilities and we actually do with them an applicable mission that is currently important to the Nation.

It is certainly a complex issue. Tritium production is very important. I am familiar with the, you know, the T bar recovery facility is one of the most modern facilities that we have in the complex.

You know, although I have not visited yet, I have seen many of the presentations. It's a very impressive facility. You know, I commend you for operating that.

Senator SCOTT. We certainly see it as a national treasure, a national asset. I would look forward to, during one of the Gamecock football games, your presence in South Carolina perhaps taking some time to join me at the facility and let us tour it together.

Ms. REGALBUTO. I thank you very much for your time and if confirmed, I look forward to, you know, spending time working with you and your organization.

Senator SCOTT. Thank you, ma'am.

The CHAIR. Thank you so much.

Senator, thank you for your leadership on that matter.

Senator Cantwell.

There's a vote that's been called, but I think we can finish Senator Cantwell's questions. Senator Murkowski and I have one each and we'll wrap up our hearing in time for our vote.

Senator CANTWELL. Thank you.

The CHAIR. Senator Cantwell.

Senator CANTWELL. Thank you, Madame Chairman. Thank you for holding this hearing. I have questions for each of you and so if I can get some, maybe, some succinct answers that would be great.

But I'm going to start with you, Dr. Kimball.

My colleague, Senator Murkowski, brought up obviously an important aspect of what USGS does. But I wanted to ask you, specifically, about landslides and a recommendation by the National Academy that the USGS published a landslide hazard mitigation strategy. So that was something that was recommended but it never received funding.

So do you think we need to do that plan?

Ms. KIMBALL. Senator Cantwell, thank you.

I know that our USGS employees feel very strongly about the landslide work. I think that we do need to continue. We do have a strategic plan for natural hazards within USGS. I think looking at that national plan is going to be important.

We have additional funds that we are planning to use for a national assessment of landslide prone areas. Ultimately to look at the kinds of precipitation events that would trigger landslides and debris flows.

Senator CANTWELL. I think you can realize where I'm coming from after the Oso Darrington mudslide.

Ms. KIMBALL. Right.

Senator CANTWELL. That not enough is being done. So, the fact that we did have this recommendation, so you're committed to doing a plan and you understand that we now have an increased risk, whatever you want to call it. But obviously the changing climate is causing, you know, rainfall records that people never anticipated.

So it's putting these risks in a higher area. So this LIDAR, laser imaging detection and ranging is really, you know, essential.

Ms. KIMBALL. Yes, Senator. I recognize that. We are committed to going forward with comprehensive LIDAR surveys. If confirmed, I will definitely be working with you and other members of the committee to realize this.

Senator CANTWELL. Thank you. Thank you very much.

Mr. Lopez, we had a chance to talk about the Yakima Basin project in my office. You obviously get the significance of how everybody in the region is working together, Native Americans, environmentalists, farmers, county commissioners. It's almost as if they're giddy with pride at how well they're working together which is juxtapose to a lot of other water situations around the country.

Yet, the President's budget doesn't fully reflect what they're requesting for the Federal assistance. The State has already put up \$137 million. So will you work to make sure that we get the Federal participation that's needed on this project?

Mr. LOPEZ. Thank you for your question, Senator Cantwell.

I also want to thank you for the opportunity to visit with you a few days ago and the discussion that we had regarding the Yakima Basin integrated plan really was demonstrative of the sorts of things that you can do when you get everybody together in collaborative processes and bring everybody along, make sure that there's a common understanding of the goals. Quite often it yields a win/win type situations. I commend you and all of the participants in this project that it's an outstanding example of the value of those sorts of processes.

I recognize that funding on the Federal side has been insufficient. I do commit that we would—I would work with you, if confirmed, to try and assure that the Federal Government can contribute its fair share.

Senator CANTWELL. Great. Thank you very much for that.

Dr. Regalbuto, is that the right pronunciation?

Thank you for your willingness to serve. We've certainly worked with many of your predecessors.

This issue of chemical vapor exposure to Hanford workers is unacceptable. In the last 2 months 28 people have become sick or exposed to these vapors. Workers have asked for better access to personal protective equipment.

What will you do as Secretary to increase the worker's safety at tank farms? What will you do to make sure workers who suffer radioactive exposure have their medical claims addressed?

Mr. REGALBUTO. Thank you for your question, Senator Cantwell.

I share your concerns regarding the vapor exposure to 28 workers. No workers should be exposed. I understand that the Savannah River National Laboratory is right now conducting an independent study to assess what is the source of those exposures.

I, myself, am a RAD worker, so I can suit up and put in a respirator and work. I certainly recognize that it is a complex job once you're all fully suited. The workers do deserve the best protection equipment that is available and access to their records because their records are theirs.

If confirmed, I do not know the very specifics right now of the situation. But if confirmed I look forward to fully address this issue and work with you and your staff regarding this issue.

The CHAIR. Thank you.

Senator Cantwell, since the time is so short. We just have a few minutes left of the vote. I want to recognize Senator Flake for his questions.

Senator FLAKE. I appreciate that. I'll be very brief.

Just for Mr. Lopez, thank you for coming to my office the other day. I enjoyed meeting with you there.

In the next couple of years Colorado River levels are projected to drop at Lake Mead to elevations that could result in the shortage declaration as early as 2016 or 2017. They're going to be significant imbalances throughout the Colorado River Basin. What do you believe Reclamation ought to do to address these shortages?

Mr. LOPEZ. Thank you for your question, Senator Flake. Thank you for the opportunity to meet with you a few days ago.

I'm intimately familiar with a lot of the work that's being done on the Colorado River and the Colorado River Basin. I'm New Mexico's representative to the Colorado River Compact and the—I've served as Commissioner to the Upper Colorado River Compact.

In that context, I worked with Reclamation and the other Basin States on the Basin study that was completed in 2012. Since then, as you've noted, the—we've recognized the high potential that water levels continue to drop and could reach critical thresholds very soon.

To that end Reclamation has taken a leadership role in terms of looking at some contingency planning. Obviously we don't want to operate in crisis mode, but it's prudent for us and for all water managers to look critically at what can be done to avoid those critical levels.

All 7 Basin States are working with Reclamation to look at what might be done in the short run. Things like, conservation measures, extraordinary conservation measures, both by municipalities and agricultural water users. There's work being done to see whether agricultural leasing programs might be done to make some of the ag water available in times of critical shortage.

In the upper basin we're looking at how all of the Colorado River Basin reservoirs might be re-operated to make water available for those critical needs. Based on some of that very preliminary work we believe that there is the possibility of forestalling the sorts of shortages. We will continue to work on that.

If confirmed, I would continue to that effort with Reclamation taking the lead role, doing the hydrology modeling and engaging all of the stakeholders, most notably the States, but also all of the other stakeholders including the tribes and environmental interests in that basin.

Senator FLAKE. So you'd agree to divert California's water to Arizona then? Is that what I hear you?

[Laughter.]

Senator FLAKE. It was worth a try, anyway.

[Laughter.]

Senator FLAKE. No, thank you for your question. I look forward to working—or for your answer. I look forward to working with you on this.

Thanks.

Mr. LOPEZ. Thank you, Senator.

The CHAIR. Thank you very much.

Final comment, Senator Murkowski.

Senator MURKOWSKI. Just very briefly and it was along the same lines as what Senator Flake asked.

When we have drought situations, as we clearly have in the West right now, I am concerned that oftentimes when our water resources are short there is an imbalance in terms of how our agencies meet the environmental obligations they have. When it comes to choosing between people and fish, the deference appears to be going with the fish even when, I think, they have some additional flexibility to supply water as they work to protect the fish.

These are incredibly important issues. It's going to be very important moving forward to figure out how you navigate these tensions between ensuring the water delivery that absolutely has to happen while accommodating the environmental requirements.

I do not expect you to give me that answer right here in 5 seconds. But it is attention that I think we need to reckon with as a committee because clearly those in the West are dealing with it. I would appreciate your attention to this very critical matter.

Thank you all for being here this morning.

The CHAIR. Thank you all for your testimony.

I'm going to leave with 2 points.

One is to follow up on the Bureau of Reclamation that over a billion dollars flows into the fund, but last year or this year budgeted only \$123 million will flow out. So 1.043 will flow into the fund, only 1.—I mean, \$123 million will flow out of the fund.

There are an enormous backlog of projects that need to be completed, mostly for the Western States, but their issues are very important to this Chairman as well as our issues along the coast.

Second, so Mr. Lopez I'm going to ask you to submit the list of your Reclamation projects. They may be in the budget and if they are you can just notify us. How many projects are pending? What is your shortage of funding? What are your total needs, not just what is in the budget?

The CHAIR. Then second, Senator Murkowski and I talked about the importance of hydropower staying as a part of our electricity mix. We're going to talk about that at a future meeting. It's either anywhere from 7 to 19 percent. Balancing the needs of the other, you know, species, of course, fish, etcetera, is very important. Salmon comes up often in the reconstruction of these dams.

But producing more clean electricity is also very important for this country. So we look forward to working with you all in ways that that can be accomplished.

With that, if there's any further testimony it can be submitted for the record.

The CHAIR. Thank you all for your testimony. We'll follow up and review and let you know when the markup will occur.

Thank you.

[Whereupon, at 11:28 a.m. the hearing was adjourned.]

APPENDIX

RESPONSES TO ADDITIONAL QUESTIONS

RESPONSES OF SUZETTE M. KIMBALL TO QUESTIONS FROM SENATOR MANCHIN

Question 1. Dr. Kimball, as you know, the USGS is currently engaged in critical mineral research. We often hear about our growing demand for rare earth elements and their use in modern civilian and defense technologies. Can you update us on the status and progress of the USGS's research in this area?

Answer. As I noted during my confirmation hearing, in FY14 the USGS received a budget increase to look at rare earth minerals. We have a strategic plan in place that we are following. One of the new aspects of our work looking at these minerals and developing these assessments is to approach it from a life cycle perspective for use, reuse, and recycling. The USGS has more than a dozen specific projects focused on rare earth elements, including research on the largest deposits in the United States as well as new techniques that can be used to better understand these deposits. In addition, there is an important national need for accurate information about critical mineral resources. Such information currently is supplied by the National Mineral Information Center within the Mineral Resources Program of the USGS. We continue to publish annual commodity reports on rare earth elements and critical minerals. This information function remains the gold standard for mineral resource information, both on a national and international level.

Question 2. I understand that the mission of the USGS Water Resources Program includes directives to: "to protect and enhance water resources for human health, aquatic health, and environmental quality." Additionally, USGS maintains real-time data on state water quality. How do you envision the role of USGS in protecting and enhancing water quality? Are there ways in which the USGS can work with West Virginia state officials to protect and improve the water quality?

Answer. As the primary federal science agency for water information, the USGS is well positioned to work with West Virginia local officials to protect and improve water quality through the Cooperative Water Program and other activities. The USGS monitors and assesses the amount and characteristics of the Nation's freshwater resources and the sources and behavior of contaminants in the water environment. The USGS also develops tools to improve management and understanding of water resources. Fundamental to USGS water science is the collection and public dissemination of data describing the quantity and quality of the Nation's freshwater resources. These data in turn are utilized to inform the public and decisionmakers about the status of freshwater resources and provide a sound foundation for local water management decisions.

The USGS Water Resources Mission Area invests in monitoring and assessing the quality of the Nation's water, including the effects of the investments the Nation is making in water quality improvements. Specifically, the USGS provides the scientific foundation for protecting, managing, and sustaining surface water that is safe and available for drinking and other uses. Water quality information is collected at many of the 8,000 streamgage sites, which is used by local communities to protect and enhance water quality. In addition, USGS' National Water Quality Assessment program provides important information on the status of the Nation's water quality, as well as trends in conditions.

One example of USGS-state cooperation in West Virginia involved the industrial chemical spill near Charleston on January 9, 2014. The USGS worked closely with the state's Department of Environmental Protection to collect and analyze water and fish tissue samples and rapidly developed highly sensitive methods for quantifying contaminants.

Question 3. USGS National Landslide Hazard Mitigation Program—In 2004, the National Academy of Sciences published a report that found that the U.S. lacked a comprehensive strategy for landslides. Based on the report, the USGS published the "Landslide Hazard Mitigation Strategy"—which included the proposed creation

of a national landslide program. However the program was never created due to lack of funding support.

It has been 10 years since the USGS released a plan to start a Landslide Hazard Mitigation Program. In your view, is there still a need for a National program, today? What aspects of the proposed program are most critical? What would this program mean for communities who are working to manage landslide risks? What could more resources mean for the ability to predict a landslide like Oso?

Answer. The need for a comprehensive National Landslide Hazard Mitigation Program has not diminished since the publication of the NAS report. As population in potentially hazardous locations grows, the overall exposure increases. Changing land-use patterns and increasing wildfire frequency also contribute to a general increase in the exposure to landslide hazards.

Critical needs include—(1) expansion of coordinated landslide response capability to provide more effective response by the USGS, and (2) establishment of a cooperative external grants program to support landslide hazard mapping and related activities by states and local partners. Efforts should be targeted to the communities at the greatest risk. Identification of these communities requires a national-scale effort supported by the next-generation of topographic data (3DEP). Collaborations would leverage USGS research and broaden impact.

Establishing this program would provide a framework enabling communities to identify high-risk areas and apply USGS science to reduce landslide losses.

RESPONSES OF SUZETTE M. KIMBALL TO QUESTIONS FROM SENATOR CANTWELL

Question 4. USGS Landslides and Climate Change—In Western Washington, the severe storms in December of 2007 caused more than 730 landslides in the Upper Chehalis Basin. Storms like these are expected to increase in frequency and intensity due to climate change.

Is landslide risk increasing with climate change? How will climate change alter USGS landslide research, hazard mitigation planning and response? In your view, does the USGS currently have the resources and personnel to address these emerging landslide threats? How can the USGS help our states and communities better prepare for existing and emerging landslide threats?

Answer. The USGS cannot detect a general change in landslide activity, in part because a comprehensive catalog of landslide occurrence is not kept and baseline data are not available for comparison. Such an effort would require a level of resources well beyond what is envisioned in the National Landslide Strategy. Attributing any change in landslide activity to climate change is confounded by any increase that may be associated with land use change and increasing population. However, an increase in the frequency or severity of extreme weather events would likely cause an increase in landslide activity.

The USGS Natural Hazards Science Strategy (<http://pubs.usgs.gov/circ/1383f/>) outlines a framework to examine the role of climate change on landslides, particularly where their frequency and severity are expected to increase with increases in wildland fire and rising sea level.

The USGS has a Mission Area dedicated to advancing the understanding of changes in climate and land use. Current landslide program resources are dedicated to dealing with existing threats. We are exploring additional partnerships to better understand and address the potential interactions of climate change and landslides.

Question 5. USGS Research and LIDAR—As you know, LIDAR data is used to measure fine scale topography across landscapes. LIDAR data has proven to be key in identifying risk factors that could contribute to landslides, like the one in Oso, Washington earlier this year. LIDAR data is especially important in areas where there is significant vegetation, such as Western Washington state.

While some LIDAR is funded by USGS—it is usually funded through grants which states, counties, tribes and local communities use to pay contractors to take measurements. What happens to that data once it is used on a local scale?

Answer. The National Geospatial Program tracks publicly available LIDAR data and uses it to maintain the National Elevation Dataset. This process is transitioning to the 3D Elevation Program, or 3DEP. The primary goal of 3DEP is to acquire, and electronically deliver, a national LIDAR dataset to the public. In support of that goal, the USGS has developed a standard specification for LIDAR, and has awarded special contracts which are available to all Federal agencies, States and local partners to increase the opportunity for collaboration on LIDAR acquisitions.

Through 3DEP, the USGS has been successful in acquiring LIDAR (and other geospatial data) using funds from Federal, State, and local partners. In fiscal year 2013 every dollar invested by the USGS in LIDAR was matched by \$6 from partners.

The goals of using a collaborative process to acquire LIDAR include: 1) gaining efficiency and economies of scale in acquisition, 2) ensuring data are collected in formats that permit them to be useable with other collections, and 3) ensuring that the data collected are put into the public domain.

The Federal Geographic Data Committee, an interagency body, coordinates effective collection of geospatial information, including LIDAR, across the Federal government. All entities which collect LIDAR are encouraged to do so to national standards.

Question 5a. Does the USGS receive and analyze this LIDAR data and other similar landslide risk data?

Answer. Our landslide hazards specialists use these data and any other available data to analyze landslide threats.

Because much of this data collection is done by contractors on the local scale, does the USGS know which parts of the country have been mapped and which areas haven't? Is there value in pooling that data to look at risks on a regional or national scale?

Answer. We do know which parts of the country have been mapped using LIDAR. As part of an analysis completed in 2012 we developed a map of all available LIDAR data according to its quality level, i.e. the resolution of the LIDAR data. Below is a map* showing LIDAR available at a quality level necessary for landslide hazard investigations. (Adapted from www.csc.noaa.gov/inventory.)

Landslide specialists make use of this data to analyze hazards. 3DEP leverages resources to make more data available for many purposes, including landslide hazards research.

Question 6. Oso Landslide Response and Support—Seven weeks ago, a massive mudslide struck the community of Oso, Washington. 41 people have died and two are still missing. Despite this tremendous loss, the communities of Oso, Darrington and Arlington are working tirelessly towards recovery. USGS geologists, hydrologists and other researchers have been on the ground in Oso assisting in recovery efforts.

In addition to researchers and spotters on the scene, FEMA also requested additional USGS forensic geologists to conduct research to determine the root causes of the slide with the hope of minimizing future disasters like this one. Does the USGS have the resources it needs to support ongoing recovery and monitoring needs in addition to the forensic geology investigation? If not, what does USGS require to ensure Oso response and research needs are met?

Answer. The USGS mission to assist Snohomish County and Washington State to support the recovery operation ended with the suspension of active search operations and the handover of responsibility of the operation to Snohomish County on April 28, 2014. Maintaining the monitoring and near-real-time assessment of slope stability from March 27 to April 28 required the efforts of more than 20 USGS scientific, support, and managerial staff from four USGS Science Centers and Headquarters. This included the efforts of 12 landslide technical specialists, a number that represents about 60% of USGS personnel with the appropriate skills and experience to perform such duties. Additional resources would be necessary to continue the geologic investigation of the SR530 landslide.

Question 6a. Has the USGS received funds from FEMA to support USGS activities in Oso? If so, how much funding has been received? If not, when do you expect you will receive support from FEMA? Has the USGS been able to respond to all requests from FEMA and Snohomish County without immediate funding from FEMA?

Answer. The USGS was able to respond to a request from Snohomish to assess ongoing threats and provide monitoring to support the search and recovery operations. After a major disaster declaration was made, the USGS received three FEMA mission assignments at the request of the State and County. Those mission assignments total \$561,000 from FEMA to cover costs incurred in the response for both landslide and water level monitoring. At this time, the funding sources to support geologic investigation of the SR530 slide and examination of landslide hazards in the North Fork of the Stillaguamish River have not been identified. The USGS is formulating a proposal in cooperation with the State and County to establish an Interagency Agreement with FEMA to support this work. The approximate total budget is \$3,000,000.

RESPONSE OF SUZETTE M. KIMBALL TO QUESTION FROM SENATOR WYDEN

Question 7. The injection of wastewater from oil and gas development can, and in some cases does, trigger earthquakes. Since 2010, the rate of moderate-size earth-

*All maps have been retained in committee files.

quakes has increased dramatically in the continental U.S. as rates of wastewater injection have increased. Earthquakes have now been tied to wastewater injection in Oklahoma, Texas, Ohio, Colorado, and Arkansas. In Oklahoma, the rate of earthquakes has increased so substantially that geologists have termed it an “earthquake swarm”.

I am concerned about this correlation between the rise in earthquakes in oil and gas producing states and the injection of wastewater from oil and gas drilling activities in deep disposal wells.

A. What is your assessment of the science connecting wastewater injection in these states to the increase in earthquakes?

B. In your role as Director of USGS, what will you do to better understand this issue?

C. What should the next steps be to better understand and manage these events?

Answer. USGS has found that potentially damaging seismic events can be triggered by disposal of waste fluids from oil and gas production operations by injection into deep underground injection wells. While the basic geophysical mechanisms are well known, the specific subsurface conditions that are conducive to triggering are not, and it is not yet possible to make site-specific hazard predictions in advance. Thus, there is a need for more data and analysis to relate injection operations to induced seismicity, to connect these events to specific operational parameters and geologic conditions, and to develop monitoring and mitigation plans for decision-makers attempting to minimize seismic risks.

The USGS is now working with the Department of Energy and the Environmental Protection Agency to undertake research and work with industry on case studies that will illuminate the physical factors controlling induced earthquakes. Top-priority efforts are to develop methods to forecast whether or not a particular type of injection operation in a specified geologic setting would be likely to induce or trigger earthquakes, to perform comprehensive studies at two carefully selected field sites, and to establish procedures to adapt the National Seismic Hazard Maps to take account of the additional hazard due to earthquakes induced in association with wastewater from the production of oil and gas.

RESPONSE OF SUZETTE M. KIMBALL TO QUESTION FROM SENATOR PORTMAN

Question 8. Ohio is home to a portion of the Utica shale formation which has been a target of heavy investment by the oil and gas industry. What, if any, analysis has USGS conducted or is in the process of conducting related to the Utica formation?

Answer. In 2012, the USGS completed an assessment of the undiscovered, technically recoverable oil and gas resources of the Ordovician Utica Shale of the Appalachian Basin Province (<http://pubs.usgs.gov/fs/2012/3116/>). The Utica Shale assessment covered areas in Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia. The USGS estimated mean undiscovered resources of 940 million barrels of oil, 38 trillion cubic feet of natural gas, and 208 million barrels of natural gas liquids. These new estimates are for technically recoverable oil and gas resources, which are those quantities of oil and gas producible using currently available technology and industry practices, regardless of economic or accessibility considerations. The USGS Utica Shale assessment was undertaken as part of a nationwide project assessing domestic petroleum basins using standardized methodology and protocol.

RESPONSE OF SUZETTE M. KIMBALL TO QUESTION FROM SENATOR PORTMAN

Question 9. Asian carp remain a looming threat to the Great Lakes ecosystem. USGS plays an important role in combating the spread of invasive species like Asian carp. The agency conducts scientific analysis to support federal efforts to prevent, contain, control and manage invasive species nationwide. Last year, USGS was involved in analyzing four grass carp that were caught by fisherman in the Sandusky River, a tributary of Lake Erie. If confirmed, will you commit to supporting USGS' efforts to prevent the spread of Asian Carp to the Great Lakes?

Answer. The USGS has been conducting research to provide scientific information and develop methodologies to better prevent the spread of, detect, and control Asian carp. The Department of the Interior recognizes the threat posed to the Great Lakes region due to the spread of Asian Carp, and is taking proactive steps to prevent its spread to the Great Lakes. The USGS continues to work alongside the U.S. Fish and Wildlife Service on the Asian Carp Regional Coordinating Committee, a multi-agency body that coordinates efforts to prevent Asian carp from reaching the Great Lakes. USGS received additional funding in FY14 for Asian carp research, and those funds are being used to fast track the transfer of monitoring and control technology to field use.

I recognize the threat that Asian carp pose to the Great Lakes ecosystem and to the \$7 billion Great Lakes fishery. If confirmed, I will continue to support USGS science to detect, monitor and control the spread of this invasive species.

RESPONSE OF SUZETTE M. KIMBALL TO QUESTION FROM SENATOR FLAKE

Question 10. As Director of the USGS, I understand that you will be working with a variety of entities inside the Department of the Interior, as well as outside groups. Among those outside groups are various educational institutions. In Arizona, where we are always looking for ways to proactively address water resource challenges, the Water Resource Research Center at the University of Arizona has done great work analyzing diverse water issues. What opportunities do you see for continued collaboration and analysis between the USGS and educational institutes such as the Water Resource Research Center?

Answer. The Water Resources Research Center at the University of Arizona is one of 54 Water Resources Research Institutes (WRRIs) across the Nation in each of the 50 states, District of Columbia, Puerto Rico, U.S. Virgin Islands and Guam. The WRRIs are very valuable State-Federal partnerships that are becoming stronger every day. We have worked closely with the leadership of the WRRIs, and have put together a strategic plan to closely link the connection between the WRRIs and the USGS. Going forward into the future, the USGS will be able to demonstrate the value of these partnerships, and demonstrate the utility of the projects that are being conducted at the various WRRIs.

RESPONSES OF SUZETTE M. KIMBALL TO QUESTIONS FROM SENATOR MURKOWSKI

Question 11a. According to the USGS, many of the black brant who spend summers in Alaska winter in Baja California, near San Quintin Bay, Mexico. As you know, the comfort of these birds during their brief stopover in the Izembek National Wildlife Refuge has become a primary reason for which Secretary Jewell has denied a lifesaving road for the residents of King Cove, Alaska. I am trying to understand a bit more about the environment in which the black brant spend their winters. From what I understand, during their time in San Quintin Bay, the birds deal with disturbances by hunters, aircraft, vessels and other avian predators, is that correct?

Answer. USGS published science and observational data demonstrates that black brant are exposed to disturbance throughout their entire range, during breeding in Alaska, migration stop over locations in Canada and the lower-48 and during winter in Mexico. Birds deal with disturbance (predators, human foot traffic, and aircraft) by flying away from nesting, roosting or foraging sites and consequently spending less time engaged in these activities and expending energy in the response flight. Historically, the winter and spring distribution of brant included most of coastal North America from Washington to Mexico. Over time, much of the wintering range was abandoned in the U.S. by the birds, likely as a result of increased disturbance. Historical spring habitats in California were also abandoned due to hunting that was allowed in those areas. Additionally, USGS and USFWS science has found that more black brant stay in Alaska for winter. The number of birds wintering at Izembek has steadily increased over time, from 5,000-7,000 in the 1980s to 41,000-45,000 in the past three years. The direct energetic costs of disturbance and disturbance thresholds resulting in abandonment of historical wintering habitats are unknown.

Question 11b. If yes, can you describe how, with these disturbances, the birds are then able to make the migration flight to Alaska?

Answer. The return migration to Alaska occurs as a series of steps up the west coast, where birds stop and forage along the route. The energetic costs of disturbance may result in birds delaying departure from wintering areas, spending more time at staging locations attempting to "make up" for reduced body condition, or arriving at the breeding grounds in relatively poorer body condition. Brant rely on stored body reserves to both produce eggs and incubate the clutch. Therefore, reductions in body condition could result in fewer birds attempting to breed, smaller clutch sizes, and/or reduced nesting success.

Question 11c. Do you believe these disturbances in the black brant winter habitats are greater now than would be observed if a small, one lane gravel road were to be put in the Izembek refuge?

Answer. We don't know what the current level of disturbance in Mexico is. However, two wintering locations used by black brant in Baja Mexico (San Ignacio Lagoon and Ojo de Liebre) are biosphere reserves where hunting is prohibited. The daily energy expenditure for black brant wintering at Izembek lagoon is certainly higher than for birds wintering in Mexico. Also, food resources (eelgrass) are limited in Alaska and only available during low tides. Taking into account both higher ener-

getic costs and limited food supply, the energetic cost of individual disturbance events for black brant wintering at Izembek Lagoon is likely higher than for birds wintering in Mexico. I am unaware of any systematic studies comparing these energy costs to road use.

Question 12a. I have introduced a broadly bipartisan bill—with 18 other Senators also in support—entitled the Critical Minerals Policy Act of 2014. Earlier this year, we held a legislative hearing on it, and Dr. Larry Meinert of USGS noted that he was “thrilled and delighted” to see it introduced. With our nation heavily dependent on foreign nations for a wide variety of minerals, do you think there is more we—as federal policymakers—can be doing to reconstitute our domestic critical minerals supply chain?

Question 12b. Do you know, roughly or approximately, what percentage of USGS’s budget is devoted to mineral-related programs in this fiscal year? Are you concerned that it has dropped over time, or been overtaken by other priorities?

Question 12c. Again, Dr. Meinert noted that he was “thrilled and delighted” by our critical minerals bill. Have you read through it? Can you give us your reaction to it, and hopefully offer a similar statement of support for it?

Answer. The Critical Minerals Policy Act of 2014 addresses important issues of national concern. The legislation identifies appropriate responsibilities for Federal agencies, including the USGS, to respond to these national needs and provides welcome authorization for financial support to carry out those tasks. The Mineral Resources Program is a core part of the overall USGS mission and is the largest budgetary part of the Energy and Minerals mission area, one of seven mission areas that constitute the USGS. In 2014, approximately 4.5% of the total USGS budget was allocated through the mineral resources program. This number does not account for funds expended in other mission areas that contribute to mineral resource objectives, nor does it reflect reimbursable funding.

Dr. Meinert’s enthusiasm for the core mission of the Mineral Resources Program is shared at the highest level of the USGS. After a short hiatus to assess our minerals mission goals and objectives, we are ready to pursue those objectives aggressively. If confirmed, I will support and advocate for this program. I also share Dr. Meinert’s enthusiasm that the pending Critical Minerals Policy Act of 2014 addresses appropriate national priorities, and we welcome support for this part of the USGS mission.

Question 13a. One of the provisions within our Critical Minerals Policy Act is aimed at bolstering our forecasting capacity for mineral supply and demand. I think this is an important function, largely missing right now, that would benefit industries throughout our economy. a. Can you describe the current status of USGS’s capacity to forecast and analyze trends in minerals supply and demand for our critical industries?

Question 13b. Do you agree that a forecasting capacity would be worthwhile for the federal government to pursue?

Question 13c. What do you think it will take to enable the USGS to perform those functions?

Question 13d. With our nation heavily dependent on foreign nations for a wide variety of minerals, do you think there is more we—as federal policymakers—can be doing to reconstitute our domestic critical minerals supply chain?

Answer. The Critical Minerals Policy Act of 2014 addresses the important national need for accurate information about critical mineral resources. Such information is currently supplied by the National Mineral Information Center within the Mineral Resources Program of the USGS. This important information function, which has been carried out within a constrained budgetary climate, remains the gold standard for mineral resource information, on both the national and international levels. The ability to analyze this information to better understand future trends is a core capability of the National Mineral Information Center that we are in the process of rebuilding. The level of funding authorized in the Critical Minerals Policy Act of 2014 would enhance the USGS’s ability to rebuild this important function. As federal policymakers address the domestic critical minerals supply chain, USGS remains committed to providing the scientific information to inform decisions.

Question 14a. The last time the USGS released a study on water use data in 2009 was based on 2005 data. I understand that the USGS is working on the release of an update to that study. This data will greatly assist efforts on the energy-water nexus issues. a. When will the updated study be released?

Answer. The 2010 Estimated Use of Water in the United States is planned to be released in an electronic publication in late fall 2014. The paper copies of the report will follow soon after.

Question 14b. Will the updated data also include water consumption data in addition to the withdrawals data that was the only water use reported in the last report? I think both sets of data would be very useful.

Answer. For 2010, consumptive use information for only the Thermoelectric Cooling Water Sector will be included, and the consumptive use data will be released in a separate, stand-alone report, which is planned to be released in fall 2014. Producing scientifically defensible consumptive use estimates for all water use sectors is a complex and significant undertaking, and we have started by focusing on the thermoelectric cooling water sector. Research is underway on consumptive use estimation for other major sectors, including public supply water withdrawals and irrigation water withdrawals, but inclusion of these data in our routine reporting is still several years away.

Question 14c. To what extent does the USGS work with the Energy Information Administration (EIA) to coordinate the required data for energy-water related activities? Can this working relationship be strengthened and improved?

Answer. The USGS National Water Use Information Program works closely with the Energy Information Administration's Office of Electricity, Renewables, and Uranium Statistics on our energy-water related activities. We have worked very closely since 2009 to produce the first nation-wide model for estimating thermoelectric cooling water withdrawal demand and consumptive use. This model was recently released and documented in the following publication, which is available on-line at: <http://pubs.usgs.gov/sir/2013/5188/> "Methods for Estimating Water Consumption for Thermoelectric Power Plants in the United States". While working relationships can always be strengthened and improved, I feel that the work that USGS and EIA are doing together is one of the best examples of interagency cooperation.

Question 15. My home state of Alaska is very vulnerable to many natural hazards and disasters. There is a long standing partnership between the USGS, the state of Alaska, and the University of Alaska Fairbanks in hazards education, research, monitoring, and warning for earthquakes and volcanoes. These programs have been very successful, but have been severely limited by current budgets. What can be done to strengthen these partnerships?

Answer. USGS scientists work closely with State and university partners to better understand and address the volcano and earthquake hazards facing Alaskan communities. The recent anniversary of the great 1964 earthquake provided an opportunity to review the remarkable scientific advances of the past 50 years that are keeping people safer in Alaska and around the world; I deeply appreciate your recognition of these efforts through S. Res. 400.

In recent years, significant funding from the American Recovery and Reinvestment Act enabled upgrades to earthquake and volcano monitoring networks and supported investigations by a number of university and State partners. This year, USGS is working with Alaska Division of Geological and Geophysical Surveys and the University of Alaska Fairbanks to update the Alaska National Seismic Hazard Maps and to continue support for the Alaska Volcano Observatory. Also this year, the National Science Foundation-funded Transportable Array (TA) of temporary seismometers is moving from the Eastern United States into Alaska; the USGS is supporting this effort. A number of T A stations in the Lower 48 have been successfully adopted by partners and are remaining in place; similar partnerships in Alaska might enable instruments to remain after the experimental deployment ends, further strengthening Alaska's seismic networks.

It is expensive to maintain seismic and geodetic stations, particularly in remote parts of Alaska, but this scientific infrastructure provides the essential data that keep our scientific partnerships healthy and productive. If confirmed, I would be happy to work with you to explore other opportunities for expanding and strengthening partnerships to protect people in Alaska and around the world.

Question 16. A key part of USGS's traditional mission was to map American resources. Now we have whole new technologies to help with mapping of our resources, such as LIDAR (Light-Detection and Ranging) technology. What do you see as the survey's role in future mapping of the geophysical features of America and what is your view of how the survey should be working with the states on geology, besides other scientific research?

Answer. Conducting geological surveys remains an important component of the USGS mission. USGS continues to invest in numerous mapping activities, including the National Cooperative Geological Mapping Program, which advances the understanding of earth-surface processes, groundwater availability and quality, and energy and mineral resources. This program produces geologic maps and subsurface 3-dimensional frameworks that support mineral and energy exploration, and aquifer characterization which are used to mitigate against natural hazards (e.g. landslides). Through the data innovation and mapping initiative, the USGS continues

to invest in the growing need for high quality topographic data and the need for a wide range of other three-dimensional representations of the Nation's natural and constructed features. The Three-Dimensional Elevation Program initiative will systematically collect enhanced elevation data using LIDAR and other technologies across the United States. If confirmed, I look forward to continuing USGS' efforts toward advancing the mapping of geophysical features in the United States.

The USGS considers the states to be essential partners to acquire, analyze and disseminate information on a wide variety of geological issues. In addition to local coordination, the USGS meets with the state geologists twice yearly to identify new issues and needs for collaboration.

Question 17. The USGS has always been the lead in predicting oil and gas resources in America and worldwide. The agency's evaluations for Alaska's onshore potential, combined with BOEM off shore predictions, amount to a mean estimate of 43.8 billion barrels of yet untapped oil; 291 trillion cubic feet of conventional gas; and nearly 400 trillion cubic feet if unconventional gas is included (not including methane hydrate reserves). However, this work has been largely performed with limited seismic data, usually involving two dimensional testing, not three dimensional, and in some cases with no seismic data at all. I believe we need a reliable estimate of our natural resources. Do you agree that we should be funding a more detailed study of our nation's energy resources, including new seismic testing, so we can obtain a realistic estimate of our energy resources?

Answer. The USGS periodically updates its resource assessments to take into account advances in geologic understanding, industry practices, and new available data, such as two-dimensional and three-dimensional seismic data. The USGS has forged cooperative agreements to provide access to high-quality seismic surveys at significantly reduced costs. The USGS can now access a grid of 2-D seismic data, some of which were collected as recently as 2012, totaling nearly 250,000 line miles across Arctic Alaska, the Chukchi Sea shelf and adjacent parts of Russia, and the Beaufort Sea shelf and adjacent parts of Canada. Interpretation of these extensive data sets, often conducted in collaboration with the BOEM, assures an integrated federal perspective on oil and gas resource potential both onshore and offshore. The USGS strives to maintain expertise and capabilities for incorporating seismic data into its research and assessments to help reduce uncertainties associated with estimates of undiscovered resources. The technology to support these investigations is evolving rapidly. Our ability to engage in public-private partnerships is an important component supporting these detailed studies.

Question 18. In the past, the USGS has always been the lead in exploring for our nation's vast mineral resources. In recent years, however, your funding priorities seem less directed toward mineral discoveries. Alaska, though, still has vast areas that have been poorly mapped for resource potential. What is your view of the department's role in mineral exploration? Should USGS be increasing, not decreasing its mineral exploration work not just in Alaska, but nationwide?

Answer. The USGS is the leading Federal source for public science on mineral resources. The Mineral Resources Program is refocusing attention on mineral resources-particularly in Alaska, which is one of the five priority areas of the Mineral Resources Program. This attention includes basic geological mapping, geophysics and geochemistry, and a state-wide inventory of critical mineral resources in partnership with the State of Alaska (Division of Geological and Geophysical Sciences), as well as targeted studies on emerging discoveries such as the Bokan Mountain rare earth element deposit in southeast Alaska.

Question 19. The 1879 law creating the U.S. Geological Survey describes your position as follows: "The Director of the United States Geological Survey, which office is established, under the Interior Department, shall be appointed by the President by and with the advice and consent of the Senate. This officer shall have the direction of the United States Geological Survey, and the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain." Is your own view of the USGS's current role consistent with this original founding language?

Answer. Yes. Although the USGS does not manage resources, its scientists work to describe and understand water, energy, mineral and biological resources-all products and resources of the national domain-providing reliable, timely information to States, localities, tribes and the Department and its partners. In my view the Organic Act provides for the study of the Earth for the benefit of the American people, and all people around the world, and I wholeheartedly agree that the current role of the USGS is consistent with this fundamental sentiment.

Question 20. According to data provided by USGS to my committee staff last year, there are some 226 international agreements between the Geological Survey and other nations - 24 with China, 16 with Canada, 7 with Japan, and so on. As you

know, I have been advocating for the United States to play a leading role in global energy issues. Could you talk a bit about how the Survey's work overseas helps its mission here at home?

Answer. A 2012 National Research Council recognized that "... many of the issues that are critical to U.S. national interests are inextricably linked to global issues" and that USGS international science has an important role to support informed and effective decision making in the national interest. Energy is a key component of the global economy, with the potential to affect U.S. economic development and national security. The USGS is the sole provider of unbiased, publicly available estimates of geological energy resources for the United States, exclusive of the U.S. Outer Continental Shelf, and provides publicly available estimates of global oil and gas resources. The knowledge gained from recent USGS international energy studies, such as Arctic oil and gas, unconventional oil and gas, and gas hydrates supports the USGS mission here at home by providing impartial, robust, publicly available information for understanding potential global and domestic energy supplies and for discussions of national energy policy.

Question 21. It caught my attention when USGS recently announced that Afghanistan- and not the United States -was the "first country to be almost completely mapped using hyperspectral imaging data." I understand that capability can now be used here in the United States. So, my question to you is, how do you plan to use it here?

Answer. The groundbreaking hyperspectral imaging work in Afghanistan was made possible by the combined effort and funds of the Government of Afghanistan, Department of Defense, and US AID funds. This allowed development of new capabilities that can be applied in the United States, if funding becomes available. To demonstrate that capability, the USGS is currently beginning a demonstration project using hyperspectral imaging in central Alaska. If future funding becomes available it would allow us to expand such work to other areas of the United States.

Question 22. To your knowledge, are there any USGS personnel currently stationed overseas? If so, where and for what purpose?

Answer. Three USGS personnel are stationed overseas. One is the liaison to the Department of Defense's AFRICOM in Stuttgart, Germany. The other two are stationed in the United Arab Emirates supporting water resource development. All three are supported under full cost reimbursable agreements.

Question 23. To date, President Obama has created nine new National Monuments. As you know, a National Monument designation has wide-ranging effects and impacts on local communities and regional economies, and with the creation of these new public land units comes additional regulations and a new legal framework. Any potential resource development is effectively locked up. I would like to understand the role that USGS plays within the Department of the Interior when background research is being conducted for a potential monument. In my view, USGS should play an integral role in interagency conversations regarding monument designations so that Interior and the Administration fully understand the amount of energy and mineral resources that will be impacted by a designation. Does USGS, as a matter of course, make a point of providing information about resource potential to the Federal Land Management Agencies prior to the designation of a new National Monument? If not, why not? Please explain the role of USGS in the Monument designation process.

Answer. The USGS has no regulatory or resource stewardship mandates. The USGS monitors, analyzes, and provides scientific understanding about natural resource conditions, issues, and problems. The diversity of our scientific expertise enables us to carry out large-scale, multi-disciplinary investigations and provide impartial scientific information to resource managers, planners, and other customers, that can be used to inform decisions, such as the Monument designation process. The results of our research and monitoring are publicly available. I am not aware of a role the USGS has played in the monument designation process.

Question 24. When Congress considers legislation to establish or expand public land units, to what extent does USGS prepare estimates of the energy and mineral resources located there? As a matter of course, does USGS provide this information to Federal Land Management Agencies or any other agencies to help inform any testimony those agencies may give before Congress or decisions regarding the impacts of proposed legislation? If not, why not?

Answer. When Federal agencies are tasked with advising Congress about energy and mineral resource potential on Federal lands in relation to pending legislation, the USGS contributes to the evaluation by supplying the science necessary to assess resource potential as requested. The USGS has ongoing joint projects with Federal agencies such as BLM in inventorying mineral resources in Alaska and other regions of jurisdiction. In addition, the USGS is supplying the science to support land

management decisions and the designation process concerning the uranium assessment of lands surrounding the Grand Canyon.

RESPONSE OF ESTEVAN LOPEZ TO QUESTION FROM SENATOR MANCHIN

Question 1. As you know, the Bureau of Reclamation is one of the largest producers of hydropower in the United States. If confirmed, what would your priorities for this program be?

Answer. As I mentioned at my hearing, there remains a great deal of opportunity for creating additional hydropower production in the United States by utilizing existing reservoirs or dams for power generation. I believe we have to do everything that we can together with our partners to maximize the availability of hydropower. I understand that recent studies conducted by the Bureau of Reclamation have revealed that an additional 1.5 million megawatt-hours potential hydropower capacity could be generated at existing Reclamation sites. Hydropower is an important source of electricity, and if confirmed I hope to pursue further opportunities to develop sustainable, responsible hydropower.

RESPONSE OF ESTEVAN LOPEZ TO QUESTION FROM SENATOR CANTWELL

Question 2. As you may know, for decades there has been confusion over the scope of federal, state, and tribal jurisdiction on Lake Roosevelt, which is the reservoir of the Grand Coulee Dam. The Indian tribes that have fishing rights within the Lake Roosevelt National Recreation Area have long been concerned that jurisdictional uncertainty affects their ability to enact and enforce regulations necessary to protect their fishing rights. I understand that the Department has been working to clarify these issues with the tribes. If confirmed, would you commit to resolving these issues and implementing a solution going forward?

Answer. I have been advised that the Spokane Tribe of Indians and Confederated Tribes of the Colville Reservation have requested a delegation of authority from the Department of the Interior to enforce tribal fishing regulations on areas within their reservations included in Lake Roosevelt. It is my understanding that the request is under consideration by the Department. If confirmed, I commit to join my colleagues within the Department to work with you and the Indian tribes toward a resolution of this issue.

RESPONSES OF ESTEVAN LOPEZ TO QUESTIONS FROM SENATOR HEINRICH

Question 3. As you know, the Bureau of Reclamation is a critical partner in the construction of the Eastern New Mexico Rural Water System, which will provide a reliable water supply to seven communities in Eastern New Mexico, as well as Cannon Air Force Base.

Unfortunately, the funds available from the Bureau of Reclamation for the construction of this and other rural water supply projects has been far below what is necessary to complete them. For eastern New Mexico, it would take more than 180 years to complete the project if funding continues as it has-and this community is expected to run out of water in less than 20 years.

As commissioner, will you work with this committee, and other interested senators, to find a way to finish these rural water projects once and for all?

Answer. I recognize and understand your frustration with the pace of these important rural water projects. Access to clean water is not a luxury, it is a necessity of life and crucial for economic growth. As I mentioned in my opening statement, I have supported development of the Eastern New Mexico Rural Water Supply Project to deliver water from the Ute Reservoir on the Canadian River to communities like Clovis and Portales, New Mexico. If confirmed, I look forward to working with you within current budget constraints and to identify creative approaches for developing financing alternatives to continue to make progress in promoting certainty, sustainability, and resiliency for those who use and rely on water resources in the West, and in supporting the basic drinking water needs of rural communities.

Question 4. As you well know, all of New Mexico's water supply is fully appropriated-all of the water in the state is already spoken for. This means that smart water use-conservation, efficiency, coordinated management-are often the only tools that communities have to support new economic development, or to stretch their water supplies to make it through dry years.

Can you talk about how you've worked to promote conservation and efficient water use during your time at the Interstate Stream Commission? How would you apply those experiences as Commissioner of the Bureau of Reclamation?

Answer. As Director of the New Mexico Interstate Stream Commission, I was responsible for investigating, protecting, conserving, and developing New Mexico's waters. I am familiar with the efforts under way at the Bureau of Reclamation to address drought through conservation and efficient water use, including the ongoing Drought Contingency Planning effort, the Colorado River Basin Water Supply and Demand Study, and WaterSMART program. As part of the "Next Steps" process of the Colorado River Basin Water Supply and Demand Study, Reclamation and the Colorado River basin states have documented the successes of the municipal conservation efforts of cities like Santa Fe and Albuquerque, New Mexico and Las Vegas, Nevada each of which has been able to increase the population served while reducing overall water demand. Reclamation's WaterSMART program can provide a mechanism for expanding the use of these types of best practices. If confirmed, I look forward to building on the advances of Reclamation, and recognizing the importance of bringing all stakeholders to the table to have serious discussions on how we can make every drop count in the Colorado River Basin.

The New Mexico Interstate Stream Commission has, through collaborative river management processes, worked with other stakeholders (including Reclamation) to coordinate the timing and magnitude of reservoir releases and flows in the Rio Grande and the Pecos River to optimize water use efficiency for agricultural, municipal, environmental and interstate stream compact compliance needs and often to meet multiple objectives with the same water. Also, as the drought has progressed and reservoir levels have dropped, the Interstate Stream Commission has partnered with Reclamation to construct and maintain a pilot channel to route water through Elephant Butte reservoir's exposed sediment delta thus reducing water loss through spreading and evaporation. This pilot channel is estimated to conserve approximately 20,000 acrefeet/ year, twice the amount of water consumed by the city of Santa Fe, New Mexico. By virtue of its ownership of infrastructure on the rivers of the west and its river management activities generally, Reclamation will continue to have a key role in these types of collaborative river management processes. If confirmed I will emphasize the importance of Reclamation's leadership role in these types of stakeholder collaborations.

RESPONSE OF ESTEVAN LOPEZ TO QUESTION FROM SENATOR WYDEN

Question 5. Thank you, Mr. Lopez, for meeting with me before your nomination to discuss the importance of Reclamation and the urgent challenges associated with the critical resource- water. I appreciate getting a chance to discuss three water hotspots in Oregon that involve Reclamation: the Klamath Basin, Scoggins Dam in Washington County, and Bowman Dam in Crook County. All three are issues I've dedicated much time to this Congress and previous Congresses and I look forward to working with you to improve water management for those areas and across the west. Given that many of the issues around water in the west center around drought and water cycle disruption, I'd like to know what fresh ideas you would bring to the table to meet water challenges.

Answer. I offer three ideas to help meet our water challenges.

First, as we spoke about when we met in your office before my hearing, I believe that collaborative problem solving processes, while often frustratingly slow, are far better for generating workable solutions than litigation. Litigation is often initiated by parties who refuse to participate in these collaborative processes but rather choose to stay outside the process and "throw rocks". Many of the drought related and water cycle disruption issues you speak of end up triggering endangered species litigation. An idea which could perhaps help generate solutions is to reach out to entities who might otherwise be inclined to sue to encourage them to engage and participate in collaborative programs, a highly successful example of which is the Upper Colorado Recovery Implementation Program. Such participation would help sensitize all parties to the needs and objectives of others that might be otherwise overlooked.

Second, we need to expand and make pervasive education about water-its importance, its management, and the laws by which we govern it. Such education needs to be at all levels, from formal curricula for grade school through college to informal issue-specific education using mass media. Often, it appears that the participants in conflicts about water are misinformed or have a very shallow understanding of the issues. I believe that a better informed public would help shape better solutions to our water challenges.

Third, pre-planning among entities that all rely on a common source of water about how to manage a reduced supply (e.g., due to drought) both from a legal right perspective and from a voluntary sharing perspective. Such pre-planning would likely help entities understand the potential impacts of a reduced supply and options

for mitigating those impacts. Reclamation's Basin study program can provide an ideal forum for such pre-planning activities.

If confirmed, I look forward to discussing with you how to advance these ideas.

RESPONSES OF ESTEVAN LOPEZ TO QUESTIONS FROM SENATOR FLAKE

Question 6. The Colorado River Basin is now in its fifteenth year of drought with shortages expected to be declared as early as 2016 or 2017. In 2007, the Secretary of Interior adopted the "Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead." Those Guidelines were agreed to by all seven Colorado River basin states and provide for quantified reductions in deliveries to Arizona and Nevada when the water level in Lake Mead falls below certain trigger elevations. What steps has the Bureau of Reclamation taken in anticipation of these projected shortages in the near-term?

Answer. I am aware that Reclamation has aggressively pursued a multifaceted strategy together with all of the states in the Colorado River Basin- of planning, operational improvements and, in some cases, new facility construction in the face of persistent drought conditions on the River. While I have not been party to all of those activities in my current capacity, I have participated with Reclamation and the Upper and Lower Basin states in extensive discussions of potential future activities including options to increase water conservation, extend reservoir operations to protect critical reservoir elevations, and voluntarily manage demands. I would look forward to furthering these discussions if confirmed.

Question 7. What role can the Bureau of Reclamation play in helping to secure cooperation among federal agencies so that they jointly facilitate efforts by Colorado River water users to maintain adequate water supplies?

Answer. As I noted at the hearing, I am intimately familiar with the work being done on the Colorado River and in the Colorado River Basin. I have served as a representative to the Colorado River Compact, and I have served as commissioner to the Upper Colorado River Compact for the State of New Mexico. In that context, I am aware of the work being done by the Bureau of Reclamation in developing an Environmental Impact Statement (EIS) for a new Glen Canyon Dam Long Term Experimental and Management Plan (LTEMP). Reclamation is a colead agency in that effort along with the National Park Service. Each of the federal agencies involved in this effort has its own critical responsibilities. Reclamation's role in this effort will be to assure the meaningful engagement of federal agencies and other interested stakeholder groups including the seven Colorado River Basin States and also to assure that its own responsibilities of water and hydropower management are given due consideration. If confirmed, I look forward to working with the States and other stakeholders on this and other Colorado River issues.

Question 8. In December 2012, the Bureau of Reclamation released the Colorado River Basin Supply and Demand Study that presents options to address the anticipated future imbalance between water supply and water demand in the basin. It included options that would augment the supply of the Colorado River. Can you please share what the Bureau of Reclamation is doing to study, promote or develop augmentation projects for the Colorado River Basin?

Answer. The Study included a broad range of potential options to address the water supply and demand imbalance in the Colorado River Basin, which were put forth by participants, stakeholders, and the public. During preparation of the Study, Reclamation received input comprising over 150 options, including options related to small and large scale augmentation concepts. It is my understanding that the Department of the Interior is building on the findings of the Study and leading multi-stakeholder workgroups to investigate a full range of adaptation and mitigation strategies, which are being carried out in parallel with ongoing efforts throughout the Basin. If confirmed, I look forward to leading Reclamation in developing and implementing adaptation and mitigation strategies.

Question 9. There are ongoing negotiations to resolve water rights claims along the Bill Williams River and enhance the Lower Colorado River Multi-species Conservation Plan or MSCP. To the extent those negotiations involve the Bureau of Reclamation, can you commit to making them a priority?

Answer. The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) is a multi-stakeholder program, including local entities, which provides Endangered Species Act coverage for the Bureau of Reclamation's ongoing and future river operations on the lower Colorado River. It is my understanding that Reclamation has also been involved in the Bill Williams River negotiations and other LCR MSCP activities to meet remaining habitat conservation plan requirements. If confirmed, I will continue to support these activities, which include working with local entities, to implement this important habitat conservation plan.

Question 10. Throughout the West, we seem to be hearing more about the intersection of the Endangered Species Act and federal water policy. There are examples along the Colorado River regarding the balance between power production and fish downstream from Glen Canyon Dam and in California as drought has raised tension regarding water management in the Bay Delta. In many instances, the biological opinions and other rules regarding water management afford the Commissioner of Reclamation discretion in how he or she would manage the resource. You have some direct experience with this issue relative to the Silvery Minnow on the Rio Grande in New Mexico. Can you explain how, if confirmed, you would exercise your discretion as Commissioner to make water deliveries under extreme or sustained drought conditions?

Answer. I recognize that the application of the Endangered Species Act to western waters has often been the source of controversy and conflict. Severe drought conditions have only served to exacerbate these conflicts. As Director of New Mexico's Interstate Stream Commission, I am intimately familiar with this tension from my experience finding river management solutions to difficult endangered species issues on the Rio Grande, San Juan, Pecos and Canadian Rivers. If confirmed, I will bring to bear my experience in New Mexico managing water supplies to develop strategies to cope with drought. Specifically, I intend to work to identify and maximize regulatory flexibility to adjust to changes in the weather and the environment to bolster water supplies when possible while minimizing the impacts to fish and wildlife. My experience with the Rio Grande silvery minnow during last year's unprecedented drought showed how water managers can work together to time the releases of water to meet multiple purposes with the same water. Also, water managers were able to work with the Fish and Wildlife Service to find flexibility within biological opinions. Finally, there is a move to making adaptive management a feature of biological opinions and recovery implementation plans thus building in additional flexibility into the regulatory structure.

Question 11. Please provide a list of all electric power generation assets owned or partially owned by the Bureau of Reclamation or the Department of the Interior that are subject to EPA Clean Air Act regulations.

Answer. It is my understanding that all but one of the Department's electric power generation assets are hydropower units, with the majority of those being in Reclamation's portfolio; the coal-fired Navajo Generating Station, of which Reclamation is a partial owner, is Reclamation's only non-hydropower facility. All Reclamation and Department electric power generation assets must comply with applicable Clean Air Act regulations. I understand that Reclamation's power facilities can be found at: www.usbr.gov/power/data/faclname.html.

Question 12. If confirmed as Commissioner of Reclamation, would you have any concerns or objections with aggressively advocating the continued operation of the Bureau's electric generating assets?

Answer. No. As the Bureau of Reclamation is the second largest producer of hydropower in the country, I look forward to continuing the Department of the Interior's aggressive, sustainable hydropower agenda, if confirmed.

Question 13. Would you have any concerns or objections to opposing EPA regulation of the Bureau's electric generating assets if those regulations would curtail or terminate continued operation of Reclamation's electric generating asset?

Answer. Where the Bureau of Reclamation has electric generating assets that emit air pollutants subject to regulation by the Environmental Protection Agency under the Clean Air Act, I would commit to working to ensure, if confirmed, that the Bureau of Reclamation complies with its statutory and regulatory obligations. This includes engaging in cooperative activities to achieve emissions reduction alternatives where necessary. This type of regulatory flexibility is built into the Clean Air Act, as I have observed in the case of the Navajo Generating Station. There, a Technical Work Group consisting of stakeholders, non-profits, and the Department of the Interior were able to reach an agreement to significantly reduce emissions from the Navajo Generating Station, while providing greater certainty for Bureau of Reclamation water and power customers.

Question 14. If faced with a stringent EPA regulation that required significant capital costs associated with one of the Bureau's electric generating assets, where would you propose the Bureau look to secure funding to cover those capital costs?

Answer. Based on my experience with Reclamation projects, costs associated with facility operations are primarily the responsibility of project beneficiaries, pursuant to contracts for project repayment and operations and maintenance. This would include costs associated with capital investments necessitated by regulations.

Question 15. If EPA issues a regional haze rule for the Navajo Generating Station (NOS) that results in one unit of the plant being shutdown, do you believe that subsequent EPA Clean Air Act regulations, whether for regional haze, greenhouse

gases, or otherwise, should take the shuttering of that unit into account? If not, how should the EPA treat that unit as part of future rulemakings?

Answer. I understand that the Department is working with the EPA, tribes, project proponents, and a number other federal agencies on multiple issues at the NOS, of which the EPA's proposed Best Available Retrofit Technology (BART) rule is a central one. I understand that Reclamation and the Department are highly motivated to keep the NOS operating economically and in compliance with Clean Air Act regulations for as long as is feasible. I look forward to learning more about this issue if confirmed.

RESPONSES OF ESTEVAN LOPEZ TO QUESTIONS FROM SENATOR MANCHIN

Question 16. Mr. Lopez, I know you are quite familiar with the challenges associated with managing water in a drought environment. I am concerned that too often when water resources grow tight, there is an imbalance in how the agencies meet their environmental obligations when it comes to choosing between people and fish. Unfortunately, it appears the agencies often choose the fish, even when they have more flexibility than it would appear to supply water while protecting fish. So let me ask you:

a. What will be your approach to navigating the tensions between ensuring water delivery while accommodating environmental requirements?

b. How will you seek to empower your regional directors to ensure they are utilizing flexibility available to them under the law to the maximum extent possible to ensure water delivery to folks that need it in so many places?

Answer. As I mentioned in my opening statement, given the Interstate Stream Commission's broad statutory responsibilities, I have been involved in finding river management solutions to difficult endangered species issues on the Rio Grande, as well as the San Juan, Pecos, and Canadian Rivers. These efforts for balancing the preservation of endangered species with other resource goals, including the protection of water users in the arid southwest, has required innovation, collaboration, and perseverance. I believe that a number of things can be done to balance the tensions between water and power delivery and compliance with environmental laws. If confirmed, I will continue to advocate for an aggressive science program to better understand the effects of different alternatives in decisions regarding water resources. I will also advocate for adaptive management to build in additional flexibility into the regulatory structure. If confirmed, I will work to advance Reclamation's efforts to conserve water and operate more efficiently.

Question 17. The Bureau operates hundreds of dams, canals, and reservoirs across the West. Its facilities are decades old- many as old as 50-60 years, some as old as a century. In a time of limited resources and great need, what is your plan for prioritizing the replacement and upkeep of the aging infrastructure?

Answer. I appreciate that as Reclamation's assets get older, there is and will be an increasing need to support funding for aging infrastructure. It is essential that Reclamation maintain and improve its existing infrastructure in order to deliver reliable water and power, ensure system reliability and maintained safety and sustained water conservation. I appreciate that aggressive action is required to address future water supply challenges and, if confirmed, I look forward to working with you on creative approaches for developing financing alternatives to address the aging infrastructure needs of Bureau of Reclamation projects.

Question 18. As you know, there are serious drought conditions across the West, with seemingly no end in sight. As Congress grapples with this challenge year in and year out, it seems to be done on an adhoc, piecemeal basis. What actions do think Congress should take, if any, to address it in a more comprehensive, long term manner?

Answer. As Director of the New Mexico Interstate Stream Commission, I was responsible for investigating, protecting, conserving, and developing New Mexico's waters. I am familiar with the efforts under way at the Department of the Interior to address drought through conservation and efficient water use, including the ongoing Drought Contingency Planning effort, the Colorado River Basin Water Supply and Demand Study, and WaterSMART program.

Regarding Congressional action, I understand that the Department of the Interior has prioritized the WaterSMART program, which allows the Bureau of Reclamation and other Interior agencies to work with state and local water managers to plan for climate change, drought and other threats to water supplies. Under this initiative, it is my understanding that the WaterSMART grants program has contributed toward substantial water savings on annual basis. These grants help minimize the effects of drought on the environment and agriculture and urban communities, but

also contribute to drought resiliency. If confirmed, I would support increasing the authorization ceiling for the WaterSMART grant program.

Question 19. Last month, a comprehensive agreement was reached by all parties in the Klamath Basin. Shortly, there will be legislation before this committee that would codify that agreement. It is expected that the price tag will be in the hundreds of millions of dollars. What will the Bureau's role be in implementing that agreement, what share of costs be borne by the Bureau, and where do you expect the source of funding to be?

Answer. If confirmed, I intend to continue the Department's commitment to Klamath River Basin restoration and recovery goals. I appreciate that Reclamation has played a leadership role among federal agencies, states, tribes, and the public to develop a Basin-wide recovery plan to resolve long-standing water supply and fisheries issues. I have not had the opportunity to review the Klamath Basin legislation; however, if confirmed I look forward to working with you to address the long-standing and very complex issues associated with the Klamath Basin.

Question 20. The Western Watershed Enhancement Partnership program is a joint effort between the Bureau, the Forest Service, and the Natural Resource Conservation Service. It was launched as an interagency effort to protect water supplies from wildfires. What are your thoughts on the program?

Answer. My understanding of the Western Watershed Enhancement Partnership is that the initiative will pool federal resources with those of local water users to identify and mitigate risks wildfires pose to water supplies, irrigation, and hydroelectric facilities. I believe partnerships such as this, which rely on robust local participation and support, can achieve important results for western states. I look forward to learning more about the program if confirmed.

Question 21. A report generated by the Bureau of Reclamation stated that the November 18, 2013 fire at the John W. Keys III Pump-Generating Plant that caused hundreds of thousands of dollars in damage was caused by three separate errors by Reclamation employees and had nothing to do with the regular operation of the plant.

a. What responsibility does the Bureau bear, if any, regarding the costs of the extensive clean-up effort resulting for the fire?

b. Will the Bureau work with the water users to determine a fair allocation of the equipment-related costs?

Answer. I have been advised that during the performance of regular operations and maintenance, human error did occur at the John W. Keys III Pumping-Generation Plant on November 18, 2013. I have also been advised that Reclamation discussed a distribution of associated cleanup and repair costs with the Columbia Basin Irrigation Districts, and that the Districts are currently reviewing the proposed distribution.

Question 22. Extreme drought has become a harsh reality in many parts of the Western U.S. over the past decade, and our reliance on our reservoir systems has never been higher. In the Colorado River Basin, stakeholders are moving forward to adopt contingency plans to prepare for future drought conditions in innovative ways. What do you believe is the Bureau of Reclamation's role in developing these drought contingency plans in the Colorado River Basin?

Answer. There is no easy answer to solving the imbalance between the demand for water and the supply in the Colorado River Basin. It is going to take diligent planning and collaboration from all stakeholders to identify and move forward with practical solutions. If confirmed, I look forward to continuing Reclamation's work on finding solutions to drought conditions in the Colorado River Basin and, working with Congress and Basin stakeholders, using resources such as the Colorado River Basin Study, to explore actions we can take toward a sustainable water future.

Question 23. Regarding storage as a way to address water needs in the West:

a. Is there a demand for new sources of storage water in some basins?

b. If so, how will we build this new water infrastructure in an era of declining federal budgets?

Answer. I recognize that there is significant demand for new water storage within many river basins in the 17 Western states. Surface storage can be an important tool to alleviate drought and provide for sustainable water supplies during drought years. However, the current budget climate requires water managers to take a careful look at surface storage. Several factors that weigh on the feasibility of new surface storage include whether there is a sufficient customer base to provide for project reimbursement, whether there are more cost-effective alternatives, and whether environmental impacts, safety, and geological challenges can be addressed. If confirmed, I look forward to exploring all options, including surface storage, to secure water supplies in the West.

RESPONSE OF ESTEVAN LOPEZ TO QUESTION FROM SENATOR CORNYN

Question 24. In your current capacity as Director of the New Mexico Interstate Stream Commission, would you please describe your involvement in the Rio Grande Compact case on behalf of the State of New Mexico? As the nominee for the Commissioner of the Bureau of Reclamation, the agency charged with managing the Rio Grande Project in New Mexico and Texas, if confirmed, will you recuse yourself completely from any personal involvement on behalf of Reclamation or the Department of the Interior in the Texas v. NM Supreme Court case?

Answer. Because this is a matter in which the State of New Mexico and Interstate Stream Commission have been involved, I have been advised that, if confirmed, I will need to consult with the Department's ethics office on the extent to which I may participate in this matter.

RESPONSES OF ESTEVAN LOPEZ TO QUESTIONS FROM SENATOR BARRASSO

Question 25. I understand that you are familiar with my bill-S. 1800, the Bureau of Reclamation Transparency Act. This legislation would require the Bureau to compile its maintenance backlog in a report and make the report available to the public. My bill would also require the Bureau to update this report every two years. If confirmed, will you work with me to pass this bill so Congress can understand the Bureau's total maintenance backlog and take steps to address it?

Answer. I appreciate your interest and that of the public in obtaining additional information regarding the Bureau of Reclamation's infrastructure by supplementing existing aging infrastructure reporting efforts. It is my understanding that the Bureau of Reclamation has provided you with some recommendations pertaining S. 1800. Although I have not been privy to these discussions, if confirmed, I look forward to working with you on this legislation.

Question 26. If confirmed, what steps would you take to address the need to build more water storage in the West?

Answer. I recognize that there is significant demand for new water storage within many river basins in the 17 Western states. Surface storage can be an important tool to alleviate drought and provide for sustainable water supplies during drought years. However, the current budget climate requires water managers to take a careful look at surface storage. Several factors that weigh on the feasibility of new surface storage include whether there is a sufficient customer base to provide for project reimbursement, whether there are more cost-effective alternatives, and whether environmental impacts, safety, and geological challenges can be addressed. If confirmed, I look forward to exploring all options, including surface storage, to secure water supplies in the West.

RESPONSES OF ESTEVAN LOPEZ TO QUESTIONS FROM SENATOR HELLER

Question 27. As you know, the Colorado River system is facing the worst drought on record. The water level of Lake Mead, which serves as a reservoir, the primary water source of the entire Las Vegas Valley, has dropped more than 100 feet since January 2000. As water levels at the lake decline, there will be a reduction of available Colorado River water for Southern Nevada and other communities that rely on that reservoir for use. Our communities have taken an active role in water conservation. Local business, such as our casino resorts, and local governments have implemented measures to reduce consumption and increase efficiency. They are continuously looking for other innovated ways to conserve this precious resource.

What types of new policies do you believe Reclamation must prioritize to better manage the Colorado River Basin Water supply and will you commit to working closely with me and many of my other colleagues from Colorado River Basin states to develop policies that will ensure a secure water supply for our western communities as Commissioner?

Answer. There is no easy answer to solving the imbalance between the demand for water and the supply in the Colorado River Basin. It is going to take diligent planning and collaboration from all stakeholders to identify and move forward with practical solutions. If confirmed, I look forward to continuing Reclamation's work on finding solutions to drought conditions in the Colorado River Basin and, working with Congress and Basin stakeholders, using resources such as the Colorado River Basin Study, to explore actions we can take toward a sustainable water future.

Question 28. As a former state water official in a basin state, you had to work closely with the Department of the Interior on a variety of issues. How will you bring those local experiences you may have had with federal laws or agency actions to the Commissioner role?

Answer. As I noted at my confirmation hearing, if confirmed I will bring with me over two decades of water resource management experience to the Bureau of Reclamation. In my various positions, including most recently as Director of New Mexico's Interstate Stream Commission, I have worked directly on many of the issues that affect water management throughout the western United States. I believe strongly in a transparent and collaborative approach to problem-solving and looking for ways to resolve environmental concerns while balancing the need for development consistent with the law. My work on interstate water compacts, Indian water rights settlements, rural water projects, and environmental compliance have required me to establish strong relationships with diverse stakeholders, including our neighboring states, local governments, Indian tribes, agriculture and municipal water users, power users and environmental interests. If confirmed, I look forward to bringing that experience to the Bureau of Reclamation.

Question 29. I am familiar with many of the initiatives that Nevada's local utilities and communities have implemented to conserve water. Could you discuss some of the recommendations/initiatives the New Mexico state taskforce pursued and what you think basin states can do at the state and local level to better conserve scant water resources?

Answer. As in Nevada, communities in New Mexico have implemented aggressive conservation programs. The cities of Santa Fe and Albuquerque, New Mexico are among the lowest per capita water use municipalities in the nation. On occasion, the New Mexico State Engineer has conditioned water rights transfer approvals on successfully meeting conservation targets. Regarding river management, careful coordination among federal, state and local water management entities of the timing and magnitude of water releases from reservoirs has allowed New Mexicans to meet critical water needs while remaining in compliance with endangered species flow targets. New Mexico is in the process of implementing its Active Water Resources Management program to build capacity to allocate water in times of shortage. This can be done according to the seniority of the water rights or according to voluntary shortage sharing agreements among water users. If confirmed, I look forward to evaluating the utility of these types of practices in other locales and evaluating the expanded utility of best management practices generally.

Question 30. Based off your experiences at the state level, in what ways are federal environmental laws, particularly the Endangered Species Act, hamper, limit, or impede the Bureau from taking actions it needs to do to better manage our water supplies for the people of the west?

Answer. I recognize that the application of the Endangered Species Act to western waters has often been the source of controversy and conflict. Severe drought conditions have often served to exacerbate these conflicts. As Director of New Mexico's Interstate Stream Commission, I am intimately familiar with this tension from my experience finding river management solutions to difficult endangered species issues on the Rio Grande, San Juan, Pecos and Canadian Rivers. In the Rio Grande, during last year's unprecedented drought, water managers were able to work with the Fish and Wildlife Service to find flexibility within the existing biological opinion. If confirmed, I will bring to bear my experience in New Mexico managing water supplies to develop strategies to cope with drought. Specifically, I intend to work to identify and maximize regulatory flexibility to adjust to changes in the weather and the environment to bolster water supplies when possible while minimizing the impacts to fish and wildlife.

Question 31. What steps can be taken to reduce limitations on water delivery caused by such environmental laws?

Answer. Although it is difficult to generalize what types of tools are available from one river basin to another, it has been my experience that there are often a range of activities available to water managers to ensure reliable water supplies while complying with environmental laws. In New Mexico for example, the Middle Rio Grande Endangered Species Collaboration Program has been an effective mechanism to conserve and help recover endangered species, attain regulatory compliance for all parties, and provide for existing, ongoing, and future water development and management activities. Specifically, the leasing of supplemental water, adjusting seasonal flows, improving riparian habitat, furthering conservation, and continuing to evaluate and develop mechanisms for making water available for ESA purposes while protecting existing uses have benefitted both water users and the endangered silvery minnow in the Middle Rio Grande.

Question 32. Considering your experience on the Colorado River Basin Salinity Control Forum, what do you think can be done at the Bureau of Reclamation to improve the water quality and decrease the salinity of the river? In Specifically, can you address what kind of efforts the Bureau of Reclamation should prioritize to im-

plement in the upper basin of the river to decrease the damages to the lower basin caused by the high salinity of the water?

Answer. The Colorado River and its tributaries provide municipal and industrial water to about 33 million people and irrigation water to nearly four million acres of land in the United States. The salinity threat is a major concern in both the United States and Mexico. The Salinity Control Program is an important tool and has improved the water quality and decreased salinity in the Colorado River Basin significantly since its inception. Reclamation partners with the seven Colorado River Basin States (Basin States) and other federal agencies to reduce the annual salinity load in the Colorado River. I understand that Reclamation's salinity control programs account for 570,000 tons of that annual total salt reduction. One important priority for the Salinity Control Program is development of a salt removal alternative to the Paradox injection well which is nearing the end of its useful life and is the single largest salt removal facility on the River.

I strongly support Reclamation's work to award grants for new projects sponsored by nonfederal entities to control salinity loading anywhere in the Colorado River Basin. I understand that use of the competitive process has greatly reduced the cost of salinity control. If confirmed,

I will work to ensure Reclamation can continue to fund the Basinwide Program to continue this important work.

RESPONSE OF MONICA C. REGALBUTO TO QUESTION FROM SENATOR MANCHIN

Question 1. Dr. Regalbuto, while the Office of Environmental Management does not oversee any sites in my state, budget overruns from that Office do affect DOE programs in West Virginia. How do you plan to prevent cost overruns in the multi-billion dollar budget?

Answer. There are many challenges facing the Office of Environmental Management. Some cleanup work could not be adequately characterized when the current cost estimates were completed and as a result, the cost estimates were not always as accurate as hoped. If confirmed, I will work with EM federal and contractor employees, academia and industry to further improve project and contract management and determine how to mitigate cost overruns to the extent practicable through technology advancements.

RESPONSES OF MONICA C. REGALBUTO TO QUESTIONS FROM SENATOR CANTWELL

Question 1. The chemical vapor exposures suffered by Hanford workers are unacceptable. In the last 2 months, 28 people have become sick after being exposed to these vapors. In the public "State of the Hanford Site" meetings on April 29th in the Tri-Cities, workers asked for better access to personal protective equipment to prevent exposure.

How do you respond to accusations that there has been retaliation against employees who have asked for personal protective equipment?

How do you respond to claims that the study on tank vapors is not being conducted by an impartial third-party? The study is being conducted by Savannah River National Laboratory, and both Savannah River National Lab and Hanford are under the jurisdiction of the Department of Energy, suggesting a potential conflict of interest.

Answer. Protecting workers at all of our sites is an important issue and a core principle for the Department and it will be my priority if confirmed. I am aware that at least 28 workers at Hanford have been evaluated this year after possibly being exposed to vapors or smelling odors in the tank farms. It is my understanding that the site is working with the Savannah River National Laboratory to conduct an independent technical review of this issue with a focus on not just studying, but solving the issue. SRNL has the technical depth and resources by virtue of its decades of experience with similar issues and its ability to access national recognized experts from across the country. In addition, National Laboratories uphold the highest scientific principles and conduct rigorous peer reviews. If I am confirmed, I expect to be very involved in Hanford, tank issues and developing ways to protect the workforce. I would be happy to work with you and the Washington State delegation on these important issues.

Question 2. Hanford workers and the Union that represents many Hanford workers have expressed concern that after exposure, medical claims were not being adequately addressed. DOE has consolidated the administration of workers compensation claims across the Hanford complex at one contractor, Penser. There are concerns that Penser might seek to deny valid claims. The Hanford Atomic Trades

Council has asked Washington State's Department of Labor and Industries to decertify Penser as a third party administrator over this issue.

How do you response to these claims, and what would you do as Assistant Secretary to make sure that Hanford worker claims are addressed?

Answer. Protecting workers at all of our sites is a core principle, and it will be my priority if confirmed. My understanding is that the authority to determine workers' compensation claims lies solely within the Washington State Department of Labor and Industries.

If confirmed, I will ensure that DOE maintains open lines of communication with workers to address their concerns and be certain that the workers understand their rights under the workers' compensation laws.

Question 3. The State of Washington and the Department of Energy are currently in an 8-week period of mediation to determine how to amend the Consent Decree, which is the agreed path forward for clean-up. It is critical that all parties negotiate in good faith, in order to get the best outcome possible. If confirmed during this time, do you commit to negotiating with the State of Washington in good faith, and to establishing a more transparent timeline for clean-up activities?

Answer. I am familiar with the key challenges associated with the Waste Treatment Plant. I am also aware that the Department of Energy and the state of Washington are engaged in good faith negotiations to try to reach agreement on an amendment to the Consent Decree. If confirmed, I am committed to continuing to work with the State of Washington on amending the Consent Decree as appropriate.

Question 4. Technical difficulties related to the Waste Treatment Plant abound, yet our world-class scientific expertise at the Pacific Northwest National Laboratory is less engaged in Hanford clean-up than ever. As Assistant Secretary, would you further engage PNNL to guide the clean-up process? Can you tell me how you would go about ensuring that PNNL's expertise is fully utilized?

Answer. I strongly agree that Technology Development and Deployment (TDD) activities conducted by the DOE national laboratories and other organizations are crucial to the Department of Energy's (DOE) mission of effectively remediating and closing contaminated sites on schedule and within budget. Investment in our TDD activities has a distinct potential to generate significant life-cycle cost savings in this mission. PNNL provides unique expertise. From 2003 to 2008, I served as the head of the Process Chemistry and Engineering Department at Argonne's Chemical Sciences and Engineering Division. If confirmed, my prior roles as a researcher and manager, as well as my previous position in the Office of Environmental Management, will enable me to effectively explore how the technical and scientific capabilities of all of our National Laboratories, including Pacific Northwest National Laboratory, can be better utilized for the Department's clean-up mission at Hanford and across the complex.

If confirmed, I will continue to actively engage and leverage the expertise of PNNL and other national laboratories as EM executes its cleanup mission.

Question 5. The President's budget request indicates that DOE is reducing its commitment to the Richland Operations Office. This office is in charge of protecting the Columbia River from contamination from the Site, and returning land to the community for both industrial use and for recreation, which will contribute to the economic health of the region. This is also the Office that is preparing to tell the Hanford story, and its contribution to U.S. victory in World War II, through the establishment of the Manhattan Project National Historical Park.

Will you commit to keeping to the clean-up schedule that has been agreed to under the Tri-Party Agreement and Consent Decree, including the milestones already in place for both clean up and return of land to the community?

Will you commit to maintaining the Richland Operations Office budget at about \$1 billion?

The current Director of the Richland Operations Office has announced his retirement, effective next month. Now is not the time for the Department to be dialing back on its commitment to return these cleaned-up lands to the community. I would like your commitment that you will find a new director who is committed to keeping work on schedule.

Answer. Hanford workers and the Tri-City communities have made tremendous contributions to defending our nation. As Assistant Secretary I would work to ensure our obligation to cleanup Hanford remains a top priority for the Administration. The cleanup at Richland has been very successful in the past and it is important to keep making meaningful progress on cleaning up Hanford. If confirmed, I would work to ensure the new Manager of the Richland Operations Office is committed to this vision and that we work together with the State of Washington and other regulators to continue the progress on Hanford cleanup.

RESPONSE OF MONICA C. REGALBUTO TO QUESTION FROM SENATOR HEINRICH

Question 1. I think the job you are taking on may be one of the most technically challenging in the government. As recovery efforts get underway at the Waste Isolation Pilot Plant in New Mexico I urge you to make a trip out to Carlsbad to meet with the community. I agree with your assessment that reopening WIPP is the top priority; however, I found very troubling the litany of serious management failures cited in the two accident reports.

What will be your approach to implementing the recommendations of the two reports of the accident investigation boards?

In light of the substantial changes at WIPP in operations, design, and management that were recommend in the two accident reports, should DOE consider re-establishing independent oversight of the recovery and future operation activities at WIPP?

Answer. As the Nation's first operating repository, WIPP is a critical asset to the Department and the nation. It is very important that the recovery efforts are done as safely and efficiently as possible while ensuring the safety of the workforce and the public. I've worked on many WIPP issues over the years, and while I am not personally involved in the recovery efforts at this time, I agree that EM and the Department must take a close look at the Accident Investigation Board reports for both incidents to determine what improvements need to be made across the board to ensure that WIPP will be reopened and operated safely. I understand that EM is now evaluating these reports and working on a Corrective Action Plan. If confirmed, I expect to be very involved in the WIPP recovery effort and I pledge to work closely with you and the New Mexico delegation on this important issue.

RESPONSES OF MONICA C. REGALBUTO TO QUESTIONS FROM SENATOR WYDEN

Question 1. At Hanford, a contractor fired a whistleblower employee—Donna Busche—who was listed in the contract as “essential personnel”—and DOE did nothing. Hanford contractor personnel are also being required to sign non-disclosure agreements to prevent them from disclosing problems in the future. I also understand that DOE personnel are being told that they too will be punished if they disclose “official use only” information. If you are confirmed, what are you going to do to change the management culture in the DOE clean-up program that intimidates and punishes those employees—both contractors and Federal employees—who come forward to raise concerns, especially at Hanford, but at all EM sites? Please include any contract modifications or other measures that you would institute to ensure that contractor personnel are not retaliated against, as in the case of Ms. Busche.

Answer. The Department remains committed to improving the safety culture across the DOE complex. If confirmed, I will work to create a work environment in which employees feel safe from reprisal when raising safety concerns, where differing points of view are solicited and encouraged, management provides relevant and timely information to the workforce, and vigorous corrective action programs are effectively implemented. I understand that many of these actions to strengthen the safety culture have already been completed at Hanford, and many more are underway or planned. The Department and I clearly recognize the importance of having a robust safety culture in place at Hanford and across the DOE complex. If confirmed, as part of that process of improvement, I would consider all of the tools, including contractual measures, available to the Department. I am committed to working with you to ensure that this important work continues and that we achieve improvements that will keep our workers safe and enable us to complete our mission.

Question 2. Intimidation of employees is not just a problem at Hanford. A 2012 Safety Conscious Work Environment (SCWE) self-assessment at WIPP and the Carlsbad Operations Office found that 60 percent of the Federal employees and 40 percent of the contractor employees reported that they did not believe they could confidently report safety concerns. That facility is now shutdown because of two recent accidents. Earlier this year, Hanford conducted a similar SCWE assessment. Please provide the results of that assessment.

Answer. I am not personally familiar with the results of a recent SCWE assessment at Hanford. If confirmed, I will work with you on continuing to improve safety culture and provide you with the results of the SCWE assessment.

Question 3. In March, DOE proposed to make a number of changes to the Hanford clean-up schedule under the Tri-Party Agreement. The State of Washington has proposed its own changes to the clean-up schedule that are focused on building new tanks and emptying out the oldest, leaking single-shell tanks. Those of us in Oregon have some thoughts of our own. To what extent will you, as the new Assistant Sec-

retary for Environmental Management, be able to use your extensive experience in chemical engineering and nuclear materials to re-examine the Hanford plans that DOE has already come up with and take a fresh look at them?

Answer. The tanks at Hanford hold 56 million gallons of radioactive and chemical waste. DOE is committed to completing the tank waste mission at Hanford. While continued safe management of the tanks and the waste is imperative, the best solution is still to safely immobilize and ultimately dispose of this waste. I agree with the phased approach outlined by Secretary Moniz in DOE's recent proposal to amend the consent decree. This approach is the foundation for an achievable and sustainable plan for putting this important mission back on track. If confirmed, I will use my expertise to further inform and refine, as needed, the path forward for the cleanup of Hanford, including the tank waste cleanup mission, and will work with you and the Washington State delegation on these important issues.

RESPONSES OF MONICA C. REGALBUTO TO QUESTIONS FROM SENATOR PORTMAN

Question 1. DOE is conducting decontamination and decommissioning (D&D) cleanup of the Portsmouth Gaseous Diffusion Plant (GDP) in Piketon, Ohio. What do you know of the cleanup effort? In your view, what are the current and future challenges that the site faces?

Answer. I know that EM is responsible to clean up the contamination resulting from the plant's historical uranium enrichment operations and stabilize uranium hexafluoride cylinders. I also understand the Department is responsible for the decontamination and decommissioning (D&D) of the large Gaseous Diffusion Plant former leased to the US Enrichment Corporation. All these activities involve more than 300 facilities, processing more than 200,000 metric tons of depleted uranium hexafluoride, and cleaning up contaminated groundwater and groundwater. The D&D is supported by appropriations and a uranium transfer program that allows the Department to obtain services from our contractor in exchange for the uranium. The future of that bartering program is dependent upon the uranium inventory and market analysis. I understand the local community and the state are very interested in the cleanup mission as it supports potential future re-industrialization of the site and jobs in an economically depressed area.

Question 2. DOE is targeting completion of D&D and cleanup of the site by 2024. Do you think this target date is achievable given the current DOE funding request?

What could be the potential impacts to taxpayers if this target date slips?

Answer. I know that DOE has tasked the contractor to develop the Site-wide Lifecycle Baseline for the D&D project. This will result in the establishment of the overall lifecycle baseline for the site to which future scenarios for completion will be compared. My understanding is that once the overall lifecycle baseline is completed and we have completed our review, we will be better able to assess potential impacts. I look forward to working with you on this matter should I be confirmed.

Question 3. The project employees approximately 2,000 employees. DOE was to have finalized its plans for building demolition and waste disposal for Portsmouth in 2012. In a letter to my office dated October 21, 2013, Dr. David Huizenga wrote that his office planned "to issue Proposed Plans and hold public comment periods for both projects in the spring and summer of 2014; and [planned] to complete the regulatory decision-making process by issuing two Records of Decision by September 2014." It is my understanding, that given this schedule, the earliest work could begin would be January of next year. Is the schedule Dr. Huizenga outlined still valid?

Answer. I am not aware of the detailed schedule for these decision documents, but my understanding is the regulators are working closely with DOE to move these decisions forward sometime late this summer or fall.

Question 4. If confirmed will you prioritize the effort to finalize the building demolition and the waste disposal plans as soon as possible?

Answer. If confirmed, I will work to prioritize the efforts as soon as possible.

Question 5. It is my understanding that DOE recently re-interpreted a provision of OMB Circular A-11 to require that environmental restoration and D&D projects (including building D&D and onsite disposal facility construction) be funded through line item appropriations. Portsmouth GDP funding is impacted by this decision. I am told this interpretation will impose notification and funding requirements on these projects which will result in a loss of flexibility to address changing project conditions and which could lead to project delays. Will you commit to me, that if confirmed, to provide an explanation for why this change was made and to determine if DOE can continue to fund these projects through its operating funded accounts?

Answer. If confirmed, I will examine this issue and discuss the changes with you as we work together to continue progress on EM's environmental restoration and D&D projects, including those at Portsmouth, consistent with applicable laws, regulations and policies.

Question 6. DOE has been bartering uranium from its stockpile to the open market to help fund the cleanup at the Portsmouth GDP. The agency had limited itself to a target for uranium sales and transfers of no more than 10 percent of annual domestic fuel requirements for uranium. In 2012, I advocated for an increase to the uranium barter program to help cover a funding gap for the Portsmouth cleanup. To his credit, then Secretary Chu agreed to increase barter sales from 1,600 to 2,400 metric tons per year. Before doing so, he ordered an independent study of its market impact. That study demonstrated the barter program does not have an adverse material impact on the domestic uranium mining, conversion, and enrichment industries. Last year, the uranium barter program generated more than \$200 million in funding and was used exclusively to pay for important Environmental Management cleanup activities at Portsmouth. Without these funds, it is clear that significant job impacts would have occurred and cleanup would have slowed down. Beyond the important employment and cleanup benefits of the barter program, it should also be noted that the barter funds directly offset an equal amount of taxpayer funds and therefore reduces our annual budget deficit. Secretary Moniz testified before this Committee last year that he intends to continue the barter program and to use it to help fund the ongoing Portsmouth GDP cleanup activities. If confirmed, will you also support the bartering program?

Answer. I understand just this month the Secretary issued the most recent determination permitting the Department to continue to make the uranium transfers to fund accelerated cleanup. The continuation of this program is consistent with the Department's principles and policies and helps to fund important cleanup at Portsmouth GDP. If confirmed, I will support the continued use of the barter program.

Question 7. It is my understanding that DOE formulated its fiscal year 2015 budget request for the Portsmouth site based on an estimate that FY2015 barter proceeds would be approximately \$188 million. Over the past several months, uranium prices have declined and the projected barter proceeds for FY2015 are now less than \$188 million. If confirmed, what measures will you pursue to cover a gap in funding Portsmouth D&D in FY2015 caused by lower uranium prices should a gap occur?

Answer. Senator, I am very concerned about the falling uranium prices and their impact on our cleanup mission. If confirmed, I will work with Congress and internally within the Department to assess what measures are available to cover any potential gap in funding due to lower uranium prices.

RESPONSES OF MONICA C. REGALBUTO TO QUESTIONS FROM SENATOR MURKOWSKI

Question 1. I am very concerned about the radiation leak that occurred on February 14 at the Waste Isolation Pilot Plant in New Mexico. Recent reports suggest that the roof and walls of Panel 7 in the WIPP facility remain intact and may not be the cause of the leak. The cover bags, however, were damaged.

Has the cause been determined yet?

Were the containers those bags protected also damaged?

When will the facility be re-opened?

Answer. I understand that while the recovery teams were in the underground at WIPP, they discovered damage to magnesium oxide bags in the area that is believed to be the location of the release event. I am told that samples are being analyzed and recovery teams are continuing their work to determine the cause of the release. I believe the focus must be on safely executing recovery efforts as EM and the site work to reopen WIPP. If confirmed, I expect to be very involved in the WIPP recovery effort and I pledge to work closely with you and the New Mexico delegation on this important issue.

Question 2. In the absence of new legislation on the back-end of the fuel cycle what options exist for DOE to address the pressing question of what to do with the civilian spent nuclear fuel that continues to accumulate at nuclear facilities across the country? What are your thoughts on the comingling of defense and civilian nuclear waste? Are there any specific challenges or issues you see with this option?

Answer. In the absence of new legislation, I know that the Department is engaged in research and development activities and integrated waste management activities, consistent with the Administration's Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste. In addition, from my role in the Office of Nuclear Energy, I have led a team within DOE that has taken a comprehensive look at the inventory of DOE-managed high level waste and spent nu-

clear fuel and the options for disposal of some of these waste streams either in a so-called “commingled” repository or, potentially in a separate defense-only repository. If confirmed, I look forward to working with you on issues surrounding the disposition of defense waste within the Environmental Management program.

Question 3. I understand that you have led work on various aspects related to the transportation of spent nuclear fuel from shutdown power plants. Would you please provide me with a brief summary of what these studies have yielded thus far? What are the challenges and potential solutions you think exist in dealing with spent nuclear fuel both at the shutdown and operating sites?

Answer. I can assure you that the Department is working on various aspects related to the transportation of spent nuclear fuel. If confirmed, I would be happy to work with you further on this issue.

RESPONSES OF MONICA C. REGALBUTO TO QUESTIONS FROM SENATOR BARRASSO

Question 1. In September 2011, the Government Accountability Office (GAO) issued a report finding that the Department of Energy (DOE) violated Federal law in seven transactions in which DOE transferred uranium to two contractors in exchange for clean-up services. Specifically, GAO found that DOE violated the miscellaneous receipts statute (31 U.S.C. 3302(b)) when transferring 1,873 metric tons of natural uranium to pay for \$256 million in clean-up services.

During your tenure at the Office of Environmental Management, did you have any role in the transactions that were the subject of GAO’s September 2011 report? If so, please fully describe your role.

On May 15, 2012, Secretary Chu issued a Secretarial Determination authorizing uranium transfers from DOE.

During your tenure at the Office of Nuclear Energy, did you have any role in the May 15, 2012 Secretarial Determination or any work that served as a basis for that determination? If so, please fully describe your role.

Secretary Chu’s May 15, 2012 Secretarial Determination states that the authorized sales and transfers of uranium “will not have an adverse material impact on the domestic uranium mining, conversion, or enrichment industries.” Since May 15, 2012, the U.S. spot price of U3O8 has fallen over 44 percent, from an estimated \$52/lb. on May 15, 2012 to \$29/lb. on May 9, 2014. I understand that is the lowest price for U3O8 since July 2005. It is also less than the \$36.57 that the Energy Information Administration (EIA) says it costs to produce a pound of U3O8 in the U.S. and far less than the \$62.41 that EIA says it costs to produce a pound of U3O8 in the U.S. when total expenditures (excluding exploration costs) are considered. On May 1, 2014, EIA released its 2013 Domestic Uranium Production Report. That report explains that there has been over a 19 percent drop in employment in uranium exploration and mining between 2011 and 2013.

Do you believe Secretary Chu’s Secretarial Determination has proven correct and that the sales and transfers of uranium authorized on May 15, 2012 have not had an adverse material impact on the uranium mining industry in the U.S.? If so, why?

Answer. During my time with EM, I worked in the Office of Engineering and Technology which was charged to reduce the technical risk and uncertainty in the Department’s multi-billion dollar cleanup program; provide technical solutions where none existed and provide innovative solutions that enhanced safety and operating efficiency. I did not have a role in the transactions that were the subject of GAO’s September 2011 report. However, I am aware that this issue is very complicated and that the Department issued a lengthy response to the GAO that reflects their position that the transfers were compliant with applicable statutory obligations.

The domestic uranium industry plays an important role in our nuclear fuel supply. Robust uranium supplies provide competition in the fuel market to help ensure reliable and affordable nuclear power generation. The health of the domestic uranium industry has long been a factor in DOE’s overall uranium strategy. If confirmed, I will ensure that any uranium transfers continue to comply with applicable statutory obligations. As part of that process, I will look at implications for the uranium mining industry of covered sales or transfers. I will work to ensure that the Secretary has sufficient information to make a determination on this important issue.

Question 2. In your testimony, you state that: “The Environmental Management program has before it some of the most complex, challenging cleanup work, and accomplishing our goals will mean applying innovative strategies to one-of-a-kind challenges.” If confirmed, would you apply “innovative strategies” that include transferring, bartering, or selling DOE’s excess uranium inventory?

Answer. If confirmed, I will promote scientific and technological innovation in all manners of the Office of Environmental Management mission including the uranium transfer program. If confirmed, I will work to ensure that any future transfers of uranium continue to comply with the law and are transparent, and I would also look forward to working with you further on this important issue.

Question 3. If your answer to Question 4 is yes, what, if any, steps would you take to: (A) ensure that any future transfers, barter, or sales of uranium comply with section 3112(d)(2)(B) of the USEC Privatization Act (42 U.S.C. 2297h-10(d)(2)(B)); and (B) increase the transparency of future transfers, barter, or sales of uranium?

Answer. If confirmed, I will work to ensure that any future transfers of uranium continue to comply with the law and are transparent, and I would look forward to working with you further on this important issue.

Question 4. Please provide the Committee with an estimate of what the Office of Environmental Management intends to spend on the decommissioning and clean-up work for the current fiscal year as well as each of the next two fiscal years.

Answer. My understanding is that the Office of Environmental Management will spend on the order of \$598M in FY2014 and is requesting some \$530M in FY2015 for the continued D&D of the gaseous diffusion plants located in Oak Ridge, Tennessee; Portsmouth, Ohio; and Paducah, Kentucky.

RESPONSE OF MONICA C. REGALBUTO TO QUESTION FROM SENATOR HELLER

Question 1. As you likely know, I am extremely vocal with my serious concerns about the safety of the Yucca Mountain Nuclear Waste Repository and the suitability of Southern Nevada as the resting place for our nation's spent nuclear material. I recognize the need to address our nation's problem with spent nuclear fuel, but it must be solved through careful consideration of all alternatives based on credible scientific information. And most importantly, and plan must be rooted in state consent. The State of Nevada, a state without any nuclear power plants, has been clear that it does not want the nation's spent fuel.

Given the state of Nevada's opposition to Yucca Mountain Nuclear Waste Repository, do you believe that the nation should look past Yucca and towards consent-based siting for long-term spent fuel storage, a policy consistent with the President's own January 2012 Blue Ribbon Commission report?

Answer. The Administration embraces the principles of the Commission's core recommendations and support the goals of the establishing a new, workable, long-term solution for nuclear waste management. Any workable solution for the final disposition of used fuel and nuclear waste must be based not only on sound science but also on achieving public acceptance. The Administration believes a pathway similar to what the Blue Ribbon Commission laid out—a consent-based solution for the long term management of our used fuel and nuclear waste—is one that meets the country's national and energy security needs.

I understand that the Department is working in support of the President's Blue Ribbon Commission recommendations and approach and if I am confirmed, I will continue to support the Department and the Administration's pathway to finding a workable solution for long term nuclear waste management.

Question 2. As you know, DOE and the State of Nevada have been in discussions regarding the shipment of low-level nuclear waste from Oak Ridge, Tennessee to the Nevada National Security Site, located approximately 65 miles northwest of Las Vegas. Last year, when DOE's decision to bring the shipments to Nevada came to light, understandably, it caused public concern. I remain concerned about any plan to bring nuclear waste to Nevada, but I am encouraged with the increased collaboration and progress made since the DOE-Nevada Working Group was formed.

As Assistant Secretary, will you commit to continuing the work of the DOE-State of Nevada Working Group?

Answer. I am aware of this issue and I certainly appreciate its importance to you and the State of Nevada. I understand that the Secretary and Governor Sandoval created a working group, and am pleased to hear you are encouraged by the progress made thus far. I believe it is critical to continue an ongoing dialogue between Nevada and DOE, and should I be confirmed, I pledge to continue those efforts.

Question 3. Can you commit to work with the State of Nevada and the Nevada Congressional Delegation to address the transportation, transparency, and collaboration issues associated with the ongoing mission of the Nevada Nuclear Security Site?

Answer. If confirmed, I would be happy to work with you, the Nevada Congressional Delegation and the State of Nevada on issues of importance to Nevada National Security Site.

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