

**INTERIOR, ENVIRONMENT, AND RELATED
AGENCIES APPROPRIATIONS FOR 2011**

HEARINGS
BEFORE A
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS
SECOND SESSION

SUBCOMMITTEE ON INTERIOR, ENVIRONMENT, AND
RELATED AGENCIES

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PART 8

**BP-TRANSOCEAN DEEPWATER HORIZON OIL
DISASTER: ONGOING RESPONSE AND
ENVIRONMENTAL IMPACTS**



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INTERIOR, ENVIRONMENT, AND RELATED AGENCIES APPROPRIATIONS FOR 2011

THURSDAY, MAY 27, 2010.

BP-TRANSOCEAN DEEPWATER HORIZON OIL DISASTER: ONGOING RESPONSE AND ENVIRONMENTAL IMPACTS

WITNESSES

HON. KEN SALAZAR, SECRETARY, U.S. DEPARTMENT OF THE INTERIOR
DAVID HAYES, DEPUTY SECRETARY, U.S. DEPARTMENT OF THE INTERIOR

OPENING STATEMENT OF CHAIRMAN MORAN

Mr. MORAN. Secretary Salazar, thank you for joining us this morning on an issue that is on everyone's minds, and we need to know what is on your mind.

I guess I should ask you, are you having fun yet? I know this has been a very difficult time for you. And there have been so many hearings, that you get to the point where you almost wonder, is it just that—not so much a matter of everything being asked but has everyone asked it. We are going to try in this hearing to focus on those issues that may not have been fully explored that are particularly pertinent to the Interior Appropriations process and our funding responsibilities.

It is nice to see Mr. Hayes here, as well, David.

I want to say at the outset that there should be no question but that you are not responsible for what happened in the gulf oil spill, nor do I think any of the decision-makers within this new administration are responsible. That is just a reasonable assessment.

But you will be responsible for how we go forward. You will be responsible for ensuring that there will not be a repeat of this catastrophe. You are going to have to assure the Congress of that and, of course, the American people. I know you have the confidence of the President, that you will take the measures necessary to see to it that we can assume with confidence that this will never be repeated and that we will learn from all the factors that may have given rise to this catastrophe.

I want to say, first and foremost, that our sympathies go out to the 11 families who lost their loved ones. We ought not get so carried away that we lose sight of the deepest tragedy, which occurred at the time of the explosion, and, of course, to all of the communities in the Gulf. They are bearing the burden of this tragedy now but perhaps to an even greater extent in the years to come, economically, socially, in every way.

But this explosion was not an accident. An accident is a situation that occurs due to chance and where no one is to blame. I don't believe that that is what happened here. This explosion has shown us that there was a catastrophic failure of the systems—systems that we, perhaps naively, relied upon to protect workers, the surrounding communities, and our natural resources. In fact, worker safety and environmental concerns have taken a backseat to drilling deadlines.

Now, there are a number of questions we are going to ask you, but let me continue laying out the context that I think is most appropriate.

We understand deepwater drilling is an inherently risky business. But it is clear that, in recent years, we have spent more time, energy, and money figuring out how to get the oil than we did analyzing the impacts and preparing for disasters like the one we now face. And that is irresponsible. There should have been a balance, and there was an imbalance. And so we want assurances that that balance will now be established.

This week, one senior scientist at the Minerals Management Service was quoted, and he felt it was necessary to be anonymous, but he said, "You have people in the MMS with a very pro-development ideology guiding and making decisions about environmental analysis, concluding that there are no significant impacts when all the scientists think there are. These scientists were ignored."

Mr. Secretary, I do have confidence in your ability and in the collective ability of the people who work with you and in the administration to turn this around. But you are facing a cultural battle. The coziness and the reliance on industry for data, reports, and science took years to establish and, frankly, were borne out of what appears to be the relentless quest for oil off our shores.

It is underscored by the fact that we are wholly reliant upon the industry to clean up the mess. We can observe, we can report, but we don't seem to be able to make the pertinent decisions, nor do we have the technology or the expertise, even if we do have the will, to address the spill, as some governments would have been able to, because we are wholly reliant upon BP in this situation.

As the Acting Inspector General for Interior mentioned in her report this week, "Of greatest concern to me is the environment in which these inspectors operate, particularly the ease with which they move between industry and government."

On page 2 of The Washington Post today, there was a quote in this article that said, "More troubling than the infractions"—and this was a repetition of what the Inspector General has found out a year and a half ago. It was clear that the regulators were literally in bed with the oil industry, but most recently in Lake Charles, Louisiana, we have any number of gifts and things that were clearly inappropriate. In one case, an inspector, a regulator was negotiating a job with the very company while he was inspecting its facilities.

But then it goes on to say, "More troubling than the infractions, though"—and that is what is most troubling to this committee—"was the explanation given by the Minerals Management Service district manager: 'Obviously, we are all oil industry,' he said. 'Al-

most all of our inspectors have worked for oil companies out on these same platforms.’”

And that is the problem. We understand their mindset, but we have at least a dual responsibility to extract our natural resources, granted, but to protect our environment. And, again, that must be the focus.

So deepwater drilling is inherently risky. As we have gone into deeper depths, greater risks have been taken. It is troubling, I have to say, that the firms that are doing this find every way to avoid paying U.S. Government taxes. That is another issue, and I won’t digress into that, but it is just one more situation of rubbing salt into wounds.

Now, with regard to the quantity of dispersants being applied in the gulf, it is unprecedented. And this committee is also concerned about that, because we are responsible for the Environmental Protection Agency. We know that over 800,000 gallons of dispersants have now been applied, but we do not know what the long-term impact of these dispersants will be.

And there are conflicting reports that at least one of the approved dispersants may contain a chemical that degrades into an endocrine disrupter, which would have very serious adverse impacts, even beyond what the oil was doing, to the fish and crustaceans and plant life.

There are simply just too many unknowns. EPA made that clear, but it doesn’t seem to have changed much in terms of the method of operating of BP. It is an unsustainable approach. We need to hear what you have done and will be doing to change this culture at the Minerals Management Service, particularly, and how your reforms will bring the science and the oversight that are absolutely necessary and have been wanting.

We mentioned the need to extend the pause in issuing new drilling leases and permits. We do believe that we have to take the proper amount of time to investigate this explosion, develop process improvements, even change this culture at MMS, before the public can have confidence that we can proceed safely. And, really, the livelihoods of our coastal communities and the health of all of our natural resources along our shores is at stake.

So we will be asking you specific questions as to what you and the President intend to do to give you the time necessary to ensure that it cannot happen again. I just saw a report on another rig called the Atlantis that they say could even be more catastrophic in deep drilling, and environmental waivers have been given for that as well.

So that, I hope, will be the thrust of the hearing. And I know that this is a bipartisan concern. And so perhaps I will ask Mr. Simpson to share his thoughts and then the chairman of the full committee, Mr. Obey.

Mr. Simpson.

OPENING STATEMENT OF MR. SIMPSON

Mr. SIMPSON. Thank you, Mr. Chairman.

Mr. Secretary, Deputy Secretary Hayes, let me begin by thanking you both for your determined efforts in response to the Deepwater Horizon explosion and oil spill. We are grateful to you, not only for

your efforts to address this spill and determine its causes, but also for the hard work of the Department on many levels to keep members of my staff and Congress apprised of the situation on a daily basis. It is much appreciated.

In fact, I am surprised you have time to go to the Gulf because there have been so many hearings in Congress. In fact, I understand there are five hearings today throughout Congress. I have a list of all the hearings that have been held by the different subcommittees. It seems like you are spending all your time up here rather than down in the Gulf. But that is kind of the way it goes. As the chairman said, everybody hasn't said everything yet, so we will have a hearing too.

At the outset, let me be very clear that I am not here today to blame BP, the Secretary, MMS, or anyone else. The Washington blame game makes great headlines, but that isn't my purpose. It is probably safe to say that we will discover down the road that a number of parties are ultimately responsible for what has occurred. Frankly, I would like to learn more about the efforts to stop the oil spill, how best to mitigate any damage that has occurred, and how to prevent further damage.

I also want to know what went wrong, how we can fix it, and determine what we can do to minimize the chances that an accident like this will happen again. That is the responsible thing to do, and it is the right thing to do. Unfortunately, a lot of the answers to those questions aren't known yet. We have to investigate this further, about exactly what went wrong.

We all recognize that this is a major disaster, but we ought not to treat it, as some are attempting to do, as the death knell for offshore drilling. That would be a big mistake, and I think most people recognize that. If you have read any newspapers or watched TV over the last few weeks, you are aware that some of my colleagues are attempting to use this oil spill as an opportunity to prevent scheduled lease sales in the Gulf to occur this summer. Others see it as a reason to cease all exploration of production in the Gulf of Mexico. Others are hopeful that this spill will lead Congress or the administration to reinstate the moratoria on drilling in the entire Outer Continental Shelf. And still others are urging the President to delay exploration planned for this summer in the Arctic Ocean. While well-intentioned, I believe this thinking to be shortsighted and misguided.

I support efforts to invest in a balanced, all-of-the-above energy portfolio that includes renewable energies, nuclear energy, as well as domestic sources of oil and gas. But the fact is that we are now and will continue to be for the foreseeable future a carbon-based society. Unless you drive an electric car, live in a solar-powered house, or have a windmill in your backyard, chances are that every day you will rely on oil and gas to drive your car, mow your lawn, turn on your lights, and generate the energy to heat and cool your home. This is not going to change significantly any time soon.

Today, oil production in the Gulf of Mexico accounts for nearly one-third of all domestic U.S. crude oil production. Over the last 60 years, offshore oil and natural gas development has resulted in more than 42,000 wells being drilled safely, including more than 2,000 wells at depths of 1,000 feet or more. We ought not to view

this latest setback as a reason to retreat but as a chance to learn how we can more safely explore and produce the energy our country will need in the coming century.

As tragic as this spill has been, it hasn't changed our country's growing demand for oil and natural gas. Exploration and production in the Gulf of Mexico and the OCS and especially in deep-water, where resources are more prevalent, will play an even more critical role in the future.

Today, five countries—Canada, Mexico, Venezuela, Nigeria, and Saudi Arabia—account for nearly two-thirds of the crude oil imported into the United States. Venezuela, a country ruled by a dictator, Hugo Chavez, and a regime which most people consider to be less than friendly to our interests, exports more than 900,000 barrels of oil a day to our country. In spite of this, the majority of Americans still believe our country needs to do more to develop domestic sources of energy, both on shore and offshore, and lessen our dependence on foreign sources of oil and natural gas.

Energy production is an inherently risky business. History reminds us that, while we can make every possible effort to mitigate risk, we can never fully eliminate it. The tragic death of 29 coal miners in West Virginia in April is not going to shut down our country's coal-mining industry. It is, however, resulting in a period of study and introspection to determine how to improve safety and avert future tragedies. This is a proper and reasonable response.

By contrast, the accident at Three Mile Island in 1979 set our country back in the development of nuclear energy for a generation or more. The oil spill in the Gulf has the potential of having that same impact if we collectively wave the white flag, signaling retreat on offshore exploration and production.

Therefore, there are many lessons to be learned from this experience: How do we adequately develop and test the technologies needed to shut down a well a mile beneath the ocean's surface in an emergency situation? What authority do Federal agencies have to make decisions about treating an oil spill in the midst of a crisis? What reforms are needed to ensure proper management controls are in place and safety inspections are completed properly? These and other questions need to be asked.

I will close with this thought. Our decision-making on oil and gas exploration and production going forward should be guided by what we know and not by what we want to believe. Facts, not emotions, should be our guide.

And, Mr. Secretary, I thank you again for being here today for this hearing, and I look forward to your testimony.

Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Simpson.

And I look forward to hearing from the chair of the full committee, David Obey.

OPENING REMARKS OF CHAIRMAN OBEY

Mr. OBEY. Mr. Secretary, good to see you.

I am not quite sure what to say. This is really a sobering experience, or it ought to be a sobering experience, for each and every one of us. I have noticed through the years that very often on issues like this, the volume of comments from people are in inverse

proportion to the information that they can bring to the subject. So I think, on an issue like this, we have a better chance of learning something if our ears are open rather than our mouths.

But having said that, I would just have one observation. The gentleman has just mentioned what happened at Three Mile Island and how it set back nuclear power for a generation. I remember when we had the Santa Barbara oil spill. I remember the Exxon Valdez. And now we have this. I think what all of that demonstrates is that, no matter what level of effort you have, sooner or later either human beings or machines are going to fail in some capacity. And that means that you have to approach each and every issue with balance and not approach them as though we are all presidents of optimist clubs.

I also think that it demonstrates that we are a prisoner of our past inertia. If you take a look at what we have done in terms of developing other sources of energy through the years, since Jimmy Carter left office we have had a more than two-and-a-half-decade decline in the resources that have been put into either energy conservation or developing other energy sources. And because of that, we are left with the potential to have these kinds of problems whether we are talking about oil or talking about nuclear, as my friend has just reminded us.

I recognize that this incident will be scrubbed ad nauseam until people find out exactly what happened and what, if any, breakdowns in the system occurred. But, in the last analysis, I would hope it would enlarge our understanding of the challenge ahead in terms of developing a very different energy policy.

The oil spill is very visible. You can see it on TV every day, as that stuff comes out of the ocean floor. And so, people will, understandably, get excited and disturbed about it. You also see the evidence of that in terms of the harm that it will do to economic interests of various groups, such as the fishing industry.

But we have a development just as serious every day which is not nearly as visible but is still as inexorable as the pumping of that oil out of the ocean bottom has been, and that is climate change. I mean, there is no question in my mind—there may be in some others', but there is no question in my mind—that we have an acute problem in dealing with that issue, as well.

So I would hope that, when we are through with this, that this experience can contribute to building a new determination on the part of everybody, regardless of philosophical bent, to take an entirely new look at the way we deal with energy in this country and globally, because it is the planet that sustains us all. And while the Gulf damage seems widespread and, indeed, it is horrifying in its massiveness, what is happening on global climate change is even broader and worse over time.

So I would hope that all of us could take a non-ideological look at what the facts are and work on not just short-term fixes to correct the problem we are going to be talking about here today, but also to deal with the long-term implications of what otherwise will face us.

Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Chairman.

Mr. Lewis, did you want to add anything?

OPENING REMARKS OF MR. LEWIS

Mr. LEWIS. Thank you. Very briefly, Mr. Chairman.

Secretary Salazar, thank you for being here very much.

Endless hearings will not solve the problem, but I am hearing from staff that CNN is telling us this morning that it appears as though the Top Kill may very well be working. If that is the case, then the one question I have in mind involves the moratorium that has been suggested, a moratorium of six months for deepwater drilling.

I would really like to know what your definition of that is, will that stop the regulatory process whereby leases can go forward, et cetera. As the chairman suggested, we are dependent upon this resource, whether we like it or not. And so if you would clarify that for the record, I would appreciate it.

Mr. MORAN. Thank you, Mr. Lewis.

Mr. Salazar, if you would like to share with us whatever you want to extend as an opening statement. Mr. Secretary, again, we are very appreciative of your being here. And I should say that I am personally appreciative of your leadership. I do think you are the right person at the right time. But it is a very difficult time to be Secretary of the Department of Interior.

So if you would like to proceed with a statement, and then we will have questions of you.

OPENING STATEMENT OF SECRETARY KEN SALAZAR

Secretary SALAZAR. Thank you.

Thank you very much, Chairman Moran, Chairman Obey and Chairman Dicks, Ranking Member Simpson, Lewis, and all the members of the Committee.

In what is now the 37th day of what has been a very difficult time period, I remain very resolute and confident we will solve the problem in the Gulf. The issues you address in this committee this morning are issues we can grapple with and we will deal with in an effective manner.

I have not taken a day off, not a half a day off, in 37 days. I have spent 4 days in the command center in Houston, as I have watched the best minds of science from around the world figure out how you can shut this well down. I have spent time on the Gulf Coast, seeing the impacts and dealing with people in the Gulf Coast region about what is happening with respect to the landfall of oil.

As I have dealt with all those issues, I have also dealt with issues within the Department of Interior that are critical to the future of the United States and critical to having the confidence of the American people in the functioning of its government.

As I have dealt with these issues, I can tell this committee—and I know many of you well—that I, today, am very resolute and very confident that tomorrow is a better day. We will see our way through it in a way that will address the myriad of issues which you all raised, from the issue of a new energy frontier and climate change, Chairman Obey, which is critical to our world, to the issues of moving forward with a thoughtful policy concerning the development of our oil and gas resources in the Outer Continental Shelf, to issues relating to accountability and responsibility that we

will see coming forth from the Presidential Reilly-Graham Commission and the multiple investigations that we have under way.

My main point to you this morning is, yes, it is troublesome and it is a time where there is a great deal of concern. I can tell you, no one is more concerned about this than the President of the United States and me and the men and women who are responding to the issue in the Gulf and you, the Members of Congress, who are responsible for the policy framework.

Let me say two or three things that I think you might be interested in.

RESPONSE TO OIL SPILL

First, in terms of the overall response, from April 20th to this day, it has been constant and it has been relentless. The day after the explosion on April 20th, which occurred at about 10 o'clock that night, I directed Deputy Secretary, David Hayes, to go to the Gulf Coast without a change of underwear for the next day because I knew of the importance of this issue. I wanted to make sure that we were standing up the command centers in the right places to be able to deal with whatever might come, no matter how bad it would be. He has been involved from day one with the Coast Guard, which has responsibility for the response under our national framework, making sure that no effort is spared to deal with this problem.

I have also spent the same amount of time and the same kind of energy in Washington, Houston, and on the Gulf Coast, dealing with this issue, as have the men and women of the Department of the Interior. You will hear shortly from Assistant Secretary Thomas Strickland, who has spent countless days on the Gulf dealing with the protection of the precious resources which are under the jurisdiction of this Committee and my command at the Department of Interior. That includes the 40 national wildlife refuges and park units within the Gulf of Mexico region and making sure the best of our wildlife scientists are down there to address the issues with respect to our response. It has been a collective effort on the part of all involved within the Department of Interior.

Secondly, this collective response and responsibility has been shared across the government. President Obama, from day one, has received daily briefings, regular updates on what is going on, and has pushed the government to do everything it can do. At his suggestion, Secretary Chu and I went to Houston to make sure the different solutions that were being worked on by BP were, in fact, the best solutions the best minds of science could come up with around the world. I assembled a group of industry leaders to make sure that they were also helping address the issue in Houston so we could essentially stop the pollution. Because until we stop the pollution, you have a problem that is undefinable.

The latest report from Secretary Chu and those in the command center at BP this morning is that the effort on Top Kill continues. Whether it will work or not, Congressman Lewis, is still an unknown. It is a dynamic process.

The first efforts that went forward yesterday were not successful. There are other efforts that are under way to try to deal with the Top Kill and to try to shut in this well. If those efforts fail today

or tonight, we have made sure there are plan B's and plan C's and plan D's. What I can assure this Committee, on behalf of the constituency you represent and the American people, is that we have the best minds of the world focused on this problem.

I appreciate the leadership of Secretary Chu; the leadership of Dr. Marcia McNutt, the Director of the U.S. Geological Survey, who I have deployed to Houston for the last 3 weeks; the National Labs of the Department of Energy; all of whom have been involved, along with the United States Navy and a myriad of other Federal organizations.

What we have seen on the coast, with respect to this spill, is the single largest response in the history of the world with respect to any kind of oil spill response.

OCS DEVELOPMENT

Let me, secondly, address a question relative to OCS some of you raised as to how we will move forward with respect to development in the Outer Continental Shelf.

We must be mindful and remind ourselves that about 30 percent of the oil and gas resources produced domestically in the United States come from the Gulf of Mexico. We must also be mindful that over 35,000 wells have been drilled in the Gulf of Mexico over the last half century without having this kind of a horrific incident. While there have been blowouts, they have not been of this particular magnitude.

We, as an Administration, believe we need to move forward with comprehensive energy and climate change legislation in the manner that Chairman Obey described. We view comprehensive energy legislation includes oil as part of the energy portfolio. The President will be making announcements shortly about how we plan on moving forward.

I can assure you his direction to us is, as we move forward, we need to make sure it is being conducted in a safe manner and we take whatever steps are necessary to ensure this kind of horrific incident does not ever happen again. That is part of what we have already started to do, by sending proposals to this committee and to Congress for its consideration, including the \$29 million request for the additional inspections that we need at the Department of the Interior.

I want to take your questions, but let me just add one more thing. There is, I think, a collective responsibility here and it is important that we move forward in this process in a thoughtful way. Yes, we can point to Three Mile Island and the lessons from Three Mile Island. We can point to the Challenger and what happened with respect to the space shuttle program. In the heat of the moment, we want to make sure we are making thoughtful decisions about moving forward with the energy future of this Nation. We will know very specifically what it is that caused this particular explosion and blowout prevention mechanisms not to work on the Deepwater Horizon, and we will learn those lessons. Those lessons will include the United States Congress and the national policy, which I helped create as a U.S. Senator, as many of you helped create as Members of the U.S. House of Representatives, to look at what kinds of changes we need to make.

It will include a change, which the President has already requested, the elimination of the 30-day mandate on the approval of an exploratory plan to allow for more rigorous environmental analysis.

It will also include, I am hopeful, the effort which many of you in the House of Representatives have worked on, and which I have supported, and that is the creation of organic legislation for what has been known as the Minerals Management Service. An agency for the United States of America that has the responsibility of our offshore energy resources, which are so vast and so important, and, that collects on average about \$13 billion a year, is one that should exist by virtue of congressional action and congressional statute. There have been efforts to try to get that done over the last year. We need to push the "fast" button and try to make sure that it gets done.

MINERALS MANAGEMENT SERVICE REORGANIZATION

In the meantime, I have moved forward within my own authority as Secretary of Interior to reorganize the Department and to change the Minerals Management Service. The Minerals Management Service, consisting of 1,700 employees, will be changed in the following ways:

First, about 700 people who currently are involved in revenue collection will be moved into an Office of Natural Resources Revenues, because there are other revenues that are collected within the Department of Interior. That agency will be separated from the Land and Minerals section of the Department of the Interior so there will be the avoidance of any perception of conflict of interest there.

Secondly, the remaining part of what is MMS will be split into two agencies. One will be a Bureau of Ocean Energy Management. That agency will have the responsibility with respect to the development of renewable energy resources offshore, which I know many of you have been very interested in, especially in the Atlantic. It will also be responsible for the development of the conventional energy resources that we see, for example, in the Gulf of Mexico.

The other agency will be a Bureau of Safety and Environmental Enforcement. That bureau will have the responsibility to act as the police, to make sure the appropriate standards are put into place and the policing of those standards actually occurs.

As we move forward in the implementation of the Secretarial order, we must work closely with the members of this Committee, Chairman Moran, and the other members of the United States Congress that have an interest in this issue. The team I have assembled that has been working on this issue will, in fact, be working with all of you as we come forward to conclusion.

So, with that, Mr. Chairman, I would be happy to take questions.
[The written statement follows:]

**STATEMENT OF KEN SALAZAR, SECRETARY OF THE INTERIOR BEFORE
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
INTERIOR, ENVIRONMENT, AND RELATED AGENCIES ON THE
TRANSOCEAN DEEPWATER HORIZON DISASTER**

MAY 27, 2010

Thank you, Chairman Moran, Ranking Member Simpson, and members of the Subcommittee for the opportunity to be here today. I appreciate the opportunity to discuss current activities at the Department of the Interior related to our ongoing response to the explosion of the Deepwater Horizon drilling rig including our efforts to address the environmental impacts. I will also highlight our reform efforts that are critical to preventing similar events in the future. David Hayes, Deputy Secretary is here with me to talk about our response actions, the Joint Investigation that is underway, and the actions we have taken to strengthen management of the Outer Continental Shelf energy program.

Deepwater Horizon

The explosion of the Deepwater Horizon is a massive and potentially unprecedented environmental disaster, which has resulted in the tragic loss of life and many injuries. It is commanding our time and resources as we work to ensure that the spill is stopped; that our great natural resources along the Gulf Coast are protected and restored; and that we get to the bottom of what happened and hold those responsible accountable. Understanding the causes of this tragedy will help prevent similar events in the future.

We are fighting the battle on many fronts and with significant resources – my entire team is focused on this event. At the President’s direction, the nation’s leadership will not rest until the oil spill is stopped, the cleanup is completed, and the people, the communities, and the affected environment are made whole.

Let me be very clear: the responsible parties must ensure that –

- the flow of oil from the source is stopped;
- the spread of oil in the Gulf is contained;
- the ecological values and near shore areas of the Gulf are protected;
- any oil coming onshore as well as the oil discharged from the facility is cleaned up;
- all damages to the environment are assessed and remedied; and
- people, businesses, and governments are compensated for losses.

From day one my job has been to make BP and other responsible parties fully accountable. That is why I have been to Houston several times to see firsthand that BP – and all responsible parties – is doing everything within its power to effectively and expeditiously address the spill. I have also met with BP executives many times here in Washington to deliver this same message and have required them to provide daily updates on all fronts related to this disaster.

Homeland Security Secretary Janet Napolitano and I received a letter in which BP has unequivocally confirmed that it will pay for all of these costs and damages regardless of whether the statutory liability cap contained in the Oil Pollution Act applies. The bottom line is that we will do absolutely everything in our power to make the United States and the affected Gulf Coast communities whole and hold BP and other responsible parties accountable for those costs. There should be no doubt about that. And while the investigations as to the cause are still underway, we will ensure that those found responsible will be held accountable for their actions.

To see that BP carries through on its responsibilities, I have made sure that the best science and engineering minds place fresh eyes on the BP response and various efforts underway to stop the flow. In that regard, I asked Secretary Chu to go to Houston with me to meet with BP executives, their scientists, and engineers to make sure they were considering every conceivable option to address this problem.

I also deployed Dr. Marcia McNutt, who is the Director of the U.S. Geological Survey and one of the nation's most preeminent marine geophysicists, to Houston to provide oversight and monitor the effectiveness of the BP command center's activities. Dr. McNutt and the personnel assigned to the Houston Command Center by Secretary Chu, along with the Commanders of the U.S. Coast Guard, are there to ensure that no stone is left unturned as we search for solutions to the problem. In addition, the White House Office of Science and Technology Policy, together with Dr. McNutt, convened a meeting on May 19th for the purpose of hearing from the academic science community concerning the primary science questions and important research approaches for addressing the effects of oil in the ocean.

The President has been clear: we will not rest until this leak is contained and we will aggressively pursue compensation for all costs and damages from BP and other responsible parties. BP has recognized its obligations to fully compensate all those bearing damages in the current oil spill. And we will hold them to that. For the future, we need to change the law to insure that there is no arbitrary cap on corporate responsibility in the event of a similar major oil spill. We will work with Congress to achieve that goal.

Response Action from Day One

The Department has been actively and aggressively engaged in this spill from the first events. The morning after the explosion, I sent Deputy Secretary David J. Hayes to the Gulf to assist with coordination and response and to provide hourly reports to me and other Administration officials of the ongoing events.

In addition, I have dispatched the top leadership from my natural resources and science team to the Gulf incident command centers, including the Assistant Secretary for Fish and Wildlife and Parks, Tom Strickland; the Director of the National Park Service, Jon

Jarvis; the Acting Director of the U.S. Fish and Wildlife Service, Rowan Gould; and the Director of the Bureau of Land Management, Bob Abbey. They are helping to lead the efforts to protect the ecologically complex and fragile Gulf Coast, including a number of National Wildlife Refuges, National Parks, National Seashores, and other public lands and resources under the Department's jurisdiction.

These leaders, along with public servants from the Department's bureaus and offices, are putting in long hours as they work alongside other Federal, state, and local partners to monitor and respond to immediate threats. These employees are on the ground working to protect wildlife and fisheries, cultural resources, and fragile habitat; assess and address long-term damage to impacted resources; and develop and provide data and information for use by the Unified Command.

I also ordered immediate inspections of all deepwater oil and gas drilling operations in the Gulf of Mexico. We issued a safety notice to all rig operators reminding them of their responsibilities to follow our regulations and to conduct full and thorough tests of their equipment.

I established a new Outer Continental Shelf Safety Oversight Board within the Department. Composed of top Departmental officials, it will strengthen safety and improve overall management, regulation, and oversight of operations on the Outer Continental Shelf (OCS). It will also help us evaluate the broader questions that this spill raises about those activities.

I have announced that no applications for drilling permits will go forward for any new offshore drilling activity until we complete the safety review process ordered by the President and we have completed our 30-day report to the President.

Reorganization of the Minerals Management Service

Last week, I issued a Secretarial Order to restructure the MMS into three separate entities. The Minerals Management Service has three distinct and potentially conflicting missions – safety and enforcement, energy development, and revenue collection - that in order to be most effective should be divided. I have tasked Rhea Suh, the Assistant Secretary for Policy, Management and Budget, Wilma Lewis, the Assistant Secretary for Land and Minerals Management, and Chris Henderson, one of my senior advisors, to work out the details of this reorganization, which will be carried out in consultation with others within the Administration and with Congress.

My reorganization will create three separate entities:

The Bureau of Ocean Energy Management, under the supervision of the Assistant Secretary for Land and Minerals Management, will be responsible for the sustainable development of the Outer Continental Shelf's conventional and renewable energy resources, including resource evaluation, planning, and other activities related to leasing.

The Bureau of Safety and Environmental Enforcement, under the supervision of the Assistant Secretary for Land and Minerals Management, will be responsible for ensuring comprehensive oversight, safety, and environmental protection in all offshore energy activities.

The Office of Natural Resources Revenue, under the supervision of the Assistant Secretary for Policy, Management, and Budget will be responsible for the royalty and revenue management function including the collection and distribution of revenue, auditing and compliance, and asset management.

As I outlined in a May 12 letter to the Chairman and Ranking member, we are initiating consultation with you this week and we are hopeful that you will help us to bring about the necessary restructuring of the organization and budget in an expeditious manner. Agencies and bureaus should be governed by thoughtfully considered organic legislation. I look forward to working with the Congress to draft legislation.

Reform During the Obama Administration

I came to the Department of the Interior to change the direction of the Department and to restore the confidence of the American people in the ability of their government to carry out the functions under my charge. That confidence had been seriously eroded by well-publicized examples of misconduct and ethical lapses. This kind of fundamental change does not come easily, and many of the changes we have made have raised the ire of industry. In the past 16 months our efforts at reform have been characterized as impediments and roadblocks to the development of our domestic oil and gas resources.

But we have not, and we will not, back down on our reform agenda. We have been making major changes at MMS, and we will continue to do so.

The Department of the Interior Inspector General issued a report this week detailing ethical lapses at the Minerals Management Service (MMS) between 2000 and 2008. This report highlights the importance of Interior's ongoing agenda to reform the agency and of new ethics reforms implemented in early 2009. This deeply disturbing report is further evidence of the cozy relationship between some elements of MMS and the oil and gas industry. Several of the individuals mentioned in the Inspector General's report have resigned, been terminated, or referred for prosecution. Those individuals mentioned in the IG report for questionable behavior who are still with MMS will be placed on administrative leave pending the outcome of a personnel review. That is why during the first ten days of becoming Secretary of the Interior I directed a strong ethics reform agenda to clean house of these ethical lapses at MMS. I appreciate and fully support the Inspector General's strong work to root out the bad apples in MMS and we will follow through on her recommendations, including taking any and all appropriate personnel actions including termination, discipline, and referrals of any wrongdoing for criminal prosecution. I have asked the Inspector General to expand her investigation to determine whether any of this reprehensible behavior persisted after the new ethics rules I implemented in 2009.

Under MMS's management, the OCS currently provides 30 percent of the Nation's domestic oil production and almost 11 percent of its domestic natural gas production. The MMS is one of the largest collectors of non-tax and non-trust revenue for the Treasury, and has collected an average of more than \$13 billion annually for the past 5 years.

Offshore energy development is a major part of our vision for a new energy future with a balanced portfolio that includes offshore wind and renewable energy production. Within months of my confirmation, we issued new regulations governing the establishment of offshore wind generation facilities, and concluded an historic Memorandum of Understanding with the Federal Energy Regulatory Commission to end a bureaucratic dispute that had delayed the introduction of renewable energy projects on the OCS.

Last month, I gave final approval to the Cape Wind project off the Massachusetts coast. And we have taken the first steps to stand up major wind projects off the coasts of New Jersey and Delaware. I am working with the Atlantic Coast Governors to give renewed impetus to develop the potential for offshore wind projects.

In addition to changing the direction of MMS, we have implemented reforms to change the agency's culture of doing business. We began by issuing new ethics standards for all MMS employees, effective January 2009, that require all MMS employees to receive ethics training and to certify compliance to a Code of Ethics that exceeds general government employee requirements.

Responding to ethical lapses and inappropriate behavior uncovered during the previous Administration in connection with the MMS's Royalty-in-Kind program, I terminated that outdated and flawed program. We have also implemented recommendations to improve MMS's royalty collection program. These recommendations have come from our Inspector General and from the Royalty Policy Committee Subcommittee on Royalty Management, a group chaired by former Senators Bob Kerrey and Jake Garn.

I asked the National Marine Board, an arm of the highly respected National Academy of Sciences, to direct an independent review of MMS's inspection program for offshore facilities. The results of that review are due to us this fall.

The Department's fiscal year 2011 budget request reflects this theme of reform. In addition to increases for renewable energy development, audit and compliance, and marine spatial planning, the budget requests funding for an additional 6 inspectors for offshore oil and gas facilities in the Gulf, an increase of more than 10 percent. The budget also doubles the amount that we would charge operators in support of the inspection program.

Additional Reforms Now

This tragedy and the massive spill for which BP and others are responsible have made the importance and urgency of this reform agenda ever more clear. As I mentioned above, the MMS will be restructured to establish a separate and independent safety and environmental enforcement entity. We will responsibly and thoughtfully move to establish independence and separation for this critical mission so that the American people know they have a strong and independent organization holding energy companies accountable and in compliance with the law of the land.

The Administration has also submitted to Congress a comprehensive multi-agency legislative package, to address the funding of Federal response activities through the Oil Pollution Act, food safety programs, unemployment and nutritional assistance, and other help for communities and individuals affected by the oil spill.

The legislation requests an additional \$29 million for the Department of the Interior to bolster inspections of offshore oil and gas platforms, draft enforcement and safety regulations, and carry out environmental and engineering studies needed in light of this event. The funds will allow the USGS, the Fish and Wildlife Service, the National Park Service and other entities to perform activities that are needed to address issues raised by the spill but would not be eligible for reimbursement by the responsible parties. The legislation would also extend the time allowed by statute for MMS to review and approve oil and gas exploration plans from 30 to 90 days.

The supplemental request is vitally needed to support our full and relentless response to the events that have happened and continue to unfold. As you know, only activities directly related to the oil spill response and authorized by the U.S. Coast Guard are eligible for reimbursement from the Oil Spill Liability Trust Fund. Neither our current budget nor the Trust Fund provides the resources that are necessary to aggressively implement the corrective actions that are necessary to address safety issues for all oil and gas exploration and production activities on the OCS.

Active Investigation and Independent Review

We are carrying out, with the Department of Homeland Security, an investigation into the causes of the April 20th explosion, including public hearings. This Joint Investigation and the activities of the Oversight Board will identify the actions that are needed. The 30-day safety review that President Obama ordered us to undertake, and the results contained in the report I will submit to the President tomorrow, begin to identify the safety measures that should be immediately implemented.

The National Academy of Engineering also has agreed to my request to review the Deepwater Horizon spill. This highly respected organization is a part of the National Academy of Sciences, will bring a fresh set of eyes to this tragedy, and will conduct an independent, science-based analysis of the causes of the oil spill. The NAS has carried

out similar independent investigations into events like the space shuttle Challenger accident.

In addition, the President signed an Executive Order establishing the independent bipartisan National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling tasked with providing recommendations on how we can prevent – and mitigate the impact of – any future spills that result from offshore drilling. The Commission will be focused on the necessary environmental and safety precautions we must build into our regulatory framework in order to ensure an accident like this never happens again, taking into account the other investigations concerning the causes of the spill.

We will get to the bottom of this disaster and will hold those responsible accountable.

Informed Energy Strategy

Much of my time as Secretary of the Interior has been spent working to advance the President's vision of a new energy future that will help us to move away from spending hundreds of billions of dollars each year on imported oil.

Offshore energy development is a necessary part of that future, and on March 31st we announced a new, balanced, and science-based strategy for exploring and developing our oil and gas resources on the OCS.

As we evaluate new areas for potential exploration and development on the OCS, we will conduct thorough environmental analysis and scientific study, gather public input and comment, and carefully examine the potential safety and spill risk considerations. The findings of the Joint Investigation and the independent National Academy of Engineering will provide us with the facts and help us understand what happened on the Deepwater Horizon. Those findings, and the work of the Outer Continental Shelf Safety Oversight Board, will help inform the implementation of the Administration's comprehensive energy strategy for the OCS.

We are taking aggressive action to verify the safety of other offshore oil and gas operations, further tightening our oversight of industry's practices through a package of reforms, and taking a careful look at the questions that this disaster is raising.

Conclusion

Tom Strickland, Marcia McNutt and Bob Perciasepe, the Deputy Administrator of the Environmental Protection Agency, are also here today to provide a detailed description of the Federal response to this disaster and to describe the impacts on the environment. They will give you a good picture of the actions underway including the work our employees and our partners are doing every day, on the ground on the Gulf Coast to respond to the spill and protect and restore affected natural resources.

Let me assure you that this Administration will continue its relentless response to the Deepwater Horizon tragedy. Our team is committed to helping the people and communities of the Gulf Coast region persevere through this disaster, to protecting our important places and resources, and to taking actions based on the valuable lessons that will help prevent similar spills in the future. In addition, I will continue to ensure that offshore operations are following the law, protecting the workers, and guarding against future incidents and spills. I will be working with you in the coming weeks to continue the reforms I outlined and I look forward to your support for our reorganization.

Ken Salazar
Secretary of the Interior

Ken Salazar, a fifth generation Coloradan, was confirmed as the 50th Secretary of the U.S. Department of the Interior on January 20, 2009, in a unanimous vote by the U.S. Senate.

As Secretary of the Interior, Salazar is implementing an agenda of reform, built on openness in decision-making, high ethical standards, and respect for scientific integrity. He has prioritized the responsible development of America's energy resources, including environmentally-appropriate renewable energy development on public lands, and has established Interior's first-ever departmental strategy to address the impacts of climate change on our land, water, and wildlife. Salazar has undertaken a robust 21st century conservation agenda that will help restore America's treasured landscapes, from the Everglades to California's Bay Delta, and connect more young people to opportunities in the great outdoors. Salazar is also working to empower Native American communities by restoring nation to nation relationships with tribes while expanding economic opportunities, improving education, and helping improve public safety.

Prior to his confirmation as Secretary of the Interior, Salazar represented Colorado in the U.S. Senate, where he was involved in every major bipartisan legislative effort on energy since 2005; was a champion for farmers, ranchers, and rural communities, helped lead efforts to pass the 2007 Farm Bill; fought to improve access and quality of health care for veterans and military families; and helped build consensus and bipartisanship on a range of challenging issues facing the Senate.

From 1999 to 2004, Salazar served as Colorado's thirty-sixth Attorney General, during which time he was selected to chair the Conference of Western Attorneys General. From 1987 to 1994, Salazar served in the Cabinet of Governor Roy Romer as chief legal counsel and executive director of the Colorado Department of Natural Resources, where he crafted reforms for oil, mining, and gas operations to better protect the environment and the public.

Raised on a remote ranch in Colorado's San Luis Valley without electricity or telephone, Secretary Salazar and his seven brothers and sisters were all first generation college graduates. Secretary Salazar received a political science degree from Colorado College in 1977, graduated with a law degree from the University of Michigan in 1981, and has received honorary doctorates of law from Colorado College in 1993 and the University of Denver in 1999. Salazar and his wife, Hope, have two daughters, Melinda and Andrea, and one granddaughter, Mireya.

MINERALS MANAGEMENT SERVICE REORGANIZATION

Mr. MORAN. Thank you, Mr. Secretary.

I was going to begin with another question, but since you raised the reorganization, let me start with that.

I think I made it pretty clear in the opening statement that, at least in my view—I know it is not unique; it seems to be the view of most people who have looked at this situation—see a cultural problem, a very deep-seated cultural problem within the Minerals Management Service.

I don't for a moment personally blame Ms. Birnbaum because she is not part of that culture; she only just joined the Minerals Management Service. We had asked that she be here. It is your call who you want to be here. And I trust that no one, particularly people who are not directly responsible, are going to be scapegoated in this situation. Our interest is in getting to the heart of the problem.

In this reorganization, the most important thing is that the environmental experts not be shunted aside. What has happened for the last several years is that they were treated almost as though they were the crazy paranoids in the attic that you could ignore or even dismiss in a cynical way. They had virtually no input. We want to put them back at the table. They don't necessarily have to be in the driver's seat, but given what has happened, it seems to me for a while they need to be in the driver's seat before any permits can be issued.

Now, the procedural activity of collecting royalties, fine. But the issue is the people doing the permitting being able to act independently of the environmental scientists. And that is what needs to be corrected.

You don't even need to respond to that. I trust that you understand that we are going to have to get into this reorganization because this Committee does have to approve and then fund it. We can discuss that further. You can build it into a response in another question, if you would like.

OCS DEVELOPMENT

The news reports have been prolific and consistent as to what the administration is going to do today after this hearing. We hear six things: One, that you will delay the 5-year oil leasing plan. As most people know, you can't drill unless it is part of a 5-year oil leasing plan. Two, you are going to suspend the Arctic Ocean drilling permits that have already been issued to Shell Oil for drilling this summer. Three, there will be at least a six-month pause in any further oil leasing. Four, you will stop the Virginia Sale of lease 220 completely. Five, you will implement much more rigorous oil development regulations for oversight. And, six, you will suspend upcoming lease sales in the western Gulf of Mexico.

I can understand if you don't want to trespass on the President's statement, but do you have anything to add to that or to comment about that? Because that is what we are reading, and I am sure you are reading the same thing. It is not as though it is classified information. Do you wish to comment, Mr. Secretary?

Secretary SALAZAR. Let me comment on the items you raised. We had discussions late into the night, and they continue right now. Later in the day, the President will be making an announcement with respect to many of the issues which you raised.

I think the driving principle, Chairman Moran, is that we need to make sure, if there is going to be deepwater drilling in the Outer Continental Shelf, that it is going to be done safely. There are a number of different considerations and issues that have to be dealt with as we move forward with that decision. We will share that information with you as soon as the decisions are finalized later this morning.

REFORMS OF MMS

Let me comment on your opening question concerning the reform issues and Ms. Birnbaum. Liz Birnbaum has been a strong leader, and we have done tremendous work to essentially deal with what you and other members of this Committee raised as a culture of corruption and reprehensible conduct that existed at the Minerals Management Service. We have worked on it from day one.

You, Chairman Moran, reading the latest Inspector General's report, will note all that conduct, even though most people here in Washington and most newspapers haven't focused on the dates, was all focused back in the prior Administration. Yes, it was a time when the oil and gas resources of this country essentially were allowed to be taken without the kind of review and the kind of protection of the natural resources that we needed to have.

As Secretary of the Interior, I am proud of the reform efforts we have taken across the board. There are many reform efforts specific to MMS, and I won't go through a long, complete list of them, but let me just mention a few of them.

Within the first two weeks of my swearing-in as Secretary of the Interior, I went to the Minerals Management Service in Lakewood, Colorado. We instituted a code of ethics, required a number of ethics training measures to be taken by employees, and announced we would have a zero-tolerance policy with respect to ethical failures. For those who have committed wrongs, they have been dealt with in the personnel system. For those who have committed criminal conduct, they have been referred over for criminal prosecution.

This latest report from the Inspector General deals with a time-frame that is pre- the Obama Administration, and the same kind of action has been taken. Indeed, what we have done is ask the Inspector General, at my request, to look at whether or not these activities and this culture of corruption have continued after we instituted these actions at the beginning of this Administration. I very much look forward to that report, and we will see whether the efforts we have undertaken have, in fact, helped.

ROYALTY-IN-KIND PROGRAM

But I didn't stop just with ethics. The Royalty-in-Kind program, which some of you on this Committee have been critical of for years—I terminated the Royalty-in-Kind program because it seemed to me, it was an area full of the possibility of the kinds of problems we see in that kind of culture. That was an important de-

cision, but it was the correct decision as we move forward with our agenda on reform.

SCIENCE

Finally, with respect to science, many of you, I hope, still remember when I came in as Secretary of the Interior there was a plan to do very aggressive development of oil and gas resources all over the entire OCS. I put a stop button on that for 180 days.

When we announced our OCS plan, I said that in the Arctic, in the Beaufort and the Chukchi Seas in the north, we did not know enough of the science, nor did we know enough about the oil response capabilities, and that those leased sales would, in fact, be cancelled, and I cancelled them. In addition to that, that there were places that were too special to drill, including Bristol Bay in Alaska, and we took those things off the map.

REFORMS

I look back at the last 15 or 16 months, and we have done a lot of reform in the Department, but in this area, there has been significant reform. Now, you can ask the question, is that enough reform? The answer is "no." That is why we will continue to do what we have to do to make sure the house is cleaned up.

Mr. MORAN. I appreciate that.

PERMIT APPROVAL PERIOD

We understand that one of the problems that you have had is that you have only 30 days to approve a permit. You approve over 200 plans a year. That is not enough time in which to implement the intent of the National Environmental Policy Act. It also explains why there are categorical exclusions that are simply not applied. I should say, it is quicker to grant the categorical exclusion and move on than to do the kind of review that is necessary.

Now, I won't go into that with you, but subsequently we are going to need to know what it is going to take to change that. I understand that the President wants to extend that to 90 days. That is an expensive process. We need to know if you have the resources.

Let me ask one other question, and then I want to move on to the other Members.

MARSH BURNS

We have a lot of questions about what the cost is going to be. We are being told BP is going to pick this up. I suspect there are going to be a great many costs that will wind up being borne by the Federal Government.

We hear this morning that the intent of the admiral in charge is to burn the oiled salt marshes. Admiral Allen said that, "Where there are conditions that are right, crews are going to set fire to oil-coated plants."

Marsh burns occur in fall and winter, not now. This is the wet season. I don't know how that is going to work. I can't imagine how you can avoid burning roots and permanently destroying marshes.

Is that a decision that has been coordinated within the Interior Department to consider the impact upon your responsibility for the natural resources in that area? Do you have an assessment of what the short- and long-term impacts are?

That is a relatively radical approach, although I think this situation probably requires a radical approach.

Secretary SALAZAR. Chairman Moran, this is a highly coordinated effort among all of the Federal agencies through the National Response Team and the implementation of the Oil Pollution Act and the programs that were set up to make sure there was coordination in this kind of an event.

I am not aware of the particular issue that you raise, but let me check on that particular issue.

Mr. MORAN. He announced it this morning. It was news to us, too, of course. And it would be important to know if there has been some coordination. Because while it may require a radical approach, that is one that has very substantial implications for the fish, the wildlife, the birds, and particularly the marshes. I don't know how it works and would like to know.

Secretary SALAZAR. If I may, Chairman Moran—

Mr. MORAN. Go ahead. Please.

Secretary SALAZAR [continuing]. We will get information back to you on that.

And, if I may, I just want to respond very quickly for 30 seconds on two of the issues that you raised.

Mr. MORAN. Yes.

Secretary SALAZAR. First, on the environmental reviews, David Hayes and the director of the Council of Environmental Quality, Nancy Sutley, are leading an effort to look at all of the environmental reviews to make sure they are being done right or identify what kind of changes need to be made.

I would remind the Committee that, even with respect to whatever criticism may be in the past, including this particular lease, there are multiple environmental impact statements in review—in fact, in this particular one, seven that occurred before the time the well was actually drilled. We will go through an effort to make sure that, if it can be done better, it will be done better and also to identify any particular legislative changes.

COSTS OF CLEAN UP

Finally, the question you raised with respect to BP being accountable and liable here, we have in writing from them, at the request of Secretary Napolitano and myself in meetings we have had with the principals of BP, including the Chairman of the Board and President, that they will not hide behind the \$75 million liability cap and they will be responsible for all response costs, as well as natural resource damages, as well as other damages that may result from the spill.

Mr. MORAN. We trust that will be the case.

Mr. Simpson.

Mr. SIMPSON. Thank you, Mr. Chairman.

LIABILITY CAP

And just to clarify that, because I have heard a lot of people say, you know, "They are only liable for \$75 million, according to the statute, and we ought to increase that to \$10 billion," and other things like that. As I understand it—and correct me if I am wrong—it is \$75 million in economic losses. They are still liable for all of the environmental cleanup costs and all of those things; is that right?

Secretary SALAZAR. I am going to have David talk just a little bit about the law itself, because he testified on it in one of the Committees in the last few days and testified on the changes the Administration is proposing.

With respect to this particular incident, what they have assured us is they will not hide behind any liability limitation and they will pay for everything. A company that made, from some reports, \$16 billion, other reports, \$14 billion last year, it seems to me that we will hold them to their word, which we have in writing, and that is they will pay for everything.

David.

Mr. HAYES. You are correct, Congressman Simpson. They have complete responsibility for all response costs in responding to this spill. No question about that.

The question is the economic damages, natural resource damages. That is the cap question. Under the current law, of course, that cap does not apply in the situation of gross negligence, or any violation of standards. So there are a number of situations where that cap would not apply.

They have assured the Secretary and Secretary Napolitano in writing they do not intend to use that cap to limit their liability here.

OCS DEVELOPMENT

Mr. SIMPSON. Okay.

You mentioned, in response to the chairman's question, deep-water drilling in the OCS has to be done safely. I think we all agree. Are they going to stop the permits and the drilling in the Arctic, which, as I understand it, is not deepwater drilling? There is a significant difference between deepwater drilling and shallow water drilling.

Secretary SALAZAR. Congressman Simpson, that announcement will be made shortly.

The reality is there are issues of significant concern in the Arctic, which is why we canceled the leases in the prior plan. Those issues relate to the oil response capabilities and to the science that is, in fact, available as we move forward.

What you are seeing today in the Gulf, as you turn on any television set or read any newspaper, is the greatest armada ever assembled to fight an oil spill.

Mr. SIMPSON. Right.

Secretary SALAZAR. We have significant concerns that what was previously thought to be so safe by members of this Committee, as well as the United States Congress, as well as the Executive Branch, may not be as safe as what we had been informed of.

Until we have the safety review and the report from the Commission, you will see some changes that I hope this Committee will support as we try to get to this Committee what I believe you want us to do. We need to be learning all the lessons from this horrific incident and making sure it doesn't happen again. That will include a much longer conversation with members of the Committee.

PRESIDENTIAL COMMISSION

Mr. SIMPSON. I am not one who is out bashing the administration, saying that this is Obama's Hurricane Katrina and so on. I don't think that advances our cause any, and our cause ought to be—

Secretary SALAZAR. We are going to have you join in all our press conferences, Congressman.

Mr. SIMPSON. Well, it is—you know, we ought to be focused on cleaning this mess up and, as you said, making sure that it doesn't happen again, to the extent that we can.

Is this Commission going to look at, I suspect, the whole process by which we allow for deepwater and OCS drilling? Will it also look at the Federal response that occurred, what the Department did right, what they did wrong?

I am sure there are lessons—hopefully, there are lessons we can learn from this as to how we would address it better in the future. Is the Commission going to look at those types of things, or will that be an internal review? Internal reviews of how you did something are always suspect. We need to have some outside sources look at this so that we learn from it, not as a criticism, but so that we learn from it how we would do it better in the future. Because I am certain that there are things that, if you had to go back 37 days ago, you would probably do a little differently.

Secretary SALAZAR. Congressman Simpson, you are absolutely correct, and we are thinking along the same track there. There are multiple investigations under way, but they will all feed into the Commission. Within the Department of the Interior and the Coast Guard, there is a joint investigation of the incident that will feed into the Presidential Commission. There is another investigation, which I have asked the Inspector General to conduct, of what happened and whether there were improprieties relative to the regulatory effort. The Commission will have its own independence to make these decisions.

We also will be contracting with the National Academy of Engineers, to have them come in and take a third-party, independent review of new safety measures that can be taken with respect to this.

LIZ BIRNBAUM

Chairman Moran, if I may make a statement, because I want to come in front of the Committee where I see so many people who have been so strong in support of the Department of the Interior—and be as forthright as I can. Liz Birnbaum has resigned as the Director of the Minerals Management Service. She did it on her own terms and her own volition.

Liz Birnbaum is a strong and very effective person who, among other things, helped us break through the very difficult issues on

standing up offshore wind in the Atlantic, where we still have a lot more work to do. She helped us move forward to address what was a very broken system that we found when I came into the Department of Interior. She is a good public servant.

Mr. SIMPSON. Thank you. I appreciate that.

One last question, Mr. Chairman?

Mr. MORAN. Thank you, Mr. Secretary.

If I could, Mike, to the young ladies who are holding the banner, you are doing it silently and I don't have a problem with it. But if you wouldn't mind standing with your back to the wall so that it doesn't interfere with the view of the other people. Just as long as we are considerate of others is all I ask. There is a corner here where we could still see it, and it wouldn't block the view of other people. Or you can stand by the wall, if you would like.

Thank you.

As long as people are quiet and respectful, they can express their views, but we don't want it to be inconsiderate of others.

Mr. Simpson.

Mr. SIMPSON. One last question that concerns the jurisdiction, actually, of this committee.

SUPPLEMENTAL REQUEST

You requested \$29 million in additional appropriation. Could you go through what that is for?

Any idea yet on what we can expect, looking forward on what we are going to have to appropriate in the future, what it is going to cost us in terms of both addressing this spill and, as you said, reforming the Department and the Minerals Management Service?

Secretary SALAZAR. I will have the Deputy Secretary, Congressman Simpson, respond to this specific question.

Mr. HAYES. Congressman, of the \$29 million, approximately \$20 million is focused on the Minerals Management Service, including, in particular, engineering studies, investigations, enforcement, and more inspections. As you know, in our 2011 budget, we also had a modest increase request for more inspectors.

Mr. SIMPSON. Isn't it true that we only have 65 inspectors in MMS for the entire country?

Mr. HAYES. Yes.

Mr. SIMPSON. That is both onshore and offshore?

Mr. HAYES. That is offshore. They are virtually all in the Gulf. There are, I think, five in California. There are, I think, 55 in the Gulf, and they are the ones that cover all of the offshore. We are interested in beefing that up for obvious reasons, and that is the bulk of the \$29 million request.

However, there is a substantial request of about \$7 million to support these independent science efforts the Secretary just alluded to, including the National Academy of Engineering independent root cause analysis, the special safety oversight board the Secretary established, the 30-day report we are delivering to the President today, and then a couple of additional million dollars in additional activities.

Mr. MORAN. David, would you bring the microphone closer? We are being told that nobody can hear you.

Mr. HAYES. Thank you. So just to recap, \$20 million for enforcement and inspection, MMS-related activities, \$7 million for independent science and also to support the internal scientific investigations, engineering investigations, and some additional activities that do not qualify for reimbursement under the Oil Pollution Act, the spill fund. We estimate that to date we have spent about \$8 million already responding to the crisis. We have agreements, Pollution Removal Funding Authorizations, that we are working through to preauthorize funding for a lot of the response activities in the Gulf. We have agreements with the National Park Service, the Fish and Wildlife Service, and the Minerals Management Service. So far we have spent about \$4 million of the \$7 million we think will be directly reimbursable under these agreements, under the Oil Pollution Act of 1990 through the Coast Guard. There are some additional expenses, such as increased inspections, for example, and others, that are not directly reimbursable.

Mr. SIMPSON. And that will be an ongoing expense?

Mr. HAYES. That will be an ongoing expense, yes.

Mr. MORAN. Thank you Mr. Simpson. Mr. Obey.

INTERNATIONAL REGULATIONS

Mr. OBEY. Mr. Secretary, just one question. Do we have anything that we can learn by looking at global experiences with problems like this? For example, drilling off Indonesia or in the North Sea by the Norwegians? What has their experience been with respect to oil spills? What is the difference in, for example, the Norwegian regulatory regimen versus our own? My understanding is that in Norway, they have done roughly what the administration is proposing by way of separating the leasing function from the oversight and regulatory function. Is there anything at all that we can gather from their experiences? Or aren't they comparable?

Secretary SALAZAR. Chairman Obey, there is a lot we can learn from their experiences, and indeed the report that should be on its way to the President momentarily actually has looked at all the regulatory regimes in those other countries. I will say it is known that we do have one of the more stronger regulatory regimes with respect to Outer Continental Shelf oil and gas development. I think, as this incident in the Gulf of Mexico demonstrates, there is a lot more that can be done. We will obviously learn a lot more, but I have spent a good amount of my own personal time trying to understand these blowout prevention mechanisms and how they could be upgraded with additional redundancies. The fact of the matter is that they can be, and the fact of the matter is that there are ways in which they can be actuated with redundancies that can be put into place. That will all be part of what we will move forward because the President has been very clear. We essentially will not allow any more deepwater drilling until we can ensure that we are doing it in the safest way possible, and we believe that we can do it safer.

Mr. OBEY. My understanding in Norway is that they get as much as a third of their revenue from offshore oil drilling, and I am wondering what their experience has been. Have they had any significant spills during their drilling history?

Secretary SALAZAR. Let me say, this is not complete, but there have been huge spills, much larger than what we are seeing in the Gulf of Mexico today over time. I am looking at the 1979 spill in the Gulf of Mexico by Pemex in what they called the Ixtoc I oil well. That went from June 3, 1979, to March 23, 1980, before it was capped. During that duration in the Gulf of Mexico, it dumped 3.5 million barrels of oil into the ocean. There are a whole host of other ones in the Persian Gulf, in France, in Africa and others. The fact is that there is that kind of information out there.

Mr. OBEY. Thank you, Mr. Chairman.

Mr. MORAN. Thank you very much, Mr. Obey. Mr. Lewis.

Mr. LEWIS. Thank you very much, Mr. Chairman. Secretary Salazar, I was pleased, I think, to hear you suggest that you have had this responsibility for about 16 months, and thereby implied that maybe President Bush isn't responsible for this particular spill. Am I correct in that?

REFORMS AND BUREAUCRACY

Secretary SALAZAR. You are correct in that we have made very significant reforms. There are more reforms to be made, and we did inherit what essentially—and I think you and this Committee probably know this more than anybody else—what had been a Department that had been significantly eroded through a number of different means, including budget, for many years. It is a conversation which Congressman Simpson and I have had many times, and it is not a Democratic or Republican issue. I think one of the lessons to be learned from all this is that when you have a government, you need to support that government to be able to work in all of its essential functions, including the protection of the public safety and the environment.

Mr. LEWIS. Indeed Presidents do come and go. The underlying bureaucracy is there for a long, long time. They have got serious responsibilities that we assume they will continue to move forward with.

MORATORIA

I am interested, for the committee and for me, to have you clarify exactly what is your meaning of moratoria. Are we talking about moratoria of deepwater drilling? Are we including in that, however, what can be a very long process whereby people go through applying for the opportunity to drill in the future? Would you clarify for the committee exactly what your definition is of moratorium?

Secretary SALAZAR. The President's announcement will happen in the next several hours, and I should defer to my President to make sure I don't say something different than what he is going to say. I will say this, the direction he has given me and the direction which I accept and the direction which I think is correct is that we need to push the pause button with respect to deepwater, because we need to make sure the lessons from this horrific tragedy are learned.

We also recognize—and I think this has been clear from the beginning of this Administration—that we see oil and gas development as part of the energy portfolio for the future, along with solar, wind, geothermal, and biomass. The reality is the place where you

have the abundance of oil and gas reserves is still in the Outer Continental Shelf. I think it is important that we move forward thoughtfully.

When we are talking about hitting the pause button, we are talking about taking the time out to essentially learn what exactly happened here to do everything we can to ensure that it doesn't happen again.

Mr. LEWIS. Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Lewis.

RIG INSPECTIONS

Mr. Dicks.

Mr. DICKS. Thank you, Mr. Secretary, for being here. I know you are doing everything you can to deal with this problem.

The Wall Street Journal reported, using MMS data, a decline in rig inspections from 1,292 in 2005 to 760 in 2009. With the growth in the industry, this decline in inspections is troublesome. We have talked about the 55 inspectors, and we are adding some. You asked for 11. We are putting them in the supplemental. The money is in the supplemental, by the way, that you requested. How many safety inspectors does the MMS employ? And what resources does the Department need to ensure the number of inspection increases?

Now, the reason I am asking that is, on the MMS Web site, the agency claims that each rig must be inspected once per month. News reports, however, indicate that schedule is not always kept. Prior to the incident in the Gulf, how often were drilling rigs inspected? And what was the scope of these inspections? Have inspections included an evaluation of the functioning of the blowout prevention equipment below the water's surface? And is it satisfactory just to have one prevention technique, or should there be more redundancy? And I am sure when you get the National Academy's study, that is one of the things you are going to ask them to look at.

But this is troublesome, that these inspections have declined and that we may not be inspecting these on a regular basis. What can you tell us about this?

Secretary SALAZAR. Congressman Dicks, first, as you know, even on the budget we presented with respect to 2011, we have requested additional inspectors.

Mr. DICKS. Right. And we put those in the supplemental.

Secretary SALAZAR. Well, even before the supplemental in the President's budget, we knew that there were additional inspectors that we needed, and we requested them.

With respect to the rest of your question, I will have the Deputy Secretary comment on that.

Mr. HAYES. Congressman, you are correct. The number of inspections has gone down. We will give you the specifics on that. Ironically, actually, the number of active drilling platforms has gone down, too. They tend to be more concentrated efforts. So that is not as significant a data point as it might appear.

Mr. DICKS. Okay.

Mr. HAYES. You raise some very important points. Let me just run through the others. In terms of the frequency of inspection, there is an effort during drilling activities to have an inspection

once a month, and that has not been hit completely, which is one of the reasons we are interested in more inspections. Although for drilling activities, it is very close to once a month. Probably more important is that we need to do a stem-to-stern evaluation of the effectiveness of these inspections. In fact the Secretary last fall, before any of this arose, asked the National Academy of Science's Transportation Board to do an evaluation of the effectiveness of our inspections, and that independent evaluation is ongoing. We are very much looking forward to the results.

Your final question, Congressman, went to the issue of whether blowout preventers are tested at sea, at depth when they are put down below on the seabed. They are not.

Mr. DICKS. Can they be?

Mr. HAYES. There are tests down below about the hydraulics. What has not been tested down below are secondary systems or emergency systems. The safety report the Secretary is delivering to the President today goes into this in some detail and identifies a number of areas like this very specifically, Congressman, where we think there needs to be some fresh thinking about additional inspections, and additional testing specifically going to the issues that arose in the Deepwater Horizon and the failure of the BOP.

NEPA REVIEW

Mr. DICKS. Another point that was made by a lieutenant commander in the Coast Guard was that offshore regulations, environmental regulations, were out of date. He said, a 20-year-old categorical exclusion under NEPA was used to approve drilling by the BP-leased Deepwater Horizon rig in the Gulf. We have heard over the last month that technological advances and research in deepwater drilling are similar to those of our sophisticated space exploration program. Yet we still use 20-year-old environmental reviews to approve new drilling activities. What can you tell us about that, David?

Mr. HAYES. Congressman, that is correct. That is the National Environmental Policy Act categorical exclusion policy that Chairman Sutley indicated earlier this year—actually in February of this year—that CEQ is reviewing whether it makes sense to continue with that policy. We have an additional challenge here, as you know, that we process exploration permits within 30 days, and that is not enough time to do a good analysis, which has led to those categorical exclusions. I will finally say that the Secretary and Nancy Sutley agreed and announced about ten days ago that they are doing a joint review of this very issue.

INSPECTIONS

Mr. DICKS. Because this does earn a lot of revenue, \$13 billion or \$14 billion a year, I think we ought to be very much on the side of making sure that we have the people who are properly trained and who can make these inspections and do them professionally and on a timely basis, and the science. The budget was cut by \$2 million on science this year. I think we will put that money back in. But I think we should have overkill here in terms of the inspections and the quality of the people doing it.

Thank you.

Mr. MORAN. Thank you very much, Mr. Dicks. Mr. Calvert.

COASTAL BARRIERS

Mr. CALVERT. Thank you, Mr. Chairman. As was mentioned by others, I think there will be time to investigate what went wrong and what needs to be done in the future. But I think a lot of folks, quite frankly, are interested in what we are doing now.

Governor Jindal of Louisiana has asked for immediate authority to build coastal barriers to protect coastal marsh land and estuaries. Obviously he is very concerned, and has been on the news lately. Is there any reason why you could not give the Governor immediate authority to move ahead on building these coastal barriers? I know that there is always a downside to everything, but it seems from listening to a number of experts that the risks posed by the oil are far worse than other problems associated with the barriers. I want to listen to where we are on that and whether or not permits are going to be issued to give the Governor the authority to move ahead on this.

Secretary SALAZAR. Congressman Calvert, I can tell you that this issue is one in which the National Incident Commander, Admiral Allen, has been engaged and is engaged in even today with the Governor of Louisiana. Hopefully there will be a resolution that is workable. It is an ongoing thing, and Admiral Allen is totally on top of it.

Mr. CALVERT. Well, it seems that, again, based on news stories I have been reading that we are running out of time and oil is now going into the marshlands. I believe the Governor asked two weeks ago for permission to move ahead on building coastal barriers. As I understand it, as of today no permits have been issued or no permission has been given to the Governor to move forward.

Secretary SALAZAR. Congressman Calvert, what we need to make sure happens, as we respond to this, is that we are doing things that are not going to make things worse. That is part of what Admiral Allen is assessing, and he is, along with all the Federal team, making sure we are doing everything possible, including looking at every idea that is placed on the table, including these ideas that have been placed on the table by Governor Jindal.

Mr. CALVERT. Okay. Thank you. Thank you, Mr. Chairman.

Mr. MORAN. Thank you very much, Mr. Calvert. The chair of the Science, Justice, and Commerce Subcommittee, Mr. Mollohan.

REGULATIONS

Mr. MOLLOHAN. Thank you, Mr. Chairman. Mr. Secretary, welcome to the hearing.

Mr. Dicks asked you some questions about inspectors and the number of inspections. I would like to ask you a series of questions with regard to the standard to which the companies were supposed to operate or are operating and what regulatory scheme under which they are operating that these inspectors are inspecting under. What is the regulatory regime? What are the statutory authorities? And are they mandatory? Are they voluntary? What kind of safety and environmental regulations or rules are the drilling operations operating under?

Secretary SALAZAR. Congressman, there is a comprehensive set of regulations to regulate the industry, including many mandatory provisions relating to cementing, relating to blowout preventers and redundancies in those mechanisms. There is a comprehensive regulatory regime in place. It is included in my report to the President, as we look at what we do here in the United States versus what is happening in other countries, we have a regulatory regime that is comprehensive in nature. It doesn't mean it is not a regulatory regime that needs to be significantly strengthened, for example, on the issues of blowout preventers and redundancies. In fact, there will be additional requirements we will be imposing.

PERFORMANCE STANDARDS

Mr. MOLLOHAN. The Wall Street Journal reports that over the past several years the MMS has adopted broad performance standards that industry is required to meet and does not enforce a specific set of safety rules for the OCS operations. Is that correct? And to what extent is that correct?

Secretary SALAZAR. The standards are, in fact, both mandatory as well as performance-based. The Deputy Secretary, who has been working on this issue, will comment.

Mr. MOLLOHAN. Thank you, Mr. Secretary.

Mr. HAYES. Congressman, the regulatory structure is both prescriptive and performance-based. Interestingly, back to the chairman's question, Norway, for example, has a performance-based approach more than a prescriptive-based approach. The MMS regulations are a mix, which we think is appropriate. What we are looking at is potentially additional prescriptions, however, because limiting the prescriptions may not be appropriate. I will say that this regulatory structure has been laid out over the last several years under the Outer Continental Shelf Lands Act, which itself provides ample authority for the Department to have a robust regulatory system.

Mr. MOLLOHAN. Well, according to MMS and the Wall Street Journal, the safety and environmental management plan is a voluntary program that is meant to complement other MMS regulations. The plan is a process for OCS oil and gas, and I quote, "that recognizes worker safety and pollution control are largely dependent on proper human behavior."

We have this issue and this question in the coal industry.

Mr. HAYES. Yes.

REGULATIONS

Mr. MOLLOHAN. And what we are really finding is that discretion, to the extent it exists in dangerous situations, leads to disasters. I was just wondering if you would comment on the quote, that the plan recognizes worker safety and pollution control are largely dependent on proper human behavior. I would suggest the regulatory scheme should dictate proper human behavior.

Mr. HAYES. Well, this is an important point. As I mentioned before, the regulatory system is quite prescriptive. There was a proposal in the mid-nineties to also have a safety management system-type requirement. That is what that is referring to, and that was adopted on a voluntary basis to actually just have companies

explain what management systems they were going to have, to make sure the legally required mandates were, in fact, being followed. Over the last ten years, that has been implemented on a voluntary basis. Actually the MMS recently suggested it be codified that there would be a specific requirement that companies adopt management systems not on a voluntary basis. That rule is now being finalized, and that is referenced in the safety report being presented to the Secretary today.

Mr. MOLLOHAN. Well, does this lead to inspectors not having a statutory or regulatorily promulgated standard to reference when they go out and inspect?

Mr. HAYES. No. If you look at our Code of Federal Regulations, it looks like an EPA code of regulations or a mining code of regulations. The inspectors have a very long checklist of very specific requirements and they have an enforcement program that identifies more than 2,000 violations per year. They typically will have fines of about \$1 million per year. These are all based on mandatory requirements, but that journal article I was talking about is the notion of having a safety management system that sort of overlies this. We think it is a good idea to, in fact, have that as well. But that doesn't go to the question of inspection requirements. They are all laid out in the regulations.

Mr. MOLLOHAN. Would you identify for the committee areas of inadequacy with regard to statutory and regulatory authority or rules that you have promulgated, things that need to be done additionally?

Mr. HAYES. The report we are filing today and we will make public today will identify a number of areas where we think there should be some additional strengthening, Congressman.

Mr. MOLLOHAN. Do you intend to move forward with rule promulgation to address that?

Mr. HAYES. Yes. That is our recommendation to the President.

Mr. MOLLOHAN. Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Mollohan. For the sake of the committee's understanding of the time schedule, we have just been told that in about 15 minutes, we will have a series of four votes. We will try to keep the hearing going, but will see if we can't wrap up before noontime. Just one other thing. They just announced this is clearly the largest oil spill in our Nation's history, from 20 to 40 million gallons. So it is two to four times larger than the Exxon Valdez, which was previously the most damaging.

And this will be the only round of questions for the Secretary. We will have a subsequent panel in the afternoon to deal with the Fish and Wildlife Service.

Mr. Cole.

ENFORCEMENT AND REGULATIONS

Mr. COLE. Thank you, Mr. Chairman. Mr. Secretary, thank you for being here. We sort of touched on it, but I want to break this into three parts and ask you to assess, in your view, where shortcomings may have occurred. You could have a situation where, number one, the regulations were all followed, the equipment was the appropriate equipment but it just wasn't enough. Secretary Hayes touched on this a little bit. What are the shortcomings in

the regulatory framework and the requirements that currently exist that we ought to now in retrospect fix?

Two, you could have a situation where all those things were fine but there wasn't an enforcement mechanism or there wasn't enough personnel or they didn't do their job correctly. So there is nothing wrong with the structure of the regulations, there is nothing wrong with the requirements, but there is a failure in the enforcement mechanism itself.

And three, you can have a case where there is a uniquely bad incident or a bad actor who has not done what they were supposed to do, has deliberately evaded the requirements. I know it is early to tell, but I would like your overview on whatever you think—how these factors relate together and explain what happened.

Secretary SALAZAR. Congressman Cole, I think that is why it is so important that this Commission have the opportunity to look at all of those questions, including what happened in this particular incident. You have probably by now seen many of the stories about what people think happened, what was going on in the rig, and rubber that apparently came up and a whole host of things that were missed. The question of operator error, how much of that was responsible for this, the working theories relative to whether it was a defective placement of the cementing or the casing because a blowout essentially on a well is never supposed to happen. It did happen. Then you have the whole set of questions relating to the blowout prevention mechanism, and the actuation of that blowout prevention mechanism both from the rig as well as from the ground. What happened on the rig itself with the fire and the blow-out? There is a whole series of questions that have to be asked and answered.

As part of that, Congressman Cole, I think it is very important and very obvious that we do what the President has asked us to do and, I think, what this Congress is asking us to do, which is to look at how we can improve the regulatory regime with respect to OCS. The report that we present to the President very shortly will lay out a number of places where we think safety can be improved.

I don't know if that answers your question, but the fact is we are in a dynamic process, right in the middle of crossing the river. When all is said and done, the lessons learned will include all of the series of issues you have raised.

Mr. COLE. Fair enough. It is early to ask that question, I understand.

INTERNATIONAL STANDARDS

Two other questions. This was touched on earlier. Obviously drilling goes on by a variety of countries in a variety of environments all over the world offshore. This is for informational purposes. Is there any sort of international set of standards for offshore drilling or does each country more or less decide individually? Two, if that is the case, is there any thought about the administration having more international coordination? It is terrible because it has happened obviously in our Gulf, but it would be just as bad someplace else in the world, and we all live in the same environment. So what is happening internationally on this?

Secretary SALAZAR. I will comment and have David comment as well on that. Especially when you are talking about the Arctic waters, I have wanted to make sure the other countries that are involved, including Norway, Canada and Russia, that we understand and learn from each other. I made a trip to Canada to meet with the countries that share the Arctic area to get additional information from them. We should learn from each other.

Mr. HAYES. Congressman, briefly, there is a lot of sharing of information at the international level. Both among the regulators and MMS working with regulatory authorities in Norway, Brazil and other countries that do this activity. There is not a blue book of accepted international standards. There is an active industry standard development process that is also shared globally. This is one of the things we want to look at because our desire is to have absolutely world-class efforts and to make sure the rest of the world also benefits from this.

It is a focus of the Secretary's report to the President, and it is going to be a focus, I am sure, of the Presidential commission.

COMMUNICATION COORDINATION

Mr. COLE. Okay. Last question if I may, Mr. Chairman. Let me make it clear when I ask this question I have really high respect for Admiral Allen. I really do. I dealt with him during Katrina. I think he is really one of the greatest public servants I have ever encountered. I have enormously high respect for you, too, Mr. Secretary. I think you have done a great job for the President and I think you have done a good job in a difficult situation. It has caused me concern that a week ago or a couple of weeks ago the two of you seemed to be on different pages with BP and their involvement and how we ought to be handling that.

It concerned me this morning when I heard a report on NPR about Admiral Allen floating the idea of burning oil in the marshes. It worries me that you didn't know, and that there wasn't coordination. I don't say that to be critical of you or him. But is there a mechanism here where you guys are communicating well? I think you have been a little bit out of sync with one another. Let me be fair, in the middle of an ongoing crisis, it is pretty easy to lose coordination. But I think it is something to think about because there are a lot of mixed messages going out from a PR standpoint. It creates a little bit of confusion.

Secretary SALAZAR. Congressman Cole, I think Admiral Allen and I have probably been in more communication than—in fact, I know I have communicated with him a lot more than I have with my wife over the last 37 days. We are very coordinated. We have a nightly call where we catch up on exactly what has happened during the day on the big issues we are handling, and on what the Governors and others are requesting. This is a highly coordinated effort.

That is the first point I would make. The second point, in terms of the roles—you, Congressman Cole, know how words sometimes are taken. The reality of it is pretty clear and I think Admiral Allen agrees as well. We, as the United States of America, have the responsibility of holding BP accountable. One of the roles I have played is, I am holding them accountable in Houston to make sure

the best science is brought to bear. That is why this is probably Dr. McNutt's first time in Washington for 3 weeks, because she has been at the command center. I ordered them to have Secretary Chu and his people there as well. You know the role that we play is as the directors, and I think we have played that well. People may describe that role in different ways, but there is not a substantive difference in the understanding of the role.

Mr. MORAN. Mr. Chandler.

RESPONSE TO SPILL

Mr. CHANDLER. Thank you, Mr. Chairman. Mr. Secretary, thank you for all this hard work that you have undertaken. I know that there are a lot of us who have a great deal of confidence in the fact that you are there and on the job. If you are anything like me, it frustrates you a little bit that often the first folks that criticize the response of the government seem to be the anti-regulatory or the shrink-the-government crowd. I find that ironic. I don't know if you do, but that happens quite often, and it seems to be happening here in this situation.

BP

I would like to touch on BP a little bit, if I may. We in this country refer to our fossil fuels, whether they be oil, gas, coal, whatever, as our natural resources. The key word here being "our." These resources, in my view, belong to the American people. When the Minerals Management Service approves a drilling operation, they are, again, in my view, bestowing on a private company the right to make profit off of what belongs to the American people. That is what that transaction entails. And the profits, indeed, are immense.

It is astonishing to me. BP's net profit in 2009 was \$16.6 billion. That equates to about \$45.4 million every day in profit. And we know what profit is. That is what is after all of the expenses, all of the expenses taken to extract what are our natural resources. This is the profit that they have made. My understanding is, in the first quarter of 2010, the profits jumped 135 percent, and they are now making profits at a rate of \$60-plus million a day. With making these profits by extracting our country's resources, these companies of course have a responsibility. And if these companies can't take that responsibility seriously, we really need to do something about it.

Obviously we have had tragedies. This is the most recent one. But we have had others where lives are lost in this activity, and entire regions of the country are decimated and in some cases entire economies. People who obviously had no fault in this, their livelihoods are being ruined as a result of this. We are seeing the destruction of travel, tourism, the hospitality industry, fishing. All of these things. When we give these companies the right to make profits off of our resources, they make the profits, and it seems like so often at the end of the day, the taxpayers end up being on the hook for a lot of the costs. It seems like that is the case more and more often.

DIVERTED DOI RESOURCES

Now I would be interested to know to what extent is your agency having to divert resources to this crisis, that would be used in other circumstances that this subcommittee is going to ultimately have to give you more money to replace? I suspect that something like that is going to happen in the future, through no fault of your own of course, but because you are responding to this crisis. I would be curious if you could try to address that. And I certainly don't expect you to have any particular numbers on it at this point. But also, what are you going to be doing in the future to make sure that BP does foot the entire bill for all of these things and all of the costs to the taxpayers?

ROYALTY WAIVERS

You know we have also given these companies quite large tax breaks in the past, and we have given them royalty waivers. I would like to explore with you the royalty waiver program. Do you believe that the royalty rates that we are receiving from not just this company but in general, are decent compensation? Are they sufficient for the risk that the American taxpayer has to undertake in these circumstances and for all of the potential damage that could be caused? And can you tell me, how has the royalty waiver program impacted the type of exploration that is performed, the risks taken, and how it may have contributed to this particular failure?

Thank you, Mr. Chairman.
Mr. MORAN. Mr. Secretary.

RESPONSE

Secretary SALAZAR. Congressman Chandler, let me first say that with respect to the Department of Interior's efforts along the Gulf Coast, it is a massive mobilization on our part, and it includes many agencies. You will hear in much more detail from Assistant Secretary Tom Strickland about what the Fish and Wildlife Service, the National Park Service, and other agencies are doing down in the region. He is in charge and on point dealing with the protection of the Gulf, and can articulate those efforts. There is, indeed, significant expense associated with that. They are a part of the oil spill response expense, and so we expect that BP will be paying for those expenses, and we have set up accounting mechanisms not only for us at Interior but across the Federal Government so we can get those funds from BP.

ROYALTIES

Secondly, with respect to royalties and the collection of those royalties from companies that use American property to essentially create profit for themselves, it is an issue we have been working very hard on. This has been part of our reform effort. As you know, Congressman Chandler, on the onshore we have had a royalty rate of 12.5 percent in place since 1920. It seems to me that it is high time, when you look at the royalty rates in the State of Texas and other places, we reform that. With respect to the offshore, we have underway a number of different efforts to try to get a fair return

to the American taxpayer, including royalty simplification and how royalties are calculated.

The driving principle I have articulated in front of this Committee in the past and many times in front of other committees in Congress is that my responsibility as Secretary of Interior is to make sure the American taxpayer is getting a fair return for the use of these very valuable resources, and that effort, no matter the gravity of the moment, is important, and will, in fact, continue.

MMS REORGANIZATION

Mr. MORAN. Thank you. Mr. Hinchey.

Mr. HINCHEY. Thank you very much, Mr. Chairman. And thank you, Mr. Secretary and Mr. Vice Secretary. I very much appreciate everything that you are doing. We are deeply grateful to you and we know all of the energy and all of the time you have been putting into this. It is absolutely essential that you have done so and you are making a big difference in this operation.

I just want to say candidly that this tragic disaster in the Gulf of Mexico is just another example of the deeply adverse set of circumstances that this administration has inherited and the complex conditions that they have to deal with both domestically and internationally. This is just one of those very, very tragic issues. I very much appreciate what you are doing, the focus of attention on it, the changes that are being made. All of those things are absolutely essential, and they seem to be done very, very well. One of the things that you talked about is MMS and how changes are being made in MMS. MMS, we know, was incompetent and to a substantial degree, even corrupt in the way that it oversaw the operations there. Are you comfortable now with the way in which MMS is being changed and being operated? Do we have to become involved in that? How do you feel about this and the changes that are being made?

Secretary SALAZAR. Congressman Hinchey, I appreciate your comment. The fact is, yes, we need your involvement as we move forward with the reorganization of MMS. Essentially what I have done is to blow up that agency but it carries on a very important function for the United States of America. That is why we put it together in the Office of Natural Resources Revenues, away from the mines and minerals and why we set up the bureaus of Safety and Environmental Enforcement as well as Ocean Energy Management, our key initiatives. I have a star team, a SWAT team that has been assigned to pull that together. I gave them a 30-day time period in order to be able to have an opportunity to consult with you and with your staff as we pull together the new organizations. We need your help in getting it done.

MANAGEMENT CONTROLS AND ACCOUNTABILITY

Mr. HINCHEY. I thank you very much. I appreciate what you are doing in that particular regard. I just wanted to say that it was over two weeks ago when BP-Transocean executives testified before a Senate committee, and it was clear that if you look at how the management of this rig was structured, there was no surprise in the way in which this came about. One of the things that became apparent was that BP owned the lease to drill. Transocean owned

the rig used to drill the well. Halliburton was in charge of cementing the well casing. And the situation went on and on. I mean, this was such a deeply complex set of circumstances which was almost impossible to control. One of the reasons it was almost impossible to control was the interaction, the adverse interaction apparently, between these organizations. There was a great deal of indecision in the moments leading up to this explosion, and the explosion then took place.

Who was in charge of the drilling operation? Which of these parties had the final decision on the rig operations? I know that this is something that you have begun to look into. Maybe it is not clear yet what the set of circumstances are. To whatever extent you can say so specifically would be important, but we would appreciate it as time goes on, too, because I know that you are going to continue to look into this and investigate it even more.

Doesn't the Interior Department need to ensure that effective management controls and structures are in place so that we are not faced with indecision and so that accountability cannot be outsourced? One of those aspects of accountability was the apparent refusal—and I assume it was—that refused this remote control cutoff switch whose functions would have been to seal off the well in case the rig above it was destroyed. So this was something that was obviously just neglected.

These are the things that I know that you are paying attention to, and it probably has some relationship to the situation that you are dealing with offshore in Alaska now.

Can you just give us some indication about what is going on there in this particular case?

Mr. MORAN. Thank you, Mr. Hinchey. Mr. Secretary, we do want to give Ms. McCollum an opportunity to ask questions as well. So please proceed, Mr. Secretary, and then we will go to Ms. McCollum.

Secretary SALAZAR. First, Congressman Hinchey, BP is the responsible party under the law and under the legal arrangement between the United States of America and BP as the lessee of this property and this resource. Within that construct, there are a number of contractual arrangements they enter into, including in this particular case with Transocean and other subcontracts for cementing and a whole host of other things with some of the companies you mentioned. I think you will be very interested to know these investigations will give us a lot of answers about what happened on the rig that day and that evening. I look forward to the results of an investigation that is, in fact, based on the facts of everything being investigated right now. I would expect, Mr. Chairman, you may want to have a hearing whenever those investigations are complete.

With respect to the switch and what was going on with some of the deficiencies, that is also part of what the investigation is looking at. We are not waiting for the results of the investigation to come out as we move forward with the report we are sending over to the President that will talk about significant additional safety measures that can be put into place.

Finally, with respect to your last question on Alaska, you will hear more as the President makes his announcement in an hour or two.

Mr. HINCHEY. Thank you very much.

Mr. MORAN. Thank you very much, Mr. Hinchey. Ms. McCollum.

DRILLING IN THE ARCTIC

Ms. MCCOLLUM. Thank you, Mr. Chair.

Secretary Salazar, as has been pointed out by yourself and many people, the catastrophe in the Gulf has been a tragedy for the workers who lost their lives, for the fishermen and others whose livelihoods are now ruined, for the unknown environmental impacts on public health and wildlife for which we simply have no idea what the future looks like.

BP was drilling in waters, as has been pointed out time and time again, owned by the American people. This oil spill now threatens many of our natural treasures, from the delicate coral reefs in Florida to the Louisiana wetlands that harbor life for thousands of wildlife species.

Now, Secretary Salazar, in light of the disasters in the Gulf of Mexico and the corrupt state of MMS, I have grave concerns about allowing drilling in the Arctic. Trusting the work of MMS and the assurances of Shell Oil under the current regulations we are operating under is just unacceptable. So I am asking you, and I know it has been pointed out that the President is going to be making an announcement shortly, I am asking you to continue to use your powers to stop all the drilling in the Beaufort and Chukchi Seas until we really have answers on what went wrong with BP and, until we really have ideas of what we are doing going forward. Until this happens, off shore drilling needs to stop and stop now.

So I welcome an announcement by the President because I have seen firsthand how fragile this area is in the Arctic, and I believe that we need to be working together to do everything we can do to make sure that you have all the tools that you need to put regulations in place that we know will work before any further drilling in this area commences.

Now you have two major cleanups going on right now: The one in the Gulf, the oil spill that you have been answering questions on, and then you have also been answering questions on the regulatory cleanup mess and the deep corruption and the mismanagement that has plagued this agency that you inherited. Now you have been talking about some of your plans to clean up the agency, and I just want to reiterate how important this is. According to a story in The Washington Post Tuesday, May 25, 2010, MMS actions are shaped by a 2005 regulation it adopted that "assumes"—oil and gas companies can best evaluate the environmental effects of their operations.

So once again, I am asking for the drilling to stop until we put effective, new, stringent, accountable regulations in place. The Washington Post goes on to say, the rule governing which information MMS should receive and review before signing off on the drilling plan states, quote, the leasor or the operator is in the best position to determine the environmental effects and its proposed activity based on whether or not the operation is routine or nonroutine.

I think we have the science in our toolbox to make that decision, so I look forward to you doing that. So my questions are simple, and I think I have heard you clearly say that you will be coming to Congress to request legislation authorizing this new regulatory framework. I think I have heard you clearly say that.

What request can this subcommittee expect for the 2011 appropriations? What are you going to need to be able to carry out this fundamental restructuring of the three separate agencies and finally eliminate once and for all the corruption, the negligence, and the conflicts of interest that have cost our country and our taxpayers so dearly? What can we do to help you?

Mr. MORAN. Thanks, Ms. McCollum. And this is Ms. McCollum's first foray into the Interior Appropriations Subcommittee, and we welcome you, Ms. McCollum. Thank you. It is clear she is not going to be, as they say, a shrinking violet. And we welcome that.

Mr. Secretary, after your response, we will conclude the hearing. Please, Mr. Secretary.

MMS REORGANIZATION

Secretary SALAZAR. Thank you, Mr. Chairman. Thank you, Congresswoman McCollum.

First, we have asked for the \$29 million request, which Deputy Secretary David Hayes outlined, to be used for a variety of things, including additional inspectors and the investigations that are underway. As we move forward in this time frame where we are standing up the new reconstructed organization for the Office of Natural Resources Revenue, the Bureau of Ocean Energy Management and the Bureau of Safety and Environmental Enforcement, we will work closely with you to identify the resources needed to make sure the Department will have the robustness to accomplish the purposes you outlined.

DRILLING IN THE ARCTIC

Finally, with respect to the comment you made about the Arctic, let me just say this: We know the sensitivities of the Arctic. We made very significant changes with respect to the proposed leasing programs and oil and gas development in the Arctic. The five exploratory wells that were to be drilled this summer, those predated what we were doing here. What will happen—I expect you will see the President's statement—is that there is a sense here, we need to learn the lessons from the Gulf and pushing a pause button is an important thing to do. I think in particular in the Arctic, because of the fact the oil spill response you have underway in the Gulf Coast today is the largest ever in the history of the world. I think when other oil spills have occurred, including Ixtoc I in Mexico or thousands of others, many of which have been as large or larger, much larger than this one, they have gone unnoticed to the rest of the world.

I think one of the things you raise and which Deputy Secretary David Hayes addressed a few minutes ago is we really also need to look at this in the context of the oceans of the world because what happens with respect to the Arctic in Alaska is just a very tiny piece of the Arctic Circle where there are sovereign interests that—independent of the United States, obviously, because of their

sovereignty—want to move forward with very aggressive programs in the Arctic, and it includes Russia, Canada, Norway, and other countries. In fact, that is why Secretary Clinton and I attended a meeting in Canada about a month and a half ago—about the need to really take a look at this issue even beyond the borders of the United States and the Arctic because we can take care, for example, of the Beaufort issues in the United States. Canada is right there, too. We can do it with respect to the Chukchi, but Russia is right there, too. One of the lessons I hope comes out of this is that we can also deal more with these issues on a global nature.

Thank you very much.

Mr. MORAN. Very well done, Mr. Secretary, as we would have expected. Thank you as well, Mr. Hayes. You did a terrific job as well.

This will conclude this part of the panel, and so you are free to go and to go back to advising the President on his statement this afternoon, Mr. Secretary. But the second panel, which will be the Environmental Protection Agency, the Fish and Wildlife Service, and Dr. Marcia McNutt, the Director of the U.S. Geological Survey, will begin as soon as we finish votes. My guess is that is probably going to be between 12:45 and 1:00. We will be back in this room as soon as votes are concluded with the second panel, EPA, Fish and Wildlife, and U.S. Geological Survey.

Mr. Secretary, thank you again.

[Recess.]

THURSDAY, MAY 27, 2010.

**BP-TRANSOCEAN DEEPWATER HORIZON OIL DISASTER:
ONGOING RESPONSE AND ENVIRONMENTAL IMPACTS**

WITNESSES

BOB PERCIASEPE, DEPUTY ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

TOM STRICKLAND, ASSISTANT SECRETARY, FISH, AND WILDLIFE, AND PARKS, U.S. DEPARTMENT OF THE INTERIOR

DR. MARCIA McNUTT, DIRECTOR, U.S. GEOLOGICAL SURVEY

REMARKS OF MR. MORAN

Mr. MORAN. I think we are going to start the second panel right now because I know your time is very valuable, and we want you to be back on the job as fast as you can, but we do need to get your perspective on what is currently going on.

We have Bob Perciasepe, the Deputy Administrator of the Environmental Protection Agency; Tom Strickland, the Assistant Secretary of Interior and head of Fish, and Wildlife, and Parks; and Dr. Marcia McNutt is the Director of the U.S. Geological Survey.

Why don't we go from left to right? We will have each of you make a statement and then we will get into questions, rather than making any initial statements on our part, unless—did you have a statement you wanted to make, Mike?

Mr. SIMPSON. I have been trying to get you to go from left to right for so long.

Mr. MORAN. So maybe we will start with Mr. Strickland and go from right to left, just for Mr. Simpson's edification. No, I think we will—Bob, if you want to tell us the role that EPA is playing. And after we hear the opening statements, we will get into the questions.

Go ahead, sir.

OPENING REMARKS OF BOB PERCIASEPE

Mr. PERCIASEPE. Thank you, Chairman Moran and Ranking Member Simpson and also Chairman Dicks. And thank you all for inviting me today.

I think I would be remiss if I didn't start by just remembering how this whole event started and the fact that we lost 11 lives at the beginning and that we should express our condolences to the families who lost their loved ones.

We all know that efforts by BP to stop this spill are still continuing. And while the environmental disaster in the Gulf of Mexico that we are facing right now has no easy answers, the EPA is committed to doing its job, protecting communities, the natural environment, human health from the spill itself, as well as concerns resulting from the response to the spill.

Since the crisis began, the EPA has nearly 200 staff working on emergency response, from scientists, engineers, contractors, and others in Alabama, Florida, Louisiana, and Mississippi. We are performing rigorous testing and monitoring of air and water quality and are sharing that data with the public every day.

For nearly a month, EPA has been monitoring the air and water for pollutants which could pose a risk to human health and to the local communities. This monitoring is essential to ensure that communities are protected as we respond to the spill. All of this information is being made public on EPA.gov/BPspill as quickly as possible and as quickly as we can compile it.

DISPERSANTS

One of our top priorities is the safe application of chemical dispersants. Oil spill dispersants are chemicals applied to spilled oil to break down the oil into small drops below the surface. Ideally, the dispersed oil mixes into the water column and is rapidly diluted and then degraded by bacteria.

We know that dispersants are generally less toxic than oil, they decrease the risk to the shoreline and to organisms at the surface, and they biodegrade over weeks and not years, as oil may. But in the use of dispersants, we are faced with environmental tradeoffs. The long-term effects on aquatic life are still not completely known, and we must make sure that the dispersants used are as nontoxic as possible.

To date, BP has used about 850,000 gallons of dispersant, a volume that has never been used before. Since this crisis began, the EPA has not only demanded but has ordered, using the full force of the law, that the dispersants be limited in use, volume, and toxicity.

As this event has progressed, the approaches have continued to be modified. At the beginning, we were not using subsurface appli-

cation, but, as the event continued, we were looking for more efficient ways to apply the dispersant so we could use less of it. And we went through some rigorous testing with BP to determine whether the subsurface application would work. We wanted to make sure that monitoring was in place above the surface to monitor what was happening. And once that was in place, we allowed the subsurface application to begin.

As that has started, that has shown that we can be more efficient. Although today, as we are doing these other activities at the site, there is a variability in the amount of subsurface that is being used. But, as of the last few days, there has been very little surface application and mostly subsurface, and we have dramatically reduced the amount of dispersants that are being used.

We are in a position with no perfect solution. As we emerge from this response, I want to commit to revisit the regulations surrounding how EPA prepares for response and particularly regarding the dispersant registration under the National Contingency Plan. I also want to commit to sharing the results with this committee as we review that and working with you to tighten those underlying regulations.

We have requested \$2 million for initial funding for a comprehensive, long-term study on the impacts of dispersants. This study would look at toxicity impacts over a broad range of aquatic and land species and shore species. We look forward to working with the committee to fully craft and fund that study.

Since this crisis occurred over a month ago, I have personally traveled to the region. I have met with local community members, the fishing community, and government officials. It is clear that we are going to have a great deal of rebuilding to do, in terms of restoring this community. I urge that we do everything within our power to ensure a strong recovery for the future of the Gulf Coast.

[The written statement follows:]

**TESTIMONY OF
ROBERT PERCIASEPE
DEPUTY ADMINISTRATOR**

U.S. ENVIRONMENTAL PROTECTION AGENCY

**BEFORE THE
SUBCOMMITTEE ON INTERIOR AND ENVIRONMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES**

May 27, 2010

Chairman Moran, Ranking Member Simpson, and members of the Subcommittee, thank you for the opportunity to testify today about oil spill prevention and response measures and natural resource impacts. The U.S. Environmental Protection Agency (EPA), in coordination with our federal, state, and local partners, is committed to protecting Gulf Coast communities from the adverse environmental effects of the Deepwater Horizon oil spill. My testimony today will provide you with an overview of EPA's role and activities in the affected Gulf Coast region following the April 20, 2010 Deepwater Horizon mobile offshore drilling unit explosion and resulting oil spill as well as a summary of our primary environmental concerns. I also want to express my condolences to the families of those who lost their lives and those injured in the explosion and sinking of the Deepwater Horizon.

BACKGROUND

Administration efforts have focused on responding to the disaster and ensuring that the responsible parties stop the discharge, remove the oil, and pay for all costs and damages. EPA is a key part of those efforts. EPA's Oil Spill Program focuses on activities to prevent, prepare for and respond to oil spills from a wide variety of facilities that handle, store, or use various types

of oil. EPA regulates approximately 620,000 of these facilities, including oil production, bulk oil storage, and oil refinery facilities that store or use oil in above-ground and certain below-ground storage tanks. Additionally, EPA is the principal federal response agency for oil spills in the inland zone, including inland waters. Such inland zone oil spills may come from, oil pipeline ruptures, tank spills, and other sources.

EPA shares the responsibility of responding to oil spills with the U.S. Coast Guard (USCG). Further, we share the responsibility for prevention and preparedness with USCG and several other federal agencies. The USCG leads the response to spills that occur along the coast of the United States, or in the coastal zone, and EPA leads the response to spills that occur in the internal United States, or the inland zones. The exact lines between the inland and coastal zones are determined by Regional Response Teams (RRTs) and established by Memoranda of Agreement (MOAs) between regional EPA and USCG offices. EPA and USCG have a strong relationship and work closely on oil spill response activities regardless of where the spill occurs.

EPA'S OIL SPILL RESPONSE PROGRAM

Each year, billions of gallons of petroleum and other oils are transported and stored throughout the country, creating a significant potential for oil spills and serious threats to human health and the environment. Approximately 20,000 oil spills are reported each year to the federal government. While the severity of these spill reports varies widely, EPA evaluates as many as 13,000 spills to determine if its assistance is required. Usually, EPA either manages the oil spill response or oversees the response efforts of private parties at approximately 300 spills per year. After an oil spill occurs, EPA frequently provides technical assistance which may include air and water monitoring support, mobilizing our On-Scene Coordinators (OSCs) and

EPA's Special Teams including the Environmental Response Team and the National Decontamination Team to assist with the response. The Special Teams are comprised of highly-skilled environmental experts and utilize modern, sophisticated, and innovative technologies for oil spill response.

As the manager of the Oil Spill Liability Trust Fund (OSLTF), USCG reimburses EPA for response from the OSLTF under Pollution Removal Funding Authorizations. To date, EPA has received a total of \$7.2 million in reimbursable funding authority from the USCG for the support and technical assistance being provided by EPA's Regions 4 and 6 as part of the RRTs for the Gulf States. EPA has and will continue to do all that is necessary to respond to this emergency including standing up the Emergency Operations Center from EPA Headquarters to provide operational support on resolving scientific and policy issues associated with use of dispersants, interpreting analytical data from the field, working closely with Regions 4 and 6 on waste management disposal, as well as interagency coordination. EPA will track all funds spent related to this oil spill for recovery from responsible parties. The Administration is committed to recovering the costs incurred for the removal of the oil and the damages caused by this catastrophe from those who are responsible and ensuring that the American people do not pay for any of the costs and damages for which others are responsible.

RESEARCH AND DEVELOPMENT

Historically, EPA has had a modest oil spill research and development program. Events of the past several weeks associated with the Deepwater Horizon oil spill have made it evident that this modest investment must increase to address the uncertainties that have arisen. The Administration has requested supplemental funds for dispersant research associated with the

Deepwater Horizon oil spill. If appropriated, EPA plans to engage institutions who have the knowledge and expertise to assist the Agency. The \$2.0 million requested by the President, will support research that will begin to provide a greater understanding of the short and long term implications to the environment and public health associated with the spill and the application, surface and undersea, of dispersants. We will also further our research efforts to include innovative and expansive approaches to spill remediation.

The President's request represents an important step forward to improve our understanding of the impacts and implications of the use of dispersants and exposure to the dispersed oil and the potential impact on the environment and human health. EPA intends to pursue research over time which will address the mechanisms of environmental fate, effects, and transport of the application of dispersants on released crude oil. This will be conducted by both assessing the risks to human health from exposure to chemical dispersants and chemically-dispersed oil mixtures through direct and indirect exposure and increasing our understanding of chemical dispersants and dispersed oil, including its toxicity over a broad range of aquatic and terrestrial ecosystems and species. EPA will also collaborate with other federal agencies to study the environmental and human health impacts of dispersants and chemically-dispersed oil. This research will address the mechanisms of environmental fate, effects and transport of released crude oil and the application of dispersant.

EPA'S OIL SPILL RESPONSE COORDINATION WITH THE USCG

The National Contingency Plan (NCP) is the federal government's blueprint for responding to both oil spills and hazardous substance releases. Additionally, it provides the federal government with a framework for notification, communication, and responsibility for oil

spill response. The NCP established the National Response Team (NRT), comprised of fifteen federal agencies, to assist responders by formulating policies, providing information, technical advice, and access to resources and equipment for preparedness and response to oil spills and hazardous substance releases. EPA serves as chair of the NRT and the USCG serves as vice-chair. However, the USCG is the incident-specific Chair for the Deepwater Horizon oil spill response.

In addition to the NRT, there are thirteen RRTs, one for each of EPA's ten regional offices and one each for Alaska, the Caribbean, and the Pacific Basin. RRTs are co-chaired by each EPA Region and its USCG counterpart. The RRTs are also comprised of representatives from other federal agencies and state representation, and frequently assist the federal OSCs who lead spill response efforts. The RRTs help OSCs in their spill response decision making, and can help identify and mobilize specialized resources. For example, through the RRT, the OSC can request and receive assistance on natural resource issues from the Department of the Interior, or borrow specialized equipment from the Department of Defense. Involvement of the RRT in these response decisions and activities helps ensure efficient agency coordination while providing the OSC with the assistance necessary to conduct successful spill response actions.

Each spill has only one OSC, designated from either the USCG or the EPA. EPA is responsible for maintaining the NCP Product Schedule, which lists chemical and biological products available for federal OSCs to use in spill response and cleanup efforts. Due to the unique nature of each spill, and the potential range of impacts to natural resources, OSCs help determine which products, if any, should be used in a particular spill response. If the application of a product is pre-authorized by the RRT, then the OSC may decide to use the product in a

particular response. If the product application does not have pre-authorization from the RRT, then the OSC must consult with the RRT regarding its use.

THE DEEPWATER HORIZON OIL SPILL

On April 22, 2010, the mobile offshore drilling unit (MODU) Deepwater Horizon, owned and managed by Transocean and contracted by BP P.L.C., sank after an explosion and a severe fire. Since that time, several thousand barrels per day of crude oil is being released into the Gulf of Mexico. The USCG, as the federal On-Scene Coordinator for the oil spill response, is implementing its responsibility to lead the federal environmental response actions in the coastal zone and is overseeing all response operations, including those made by BP.

The Secretary of the Department of Homeland Security has classified this oil discharge as a Spill of National Significance (SONS) and the USCG Admiral Thad Allen has been designated the National Incident Commander (NIC). EPA has integrated some of its staff into the Unified Area Command (UAC) as well as the local incident command posts. We have developed monitoring and assessment plans for surface and subsurface dispersant application, and we are providing technical assistance, air monitoring, and water quality sampling at several locations in Louisiana, Mississippi, and Alabama to assist in the oil spill response.

Air quality monitoring

EPA responders are monitoring for particulate matter, hydrogen sulfide, and total volatile organic compounds (VOCs) associated with the oil as well as the in situ burns. We are also monitoring ozone levels and testing for specific VOCs that are present in crude oil: benzene, toluene, ethylbenzene, xylene and naphthalene. We are operating a network of fixed air quality monitoring stations in the Gulf Coast region and specially deployed monitoring and sampling

equipment. In addition, EPA has deployed its twin engine aircraft, the Airborne Spectral Photometric Collection Technology (ASPECT), to detect chemical constituents associated with the oil spill, as well as to monitor for particulates over the in situ burns. We have also brought in two Trace Atmospheric Gas Analyzers (TAGA) mobile laboratory “buses” which are capable of real-time sampling and analysis, and can detect a range of chemical contaminants at very low levels. The TAGA mobile labs have specialized sampling equipment that can be used at remote locations to measure air quality. Additional response air monitoring and sampling sites have been set up by EPA response teams near Venice and Chalmette, LA, Mobile, AL and Ocean Springs, MS. In addition, we are also coordinating data collected from state monitors, and we are analyzing and tracking this information daily to note any unusual readings that might indicate changes in air quality that could trigger a call for action to protect public health.

Water quality monitoring

EPA teams are conducting surface water monitoring activities along the Gulf Coast. EPA is also collecting water quality and sediment samples in areas not yet affected by the oil release, in order to establish a data baseline. Based on the tests at the shoreline completed to date, water quality does not currently pose an increased risk to aquatic life in tested areas; however, EPA will continue to sample and test water to more fully assess water quality. We are currently developing post-impact water quality monitoring plans which will enable us to analyze water and sediment samples to detect chemicals found in oil as well as the chemical constituents of the dispersants that are being used in the oil spill response.

Use of Dispersant

When this crisis occurred, the federal OSC granted BP authorization to use approved dispersant on oil on the surface of the water in an effort to mitigate the shoreline impacts of the

oil spill on fisheries, nurseries, wetlands and other sensitive environments. The OSC's authorization includes water quality monitoring and the dispersant being applied in order to ensure the protection of the environment and public health in affected areas. Dispersants contain a mixture of chemicals, that, when applied directly to the spilled oil, can break down the oil into smaller drops that can sink below the water's surface. Dispersed oil forms a "plume" or "cloud" of oil droplets suspended in the water. The dispersed oil mixes vertically and horizontally into the water column and is rapidly diluted. Naturally occurring bacteria and other microscopic organisms' biological processes can degrade the oil droplets over time. EPA is constantly monitoring air and water quality in the Gulf Coast area to ensure the health of nearby residents in protected. The results are posted on EPA's web site as it becomes available.

Because of the magnitude of the Deepwater Horizon Oil Spill, the RRT authorized BP to conduct tests of a new approach to use dispersants underwater, at the source of the oil leaks. The test data was evaluated to determine the efficacy of subsurface application and it was determined that BP can move forward with full-scale application contingent upon following an adaptive monitoring plan. An EPA/USCG joint directive specifies requirements for BP to follow for subsurface dispersant applications and includes evaluation criteria for the RRT to shut-down subsurface application. Available data from each subsurface application is analyzed each evening jointly by EPA and the National Oceanic and Atmospheric Administration (NOAA) to determine whether subsurface dispersant application can be continued. Since the subsurface application was initiated, dissolved oxygen levels and the biological tests are within normal ranges. Initial studies indicate that the subsurface application of approximately 10,000-15,000 gallons of dispersants have the equivalent effect on the oil as the surface application of

approximately 50,000 gallons of dispersant. Thus, the subsurface application of dispersants is much more efficient and could result in far less dispersants being released into the environment.

It is important to understand that the use of dispersants has environmental trade-offs. Dispersants are generally less toxic than the oils they break down. We know that surface use of dispersants decreases the environmental risks posed by oil spills to shorelines and organisms that live in surface waters. When used this way, dispersants usually break down over the course of weeks. However, the long term effects of dispersants on aquatic life are unknown, which is why EPA and the Coast Guard are requiring BP to implement a sampling and monitoring plan. The federal oil spill response ensures that dispersant operations are constantly monitored to detect any adverse environmental effects that may outweigh the expected benefits of applying dispersants to the Deepwater Horizon oil spill.

However, with the successful use of subsurface application to date, EPA and USCG have issued an Order to BP to eliminate, if operationally possible, surface dispersant application. BP was also directed to find an alternative less toxic dispersant. BP argued that one was not available, but EPA determined that BP's analysis was insufficient. EPA is performing its own scientific verification of the data BP presented and is conducting a separate scientific analysis to determine whether a less toxic alternative is available at the needed volumes.

NEXT STEPS

The Deepwater Horizon Oil Spill is a massive and potentially unprecedented environmental disaster that has already impacted the lives and the livelihoods of countless people in the Gulf Coast region. While BP is a responsible party for this oil spill, EPA has been working alongside many federal and state agencies to implement emergency oil spill response

actions since day one. EPA's Headquarters Emergency Operations Center is fully operational and is monitoring the overall oil spill response operation.

EPA is also preparing for a potential support role in shoreline assessment and cleanup operations. EPA's support work may include continued sampling and analysis, identifying and prioritizing sensitive resources, and determining the need for cleanup and recommending cleanup methods and endpoints. We are working within the Unified Command to promote oil recovery and recycling and also to identify landfill locations for any collected oil, oil contaminated booms and other contaminated response materials. EPA, in coordination with the Gulf Coast states, will continue to provide information to both workers and the public about monitoring results and will help to address local community concerns.

CONCLUSION

EPA will continue to provide full support to the USCG and the UC, and will continue to take a proactive and robust role in monitoring, identifying, and responding to potential public health and environmental concerns. As local Gulf Coast communities assess the impact of the Deepwater Horizon oil spill on their economies, EPA, in partnership with other federal, state, and local agencies, as well as other community stakeholders, will devote its efforts necessary to assist in the oil spill response. At this time I welcome any questions you may have.

Mr. MORAN. Thank you, Mr. Perciasepe.

Just so that my good friend to the left of me doesn't get upset with the direction in which we are going, I think we will go to Mr. Strickland right now and then we will go back to Dr. McNutt.

Mr. SIMPSON. The neutral approach.

Mr. MORAN. Yes. That is it.

So, Tom Strickland, who is the Assistant Secretary of the Department and head of Fish and Wildlife and Parks.

OPENING REMARKS OF TOM STRICKLAND

Mr. STRICKLAND. I thank you, Mr. Chairman, and thank you, Ranking Member Simpson and Chairman Dicks, for the opportunity to spend a few minutes with you and answer any questions you might have.

Let me start off as Bob did and say that the first level of tragedy was the loss of the 11 lives in the Gulf. I appreciate, Mr. Chairman, your acknowledgment. Our heart goes out to those families. I have my wife's family in Louisiana, and we actually have a connection through her family to some folks who know some folks involved. It is a very, very tragic thing at the very most personal and immediate level, and we don't want to lose sight of that.

I have been down, as Bob has been down, many times. I have been down five times since the spill. Actually, I went to college in Louisiana. I have great history and connection to the area; I know it well. I spent a summer of my college life on a rig offshore of Louisiana, and so I know a bit about the circumstances and the situation that the workers were in. Our heart does go out to them.

We are doing everything we can through all the resources that the Department of the Interior has and, as Secretary Salazar said, all the resources of the United States Government, to bring those to bear to deal with the issues of shutting the well down, dealing with the spill, and then the area that I will speak about for a moment here, dealing with the impacts of this on the wildlife and on the land.

Let me give you a status report, because now the oil has begun to hit the land for about the last 2 weeks. As of this morning, the best measurement we had was about 101 miles of coastline has been impacted. A number of the miles have been barrier islands. One of the first areas to be hit was a wildlife refuge, Breton National Wildlife Refuge, the second wildlife refuge ever created, this one by Teddy Roosevelt. There is a very iconic photo of Teddy Roosevelt sitting on Breton Island—in fact, the only photo we have of him on a wildlife refuge.

I have flown over that island and the Chandeleur Chain, which makes up that refuge, many times over the last several weeks, and the impacts have been very dramatic. It is a very important wildlife refuge. Right now, we have 3,500 nesting pairs of brown pelican at South Breton Island. So far, we have been able to boom that area and keep them from being affected.

As of this point, the wildlife impacts, as we can measure them, have been fairly modest. That is not because the long-term impacts are expected to be modest; it is just that retrieval of the birds and the fish right now—there is a lag time.

I visited the wildlife recovery efforts that we have on the coast. We have over 700 Department of the Interior employees fully engaged in our efforts down on the coast. We have 32 wildlife refuges in the Gulf of Mexico. We have eight Park units. We have 40 Federal assets, if you will, within the Department of the Interior that play key roles with our environment, recreationally and otherwise.

I want to assure you that we are doing everything we can to protect those specific assets, to monitor the impacts of this spill, to be prepared to go after the responsible party under the law, under NRDA, for all damages to natural resources, and we have very good cleanup plans for all those lands. Beyond just taking care of the Federal estate, we are also working with the locals, the States and private parties, to help do the baseline assessment that will be so important as we go forward to make sure we do everything we can to restore this ecosystem.

We expect there to be significant long-term impacts to wildlife and to the environment that will play out over a long period of time if history is a lesson, and I think it would be. We are still seeing effects of the Exxon Valdez spill. As Dr. McNutt will be able to speak to in a moment and, Mr. Chairman, you commented in your remarks, there have been some estimates now of the scope and size of this that make it clear we are dealing with a very large spill in a very ecologically sensitive area.

While we are going to hold BP accountable for all the costs to the full extent of the law—and, in their case, they have acknowledged they will be responsible for every dime of impact. We interpret that to mean, and we will hold them to the fact, that this includes natural resources. To the extent we have any costs associated with this recovery, we will do our best to recover those directly from them. It is possible that some of our increased regulatory costs and response costs may not be able to be passed on, like you were pursuing earlier today, Congressman Simpson, regarding increased inspections.

I wanted to leave the message that we are fully engaged at the Department of the Interior with the natural resources part of this. As the oil is coming onshore, we are doing everything we can to accelerate the cleanups, to make sure the cleanups are done in an environmentally responsible way that is responsible to the wildlife, to recover harmed wildlife and try and protect the wildlife.

There is great public interest in what is going on down there with the wildlife. We have thousands and thousands of volunteers from around the country who want to help, and we are trying to do everything we can to engage those people.

It is a robust level of engagement. We have the head of the Fish and Wildlife Service full-time down in Houma, Louisiana. We have the head of the Park Service full-time down in Mobile. We have the head of the Bureau of Land Management full-time in Robert, Louisiana. I am down there about every 4 or 5 days, going to all the incident command centers. We also just positioned the Superintendent of Everglades National Park to head our efforts in south Florida. We are fully integrated at the incident command.

On issues like the barrier islands, the issues of the marsh, whether it burns or not and when, we are fully engaged with our scientists and our perspective to contribute to that. I do think there

will be an announcement on the barrier island proposal later today.
I may be in a position to shed some light on that here today.
Thank you very much, Mr. Chairman.
[The written statement follows:]

STATEMENT OF TOM STRICKLAND, ASSISTANT SECRETARY FISH, WILDLIFE
AND PARKS BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
INTERIOR, ENVIRONMENT AND RELATED AGENCIES
ON THE TRANSOCEAN DEEPWATER HORIZON OIL DISASTER

MAY 27, 2010

Thank you, Chairman Moran, Ranking Member Simpson, and members of the Subcommittee for the opportunity to testify about this unprecedented environmental disaster. Sharing the time with me today is Dr. Marcia McNutt, the Director of the U.S. Geological Survey. Dr. McNutt will provide separate testimony.

I would like to use my time to talk about the work that the Administration is doing to respond to the oil spill. Specifically, I want to describe our efforts to protect the Gulf environment, the efforts of our valiant employees that are working 24/7, and the extensive coordination that is underway in the Federal community with extraordinary help from the States, Tribes, non-governmental organizations, and volunteers.

Overview

We are all deeply saddened by the tragedy that occurred on April 20, 2010 onboard the Deepwater Horizon and we are all shaken by the loss of eleven workers and the toll the spill is taking on the environment, the economy, and the livelihoods of the people in the Gulf communities. The focus of our Department is assisting in efforts to shut off the source of the oil, investigate the causes, to remove the oil and remedy environmental impacts, and to begin the process of assessing the impact of this catastrophe on the shoreline and marine ecosystem of the Gulf and beyond.. All of our employees are watching this closely and are committed to helping in the effort. Our bureaus are actively engaged in these activities – they are on the frontline and participating in all of the activities. I have been asked by the Secretary to coordinate Interior's oil spill response efforts. I am working with Jon Jarvis National Park Service Director, Rowan Gould Acting Fish and Wildlife Service Director, Bob Abbey Bureau of Land Management Director, and Dr. Marcia McNutt U.S. Geological Survey Director to provide a Department-wide integrated response. These are the key personnel in our Gulf Leadership Team.

We have assembled this highly skilled team of Interior officials to deploy all of the knowledge and resources of our programs to the protection and restoration of the ecosystems of the Gulf. In total, 655 personnel have been deployed as part of the oil spill response, including the Gulf Leadership Team and employees from MMS, FWS, NPS, BLM, USGS, and the Office of the Secretary. We have staff located at the Command Centers in Houma and Robert, Louisiana; Mobile, Alabama; St. Petersburg, Florida; Houston, Texas; and at the Information Center in New

Orleans, Louisiana. We have asked our other bureaus that do not have a direct responsibility in the activities in the Gulf to participate as well by providing staff and support.

The majority of our employees across the Gulf, at parks, refuges, and other locations are monitoring conditions, collecting data, and attempting to protect and restore impacted or potentially impacted resources. Many of these Interior employees live in the communities that encircle the Gulf; many others have worked there at some point in their careers. These employees have dedicated their professions to the conservation of resources and they are dedicating themselves to protecting against and mitigating the impacts of the oil spill. They can relate to the people and communities and the impacts of the events unfolding. They are working to minimize impacts by directing wildlife response efforts, cleaning up oiled animals, assisting in cleanup operations, identifying sensitive areas for booming, and providing overall expert advice on wildlife issues to the Incident Command Structure. Many of the impacts are unseen. Our biologists, together with our federal and state partners, are attempting to understand the impacts on the aquatic ecosystems – these areas are the source of the livelihood of many people in the Gulf. Also, Interior employees have conducted and are continuing to conduct baseline assessments of Interior trust resources to assist in determining overall damages that result from this spill.

Spill of National Significance

The Deepwater Horizon oil spill has been declared a “spill of national significance” by the Department of Homeland Security and is of grave concern to the Department of the Interior. As the agency charged with protecting America’s natural and cultural resources, the Department has vast resources along the Gulf Coast including refuges, parks, and seashores. There are 32 wildlife refuges and eight national park units that are at risk from the spill. In addition to these lands, we have direct responsibilities for migratory birds and threatened and endangered species along the Gulf Coast. We are also working closely with our State partners to protect all of the threatened natural and cultural resources along the Gulf Coast.

As the areas impacted by oil expand so will our efforts. In terms of the immediate response and clean-up, the Fish and Wildlife Service and National Park Service have the preponderance of Interior-related activities with over 480 employees deployed. We also have many volunteers that are helping us conduct monitoring, cleanup, and wildlife relocation activities.

We are already seeing oil onshore in Louisiana. The hardest hit areas to date are State lands -- the Pass a Loutre Wildlife Management Area and the islands near Port Fourchon. Some beaches have been heavily oiled and oil has reached marsh areas. We have seen brown pelicans, the state bird of Louisiana, covered with oil. It was just a little over five months ago that I stood with Sam Hamilton at Big Branch Marsh National Wildlife Refuge in Louisiana as he proudly announced

the delisting of the brown pelican. At that time I said "In many ways, the brown pelican stands as a symbol of our nation's struggle to protect and conserve our wildlife." The struggle goes on.

The Department's holdings in the Gulf area are home to plants and animals and protect cultural resources that could be affected by the spill, including:

- Seagrass beds are nurseries for sea turtles, fish, crabs, shrimp, and many other crustaceans. They also provide an important food source for manatees. Oil will kill seagrasses on contact and this community is slow to recover.
- Salt marshes, which occur in back bays, provide a buffer that protects the mainland during storm events. They also offer foraging sites for birds. If oil kills these plants in the marsh, the soil will destabilize and erode.
- Mangroves are similar to salt marshes in that they provide a buffer between the sea and the mainland, as well as providing wildlife habitat.
- Shipwrecks, archeological sites, Civil War defenses, historic structures, and other cultural resources tell the stories of past inhabitants and key moments to our Nation's past. Damage from oil and cleanup operations is a concern for these treasures.

Fish and Wildlife Service

FWS National Wildlife Refuges are spread out along the Gulf Coast from Florida to Texas, including Breton National Wildlife Refuge. Established in 1904 by President Theodore Roosevelt the refuge provides habitat for a diverse array of wading birds, shorebirds, waterfowl, seabirds, turtles and other wildlife including threatened and endangered species. The oil spill has now reached the sandy islands that form the Breton Refuge. The Delta National Wildlife Refuge adjoins Pass a Loutre Wildlife Management Area to the north. It is unoiled right now because high flows from the Mississippi River have created currents pushing the oil away from the refuge. It remains to be seen what will happen when these flows lessen.

Throughout the Gulf region, in Alabama, Florida, Louisiana, Mississippi, and Texas, FWS employees are conducting aerial and ground surveys to monitor the spread and impacts of the oil, mobilize response activities, and assess damages. Trained employees are dispatched to recover oiled or injured wildlife, deploy booms, and rescue stranded wildlife. FWS is consulting with the Coast Guard and others on actions that may be taken to add to the protections for lands and resources and they are working with partners to rescue wildlife that are cleaned and released in safe locations. The FWS is also working with other federal and state wildlife agencies to initiate assessment activities to determine damages to impacted resources.

Wildlife faces grave danger from the spill – both short and long-term. Immediate danger to wildlife includes exposure to oil in the water and on the shore. Oiled birds can lose the ability to fly and can ingest the oil while preening. Sea turtles are impacted as they swim to shore for

nesting activities and turtle eggs may be damaged if an oiled adult lies on the nest. Oil and its derivatives will persist in the environment long after the spill is cleaned up and will have long-term impacts on fish and wildlife.

As you know, it has been a very traumatic time for the Fish and Wildlife Service, who lost their Director, Sam Hamilton in February. I would like to thank Rowan Gould, the Acting Director, for stepping in and providing leadership during this very difficult time.

National Park Service

Eight National Park Service units along the Gulf Coast preserve natural and cultural resources, including Gulf Islands National Seashore, Mississippi; Jean Lafitte National Historical Park and Preserve, Louisiana; Padre Island National Seashore, Texas; and Everglades National Park, Florida among others.

Impacts are starting to be seen at Gulf Islands National Seashore, Mississippi, where some birds have come in contact with the oil. A northern gannet was rescued for cleaning on West Ship Island by National Park Service staff and crews are reporting some tarballs along some of the park's barrier islands that may have come from the Deepwater Horizon oil spill.

NPS employees are conducting and overseeing surveys and sampling; documenting baseline conditions; assisting the Coast Guard and contractors during cleanup and recovery; providing guidance and prioritization for protection measures such as boom placement in sensitive areas; and preparing plans for wildlife reconnaissance and recovery and shoreline cleanup.

At the same time, the Park Service notes that all units are open for business and park programs are continuing as scheduled. Visitor education is a continuing activity. Boaters are being urged not to anchor to booms or run them over, as those actions can cause them to pop and sink. The Public Health Service, working with the Environmental Protection Agency, has set up air quality monitoring stations on West Ship Island to check for the presence of harmful volatile compounds. This is being done to ensure the park has the information it needs to protect the public's health while allowing for recreational opportunities. Visitors who spot tarballs are being asked to report the finds to park staff, and not to pick them up.

Long-Term Damage Assessment and Restoration

The longer term assessment and restoration of natural resources impacted by oil spill from the Deepwater Horizon will be conducted under the authority of the Oil Pollution Act. Interior is one of four federal agencies designated to act under OPA, as a "trustee" on behalf of the public, for the purpose of bringing "natural resource damage" claims against BP and all other responsible parties for restoration of injured or destroyed natural resources. Working together

with State and federally recognized Tribal trustees, we intend to, identify the full range of injured resources, and recover from the responsible parties all the funding necessary to fully restore the injured resources and the use of those resources that are lost. The long-term restoration plan for the Gulf will be developed through a public process. Upon completion of the restoration activities, the trustees will conduct monitoring to ensure proper operation and long-term success. These restoration and monitoring actions will likely continue for decades.

The Department has an office dedicated to the management of this process, the National Resource Damage Assessment and Restoration Program (NRDAR), which has extensive expertise in conducting these activities. The NRDAR program oversees and provides directions to the bureaus within the Department of the Interior to conduct the assessments and actual restoration work. Together the program and the bureaus work to restore any natural resources injured or lost uses of these resources as a result of oil spills or hazardous substance releases into the environment. In partnership with other affected State, Tribal, and Federal trustee agencies, damage assessments provide the basis for determining the restoration needs that address the public's loss and use of these resources.

The Department has been and will continue the process of collecting and analyzing information to evaluate the nature and extent of injuries resulting from the incident, and determine the restoration actions needed to bring injured natural resources and services back to baseline, pre-incident conditions.

The immediate response and clean-up phase, the Department does everything it can to identify resources at risk and help prevent injury to those resources or their uses. Damage assessment is the critical next step taken on the path to achieving restoration of natural resources injured or lost through the release of oil or hazardous substances. The FWS and NPS continue to work on assessing the lands and wildlife resources in the affected areas of the Gulf Coast.

As I indicated, the FWS, NPS, and BLM have begun the initial assessments required for the longer-term restoration. These efforts will be ongoing as the Department continues the immediate response activities in conjunction with the U.S. Coast Guard.

Conclusion

Thank you for the opportunity to describe our efforts around the Deepwater Horizon disaster. The Administration, the Department, and the entire Federal community are committed to doing the utmost to help the region respond and recover. In doing so we hope to minimize impacts to the communities, the environment, and the economy of the areas impacted.

Mr. MORAN. Thank you, Mr. Strickland. I wish the media would give more recognition to the top personnel that are down there on the scene.

Speaking of the media, you have been doing a good job, Dr. McNutt, in dealing with the media.

And now we will hear from Dr. McNutt.

OPENING REMARKS OF DR. MARCIA MCNUTT

Dr. MCNUTT. Thank you, Chairman Moran and distinguished members of the Committee.

The USGS is a broad-capacity research agency that is internationally renowned for bringing its science to bear to reduce the impacts of natural and environmental hazards. Since I took charge of this agency just about six months ago, I have had to deal with the earthquake in Haiti, the earthquake in Chile, the Asian carp invasion into the Great Lakes and the rivers around it, Eyjafjallajkull, and now this oil spill. It has been quite a ride, the last six months.

Mr. MORAN. A regular Calamity Jane.

Dr. MCNUTT. Yes.

Mr. MORAN. I assume that there wasn't any correlation between your coming on the scene and everything disrupting.

Dr. MCNUTT. At NOAA, they are calling me the master of disasters.

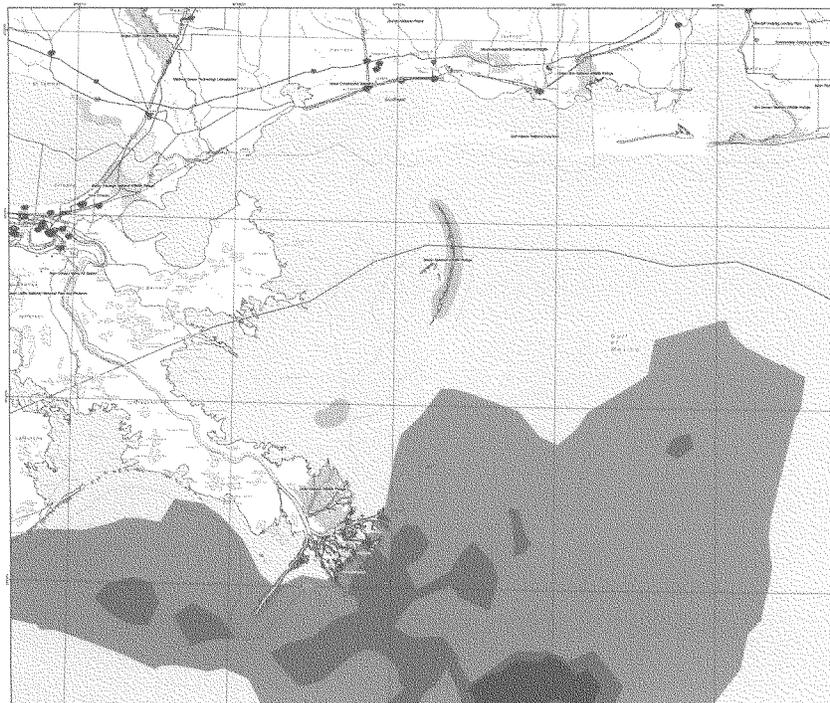
Within days of this oil spill, USGS stood up our best mapping capabilities to help all of the agencies responding to this disaster understand exactly where the oil is and understand what it is doing. Because if you don't know where the oil is, how can you respond to it?

You all have examples in front of you of the kinds of products we were turning out since very early on in the disaster. Using eyes in space and eyes in the air helps us to understand where the oil is. Working with our partner agencies, such as NOAA, we put together models that would predict where the oil might be going in future days; and to help understand the difference between thick oil, dull oil, and sheen, because emergency responders needed to know the difference between these kinds of oils because they all had different impacts on life at sea and life on the coastline.

[The information follows:]



**Federal Lands Potentially Impacted by the 2010 Oil Spill
Mississippi River Delta and Northern Gulf Coast**



Oil Spill Data:

Oil Spill data from ESRI RESTservice (http://events.arcgisonline.com/ArcGIS/rest/services/Gulf_Coast_Oil_Spill_Forecast/MapServer).

Copyright Text: NOAA Office of Response and Restoration

"Date prepared: 1300 CDT Thursday 5/20/2010. This forecast is based on the NWS spot forecast from Thursday, May 20 AM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USE, Texas A&M/TGLO, NAVO/NRL) and HFR measurements. The model was initialized from Thursday morning satellite imagery analysis (NOAA/NESDIS) and overflight observations."

Base data derived from multiple scale U.S. Geological Survey digital information.
All data are projected to UTM, Zone 16, NAD83.

We found that, in the beginning days of the oil spill, resources were being spread too thin. It was important for people to know these different kinds of oil so that resources could be put where they were really needed and not where people thought they would be needed.

In addition, at the USGS, we immediately marshalled what experience we had from prior spills. We even pulled 80-year-old scientists out of retirement who had worked on the 1969 Santa Barbara oil spill and downloaded from them what experience they had with that oil spill. We had significant capacity within the agency from the Exxon Valdez oil spill and learned what we could from them on the behavior of oil that was still in the environment decades later, the toxicity of that oil, lessons learned, what we wish we had known when that oil first hit the environment that we didn't know, and how we could have responded better.

Based on that, for example, we learned of the importance of going out and sampling immediately, before the oil even hits the shoreline, so that we can characterize what every piece of wetland, what every beach, what the animal population was like before they are impacted, so then, when the oil hits, we can make a damage assessment that is grounded in reality of knowing what everything was like beforehand.

All these lessons learned, we shared with our colleagues in Parks, in Fish and Wildlife, and with the Coast Guard, so everyone would understand exactly what needed to be done before oil hit. We shared protocols for water sampling, sediment sampling, biota sampling, so everything could be scientifically defensible and help people understand the difference between what were the standards that would be needed for a research paper versus what standards might need to be for standing up in a court of law. Those are very different standards.

We also helped with scientific evaluation of State proposals, such as Bobby Jindal's barrier island proposal, helping to understand where sand might be mined that could actually be beneficial in his proposal, versus where sand might be mined that could actually do harm to the environment.

In conclusion, the USGS will continue to work closely with Interior and other Federal and State agencies, as well as the private sector, in response to the BP oil spill.

I personally have been down in Houston for the past three weeks, helping to coordinate a very broad Federal response down there. I have been in charge of the Flow Rate Technical Group, which just reported out this morning with new numbers for release. That has been a herculean effort, which we hope will very much help this broad Federal response.

Without your recognition for the importance of the USGS's long-term monitoring and data collection, the USGS would not have the scientific tools, data, and information that have allowed our rapid response to the crisis.

I thank you for the opportunity to testify before you today, and I would be pleased to answer any questions that you have.

[The written statement follows:]

STATEMENT OF MARCIA K. MCNUTT
DIRECTOR, U.S. GEOLOGICAL SURVEY
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
INTERIOR, ENVIRONMENT AND RELATED AGENCIES

May 27, 2010

USGS Science in Response to the Deepwater Horizon Oil Spill

Good morning, Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to discuss the USGS role in the aftermath of the April 20, 2010, Deepwater Horizon oil spill in the Gulf of Mexico.

The USGS is home to a breadth of multidisciplinary science expertise, an extensive, national, on-the-ground presence, and a wealth of biologic, geologic, geographic, and hydrologic monitoring capabilities and existing data, in scales ranging from microscopic to global. It is USGS' long-term monitoring capabilities, supported and championed by this Subcommittee, that have positioned the USGS to understand changes in our environment – from water quality to ecosystem composition. The USGS brings its brightest minds and best monitoring and modeling capabilities to issues that present crucial natural resource management challenges. It is this broad capacity combined with a presence in all 50 States and Puerto Rico that enables the USGS to bring science immediately to bear not only in natural hazards such as earthquakes, floods, and volcanoes but also in environmental hazards such as the Deepwater Horizon oil spill. For more than a century, the USGS has been on point in response to natural disasters; it is this experience and expertise that uniquely prepares the agency for dealing efficiently and effectively with the challenge that lies before us today and the challenges that will face us in the weeks, years, and decades to come.

As part of the Secretary's commitment to ensure that British Petroleum (BP) is doing all that it can to meet its critical responsibilities for this major oil spill and provide every available resource to get the job done, the Secretary dispatched me to the BP Command Center in Houston, Texas to support and coordinate the efforts of Federal scientists and BP engineers who are working to develop solutions to the crisis. I am a newcomer to the Federal government and must say that I am impressed with the manner in which Federal and State agencies and the private sector have come together in this crisis. But I know that there is more that can, and will, be done. Efforts underway in the aftermath of the Deepwater Horizon oil spill reflect the power and ability of government to work together toward a common goal. Following the hearing today, I will return to Houston and continue to coordinate joint efforts to address technological challenges and approaches to secure the damaged well head, capture the leak, and control the spill. My commitment, and that of the Secretary, to ensure that the very best scientific and technological expertise informs those solutions, is unwavering.

USGS Science: From Response to Recovery

When we first learned of the leak, a number of backbone efforts to the USGS response were launched including activation of the USGS Tactical Oil Response Team and its sub-team, the USGS Geospatial Information Response Team (GIRT). The International Charter to support the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Coast Guard (USCG) was also activated.

A Unified Command was established to link organizations responding to the Deepwater Horizon incident and to provide a forum for those agencies to make consensus decisions. The Unified Command is committed to providing the public with reliable, timely and transparent information through their Joint Information Center (JIC). The USGS helped to establish and manage the JIC's social media component by providing oversight and operation of the Facebook, Twitter, Flickr and Youtube accounts for BP spill response. Around 22,000 people are following the effort on Facebook; 4,700 people on Twitter; and 38 videos are available on Youtube with one video having almost 1 million views. This effort is critical not only to keeping the public informed, but also to providing the Unified Command with information about the topics of greatest public concern. These outreach efforts demonstrate the Administration's commitment to engage and inform the public in the response effort.

The challenge of characterizing the effects of contamination resulting from the free flow of oil and gas from the drilling site lies in the enormity of the volume of oil, the expanse of sea, air, and land into which it flows, and the inability to predict exactly where this oil and the associated dispersant is going and how it will impact the various ecosystems with which it interacts, on scales from microscopic to human. Specific examples of USGS science activities underway in support of Department of the Interior (DOI) Bureaus, NOAA, USCG, and other agencies are outlined as follows:

Estimating oil volume

Using cutting edge techniques USGS, NASA and NOAA scientists will estimate the volume of oil now at the ocean surface resulting from the Deepwater Horizon oil spill. NASA's Airborne Visible/Infrared Imaging Spectrometer (AVIRIS) measures areal extent of the oil, its thickness, and what fraction is mixed with seawater. Federal researchers also plan to analyze the AVIRIS data for changes in vegetation along the coastline and assess where and how oil may be affecting marshes, swamps, bayous, and beaches that are difficult to survey on the ground. The combination of satellite and airborne imagery will assist NOAA in forecasting the trajectory of the oil and in documenting changes in the ecosystem. This is the first time AVIRIS has been used during a large oil spill, but the technology is widely recognized and has been successfully applied in other instances; for example, to map debris from the September 11 event, to map locations of naturally occurring asbestos, and to map liquid hydrocarbons on Saturn's moon Titan.

Geospatial Support

The USGS hosts a forum of over 50 Federal and State agencies that ensures coordination of remote-sensing efforts, minimizes duplicative efforts, and provides a clearinghouse of geo-

spatial information. The USGS has provided historical images and nautical charts of the Mississippi Delta and Louisiana coast to the FWS, the USCG, the U.S. Navy, and BP. Landsat imagery, acquired by the USGS, is being used to monitor the extent and movement of the oil slick. Post-spill and historical LiDAR topography from the Chandeleur Islands is being used by coastal scientists to make predictions of barrier island inundation and overwash for guidance on locations of oil deposition on beaches. The USGS has provided many GIS products to other agencies that show locations of reptiles, coastal vegetation, cold-water corals, mammals, fish, artificial reefs, and endangered species along the Gulf Coast from Texas to the Florida Keys to aid in protection of these trust resources.

Water, sediment, and biota sampling

Important to any scientific investigation of the effects of an oil spill on the environment is a complete understanding of the pre-existing condition, or baseline condition, of the water, sediment, and biota prior to landfall of the spill. USGS Science Centers in Texas, Louisiana, Mississippi, Alabama, and Florida have coordinated efforts to sample water and bottom material from coastal wetlands, DOI lands on-shore, and on the barrier islands most likely to be impacted now that the oil has come ashore. The USGS will document current conditions at these sites and the existence of any historic oil present including “fingerprints” of existing oil, Polycyclic aromatic hydrocarbons (PAHs), oil and grease, trace metals, volatile organic compounds, surfactants, dissolved organic carbon (DOC) characterization, bacterial populations capable of digesting oils, nutrients, and benthic invertebrates. Scientists are monitoring radio-tagged manatees for deviations from normal behavior in priority areas on the Gulf Coast of Florida. Aerial surveys of mangroves and wetlands along the Gulf coast of Florida are being conducted to differentiate between damage from the January 2010 freeze and any potential impact from the oil spill. Aerial surveys and sub-bottom profiling of sea grass beds along the Louisiana coast were completed to document current pre-spill conditions. The USGS will also work with Natural Resource Trustees in their establishment of regulatory baseline data for natural resource damages under the Oil Pollution Act. The EPA is complimenting a number of these efforts that will be discussed in detail in their testimony.

Scientific evaluation of State proposals

The USGS, along with other Interior bureaus and entities in Louisiana, is addressing concerns related to Governor Bobby Jindal’s barrier island proposal. The U.S. Fish and Wildlife Service (FWS) requested the USGS provide input on the proposal because of our experience in prior investigations that described the coastal geomorphic processes of the Chandeleur Islands. USGS research is enabling the FWS and others to engage in evaluation of the proposed construction of the berm. As originally written, the effort would do harm to the Chandeleur Islands in the long term by potentially reducing the available sand for natural restoration.

The USGS has also been targeted to provide science support for efforts by the MMS and USCG Joint Investigation such as the analysis of rocks and rock-like debris associated with the explosion to determine the source of the material. The collected materials may have originated from 1) below the sea floor, including sedimentary rocks that are part of the oil reservoir, 2) from the sea floor surface, including drilling debris, sedimentary rocks, coral, and sea floor sediment,

3) rock samples that may have been stored on the drilling rig, and 4) debris fragments from the sunken drilling rig. Initial tests are expected to include the characterization of the materials by Earth scientists to determine if the samples are geologic (coming from rocks and sediment) or are construction materials coming from the platform itself. Testing should determine the source and possible history of the materials during the explosion, and potentially provide information as to whether natural geologic processes contributed to the cause of the explosion.

While current USGS efforts are focused on response in the aftermath of the oil spill, USGS leadership, managers, and scientists are also planning for future research needs associated with the Deepwater Horizon oil spill. As such, a longer-term USGS Environmental Incident Science Team was launched in early May 2010. The team, that includes personnel from the FWS, the NPS, and the MMS representing their bureaus' science and resource management needs, is developing a long-term science plan designed to address the research needs as we move from an immediate response to a more mature response phase of this event and into recovery. Some of the efforts to be contained in that plan are described briefly below.

Transport, fate, and potential impacts of oil and dispersants

The use of chemical dispersants has added to the challenge of understanding the fate and transport of oil (along with the dispersant) in the Gulf of Mexico region. Chemical dispersants have converted the oil into microscopic water-soluble droplets, facilitating their movement away from the surface oil slick and into the water column to the seafloor. This procedure results in potential impacts not only to surface and shore biota but also to the vast ecosystems that reside beneath the surface of the Gulf of Mexico. To understand these impacts, the USGS will address the fate and transport of not only oil and dispersant but also the mixture of oil and dispersant to determine their impact on coastal and marine ecosystems, such as wetlands, estuaries, reef communities, beaches, and the associated species that reside in these critical habitats. In addition, the USGS stands ready to assist trustee agencies with internal and external examinations and photography of carcasses in evaluating cause of death.

Deep coral sampling

The USGS, in collaboration with the MMS, NOAA, and other agencies, has been conducting research on a variety of deep-sea and outer shelf habitats in the Gulf of Mexico for more than a decade. The comprehensive data archive, diverse skills, and technical capabilities of this group are ideal for investigating the impacts of the Deepwater Horizon oil spill on deep water coral ecosystems in the Gulf of Mexico. The September 2010 research cruise, as part of the USGS DISCOVER expedition, would be the basis for short and long-term studies that would begin with the collection of sediment and bacterial community samples. Samples such as these would allow for a comparison of the pre-spill habitat to the post-spill habitat to measure the effect of contaminants on these deep water coral ecosystems.

Conclusion

The USGS will continue to work closely with Interior and other Federal and State agencies as well as the private sector in response to the Deepwater Horizon oil spill. The USGS

Environmental Incident Science Team will lead the effort to develop a plan to identify Interior's long-term research needs in the aftermath of this disaster. As Interior moves from response to recovery, the USGS stands ready to offer its best efforts and brightest scientists to inform and guide decisions. I want to thank the Subcommittee for its support for USGS science. Without your recognition of the importance of USGS long-term monitoring and data collection, the USGS would not have the tools, data, and information that have allowed our rapid response to this crisis and our Nation would not have the science necessary to begin its recovery from this tragedy. Thank you for the opportunity to testify before you today. I will be pleased to answer any questions that you may have.

Mr. MORAN. Good for you. Thank you very much, Doctor. We have lots of questions. I will start with the EPA.

SUPPLEMENTAL REQUEST

You have asked for \$2 million. It comes up today when we mark up the emergency supplemental in the full committee. You wanted to research the impacts of the oil spill and the use of dispersants. We need to know how much EPA has spent to date. We really ought to get it onto the record.

What are the costs of the three subsurface dispersant tests prior to approval and the application, the costs of the ongoing air monitoring, costs of ongoing water quality and sediment monitoring, including the analysis of particle size measurements? And is this all reimbursable by BP?

Mr. Perciasepe.

Mr. PERCIASEPE. Mr. Chairman, EPA has spent to date about \$7 million. We fully expect that that is all reimbursable from BP.

Mr. MORAN. So do you give receipts, or do you just tell them, "This is what it costs"? Is it a phone call? I mean, how do you do it?

Mr. PERCIASEPE. There is a process through the unified command and the Oil Pollution Act. There is a trust fund that is set up, and that trust fund is where the reimbursement takes place.

We are required to have a financial stewardship plan in place, which we have done. We have had it reviewed by our inspector general, and we have included all the comments that the inspector general has given us. So we will have the detailed records on this.

This deals with two of our regional offices, the one out of Atlanta because we are mobilized in parts of the Gulf that have yet to be directly impacted but, as you know, people are preparing in case something happens there; and our office out of Dallas, which is covering Louisiana; as well as some expenses at the national level, including the contracting and the other employees that are doing the monitoring.

So all of that together. The burn rate, as we sometimes say in the budget world, would probably be about the same as that going forward.

Mr. MORAN. Thank you.

DISPERSANTS AND ENDOCRINE DISRUPTORS

Now, let's get into this dispersant a bit. We have applied about 850,000 gallons of dispersant as of today. Just on Monday, you and the Coast Guard decided to scale back the quantity of Corexit that you were applying. But in Britain they found, over a decade ago, that Corexit was negatively impacting crustaceans, snails, mollusks, and so on along the shoreline.

You wonder, if they found that it was harmful a decade ago, why are we still using it in the gulf today?

Mr. PERCIASEPE. Well, the way they look at dispersants in the United Kingdom is they are looking at rocky shores, and there are a different set of organisms in the rocky shores.

And they also have different standards on how close to the shore that you would apply it. In the United States, you don't apply dispersants within three miles of the shore. In fact, most of these

dispersants that have been applied either at the wellhead now or even in the aerial or off-ship application has occurred greater than 30 or 40 miles out to sea.

Mr. MORAN. Of course, you have tides, currents that you have to deal with.

Are you confident it is not an endocrine disruptor, as we have been told it most likely is?

Mr. PERCIASEPE. We know that there are some dispersants that may have decomposition byproducts that have been identified as potential endocrine disruptors. And one of the things we are in the process of evaluating as this event continues is to keep looking at that next level. First, let's apply the dispersants because of the long-term benefit of reducing the size of the oil particles so they can decompose more quickly and avoid some of the shoreline impacts that, thankfully, we have not yet had but, I agree with Tom, we are likely to have much more of. Now we have had ways to reduce it by using the sub-sea application.

If this continues, for whatever reason, for a longer period of time, we are going to keep looking at additional measures we would take. So right now we have asked BP to look at it from their perspective, but we have our own scientists at EPA, collaborating with the rest of the Federal agencies, looking at all the different components of these different dispersants.

Mr. MORAN. Yes, that is good, except that a lot of people are asking, understandably, why are we doing it after the fact? After we poured 850,000 gallons in there, now let's check out to see whether or not it is toxic.

Mr. PERCIASEPE. We don't believe the current dispersants that they are using have these problems.

Mr. MORAN. Well, I hope so. I mean, we are relying on BP to tell us that.

Mr. DICKS. Would you yield just a quick—

Mr. MORAN. Yes, sure, I would.

Mr. DICKS. Did they get permission to use this before they did it? There was some confusion. I have heard in the media that maybe they had just gone out and started using this and then notified you. Could you clear that up?

Mr. PERCIASEPE. There is a National Contingency Plan that is in place in advance of any particular spill. In the National Contingency Plan, there are tools that are pre-identified in the plan, and one of those tools are dispersants, and there are a number of dispersants that are on that list. And all the authorizations to start using it, as the spill unfolds, are between the responsible party and the Federal on-scene coordinator. So those things occurred almost back at the very beginning of the spill.

Mr. DICKS. Well, did they get permission to use this particular dispersant? Was it on the list?

Mr. PERCIASEPE. It is on the list, yes, sir. Yes.

Mr. DICKS. Okay.

Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Dicks.

CLEAN UP COORDINATION

I am going to ask one more question, Mr. Strickland, before I turn to Mr. Simpson. The cleanup—we were told that in many areas there is just no cleanup going on at all, that it is uncoordinated. I think we would like to know who is coordinating it. Who is in charge? Are you in charge?

What is your assessment of the damage? We saw pictures on television this morning of thousands of fish, dozens of birds dead, washing up. And it is going to get much worse day by day.

Are you concerned about the idea of burning the marshes in order to burn up the oil, Mr. Strickland?

Mr. STRICKLAND. Mr. Chairman, let me take those up in the order that you raised them.

I was down earlier this week on the beaches at Port Fourchon, and I went along about a five- or seven-mile stretch of beach with the local parish representatives, with Coast Guard representatives. I actually watched the cleanup in front of me. I saw the areas that had been addressed, other areas that were yet to be cleaned up, and actually talked with the locals.

I think you have heard Admiral Allen is in charge through the National Incident Command. All of us are coordinated and working through the leadership of the Coast Guard. I think the President is re-affirming that, as we speak, in his remarks in the Rose Garden. So Admiral Allen is in charge.

We are embedded in the incident command structure in each of the centers. There is one in Miami, there is one in St. Petersburg, there is one in Mobile, and there is one in Houma. The overall incident command system is in Robert. I will assure this committee that the Department of the Interior has senior people, in most cases presidentially appointed, Senate-confirmed people, in each of those locations that are there pretty much 18 hours a day. The interest and points of view of this Department are fully represented. EPA has broad representation, as do other agencies. These are decisions that are made by the incident commander, by Admiral Allen, with the input from us.

What I saw on the beach and what we have heard subsequently is that there has been a process of standing up our onshore response. There were efforts announced today about having a Coast Guard representative literally in every parish where there is onshore activity—that is, on the ground, designated to work, to cut through some of the red tape and the delays that have been complained about.

I think you are going to see an enhanced and more ready response on the ground. I think you are going to see, some of these areas are hard to get to. I was on a boat this week, going out into the bays. For some of these areas, it takes a couple of hours to get out to them. We are going to put barges out there, we are going to set up tent camps, which you are going to see, because we need a presence over a sustained period of time, because it is going to take a while for this to work through.

MARSH BURN

Now, as far as the marsh issue, let me just speak to that quickly. I know that idea has been broached. It is my understanding no final decision has been made. It may be a tool in the toolbox that could be used at the right time, but there are questions about when to do it, and how to do it. We will be providing our perspective in terms of the potential impacts to wildlife.

Mr. MORAN. Thank you, Mr. Strickland.

Yes, Mr. Simpson?

Mr. SIMPSON. Thank you, Mr. Chairman.

DISPERSANT TOXICITY

Mr. Perciasepe, I guess I am kind of surprised that the EPA doesn't already have the studies done on the toxicity of this dispersant. And you are asking now for \$2 million in the supplemental to look at the long-term effects of this dispersant.

You know, basically, I am not sure I understand why we are doing this and the benefit of it, other than it makes it look good. You don't see the oil on the surface as much when you disperse it.

Is it environmentally more sound to have it hidden? I mean, you are not getting rid of it, just breaking it up into little droplets. Is that right? And it is below the surface. It is still environmentally a problem, isn't it?

Mr. PERCIASEPE. Yes, I want to be really clear. Using dispersants is the, perhaps, better of very bad choices when you have this kind of an event.

Mr. SIMPSON. If you disperse it, does it make it harder to clean it up?

Mr. PERCIASEPE. When you disperse it, it makes it easier for the natural processes to degrade it and digest it, so to speak, into the ecosystem. It increases the biological activity. And that is one of the primary intents here, is to increase the biological activity, keeping more of the oil, if it is possible to do that—and that is one of intents here, as well—offshore.

In this environment that we are in, in the Gulf of Mexico, they are all sensitive ecosystems, but the coastal wetlands are the most sensitive ones and are like nurseries for the whole ecosystem. To the extent that we can allow that biological degradation to happen offshore, there will undoubtedly be some impacts out there, but it will reduce—that is the intent; that is the hard choice we are trying to make it here—it will reduce the impact on the onshore sensitive nursery areas for many of the species in the Gulf.

So it is that tradeoff that we are making. And I think we should recognize that it is not a zero-sum tradeoff where, if you do this, nothing bad happens. It is, something bad can happen, but it will be less bad than if you don't do it.

And, in terms of the long-term study, I think we have mentioned several times that this is the largest amount of dispersants that we have ever used in the United States. I think there may have been more used in the Mexican leak, but I don't recall the details of that. But, certainly, the opportunity to understand for the future and to maybe even adjust our regulations and the tests that are done on our regulations to put products on lists for different kinds

of spills can probably be well-informed by being able to go in and get some university scientists involved with looking at that long-term view.

So I think we have to be in the moment and make these decisions to reduce the overall impact, recognizing it is going to happen. We have a lot of oil in the Gulf of Mexico right now. But that we can't turn our eye away from the ability to learn from this just how we do things in the future. So it is a little bit of both of those.

SUPPLEMENTAL REQUEST

Mr. SIMPSON. Okay. Well, I appreciate and support the efforts that you are doing in terms of doing this long-term study on the impacts of this.

As a budgetary question and as an appropriator, I would say that—you are asking for \$2 million in the supplemental appropriation to do that. You have a \$9 billion unfunded obligation in the current EPA budget. It seems to me that, with that sort of unfunded obligation, if this was a priority, you wouldn't wait for the supplemental, you would do it.

Mr. PERCIASEPE. Well, at this time of the fiscal year, particularly for a budget like EPA's, which I think we have spent time in our regular budget and appropriation hearings talking to you about, a large amount of our budget are funds that are grants that go to States, tribes, or Superfund projects. And there is definitely a lag in some of those funds getting out at this point in the fiscal year.

A significant amount of that \$9 billion that still is yet to be obligated this year is oriented toward those things that usually gets obligated by the end of the year. Probably over 60 percent of it is. The rest is the normal, or very close to the normal, burn rate of our regular budget.

So, whether it is \$9 billion unobligated or not, you are really talking about reprogramming some funds in the agency. And we are suggesting—

Mr. SIMPSON. Could be done today.

Mr. PERCIASEPE. Because something would not get done. It is not like that money is available from something you have already, in your capacity in the committee here, approved for us to do.

So, I would think that is the choice. We are suggesting this additional money will enable us to have that kind of independent view. I know that BP has put forward a large sum of funds to do research, but we feel it is appropriate, along with the USGS and others, to be able to have the ability to have government-funded studies here that are not being funded by the responsible party.

The other part is, if we try to use the trust fund money right now, we are really interested in the trust fund money all going to the response to the spill. So those are some additional reasons why we have asked for the \$2 million authorization here.

Mr. SIMPSON. And I appreciate that. In a budget as big as the EPA's and the huge increases that occurred over the last year and a half, I would suspect that, with the priority that this is, you could find the \$2 million somewhere. It could be reprogrammed today and be done. This is \$2 million. That is not a whole lot in the whole scheme of things.

But I appreciate what you are trying to do, and I agree with what you are trying do. I am not trying to throw cold water on it. I am trying to say, you know, we are appropriators and also have to worry about the budget.

IMPACT OF NATURAL RESOURCE LOSSES

Tom, let me ask you—it has been mentioned both by the Secretary and by you that BP is going to be held accountable to pay for the environmental damage. If you lose a wildlife refuge like Breton Islands National Wildlife Refuge, what is that worth? How do you put a value on that?

Mr. STRICKLAND. Well, Congressman Simpson, you can't put a price on something that plays an essential role in the ecosystem. There are millions of migratory birds that come down to the Gulf Coast. It plays an enormous role in the ecosystem of the Western Hemisphere.

There are ways to monetize, if you will, damages per bird and that sort of thing. We will take advantage of those to get the maximum return and compensation. There are things we will do to try and rebuild the populations.

At the end of the day, your question raises the very valid point that these are treasures, these are natural resource treasures, environmental treasures, that are irreplaceable. As we have seen with the Exxon Valdez, there are still implications up in Prince William Sound 20 years later of environmental impacts and a her-ring fishery that is basically gone.

We are hoping that we can manage through this. The fact that this was 50 miles offshore does allow for what Bob was talking about. There has been a lot of weatherization of this oil as it moves those 50 miles. It took several weeks for the oil to first hit the coast. There are very aggressive efforts to hit it with dispersant, to skim it, to burn it. Some of the data that Marcia and her team reflected indicated that a great deal of evaporation and other diminishment of that oil occurred in that journey. Then it becomes less volatile through the natural weathering process and less toxic to living things so that, by the time it gets to the shore, it is different than if this had occurred right at or near the shore.

But be that as it may, I am not here to downplay the impacts. They are significant. They are visual. I was in the wildlife recovery area and saw the oiled pelicans. It is heartbreaking, and these landscapes are irreplaceable.

Mr. SIMPSON. Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Simpson.

Mr. Dicks.

Mr. DICKS. Thank you.

PROTECTIVE BOOMS

I can't help but say I have noticed Governor Jindal is repeatedly on television down there, saying that they still don't have enough of the protective booms.

I assume that is the responsibility of the incident commander and the Coast Guard. Or how does that work? And why is it that he seems to be dissatisfied with the way this is going?

Mr. STRICKLAND. Chairman Dicks, if you would like, I can take a crack at that—

Mr. DICKS. Yeah.

Mr. STRICKLAND [continuing]. Because I have been down there in some of the meetings where this is playing out. Every Governor along the Gulf Coast, understandably, wants their State to be boomed to the maximum extent possible.

Mr. DICKS. Do we have these booms somewhere?

Mr. STRICKLAND. We don't have enough boom to respond to every request that is out there. We have moved in boom at as fast a rate as we can. Boom is being manufactured at as fast a rate as it can be.

The incident command, to your point—you are exactly right. There is a centralized process for that. There is a prioritization that starts from the bottom up. We started by booming the most sensitive areas, environmentally, to try and keep it out of the marsh and the wetlands and off of some of the key areas. Some of the coastal areas were seen as barriers and some of the islands were seen as barriers that could actually stop the oil and you could clean it up.

It is a bit of a triage system. It is a huge coastline. There is not nearly enough boom in the world to boom the whole coastline. We started with the most sensitive areas. Understandably, I think any of us in Governor Jindal's position would be seeking as much as we could possibly get. He is doing that, and we are trying to give him as much as we can. We are starting with the most sensitive areas first.

DISPERSANTS

Mr. DICKS. Mr. Perciasepe, at the House Transportation and Infrastructure hearing—the chairman got into this, but I want to get to this point—there was a statement made that EPA basically conceded that there is no known information available on alternatives to Corexit and that basically what EPA did was just accept the statements of the companies involved about these dispersants rather than doing its own independent research. Is that correct?

Mr. PERCIASEPE. No. The Corexit and a number of other dispersants are on a list that is in the National Contingency Plan.

Mr. DICKS. Were they tested by EPA?

Mr. PERCIASEPE. Yes. Well, they are tested by the company when they submit the application to be put on the list, but the—

Mr. DICKS. So we just accept the company's word?

Mr. PERCIASEPE. It has to be from a lab that is certified.

Mr. DICKS. Okay.

Mr. PERCIASEPE. They can't just submit numbers. It has to come with all the credentials that follow the—

Mr. DICKS. Of a recognized laboratory.

Mr. PERCIASEPE [continuing]. Formal scientific process, the test methods that were performed. They are looked at for both their effectiveness to do the dispersing and also for their toxicity. The toxicity test is done on a relative basis between oil, so between a distillate.

So, yes, there is a defined, normal process for certified labs that have to be used.

SPREAD OF THE OIL SPILL

Mr. DICKS. Now, there has been some concern that the spill is going towards the Gulf states now. What about Florida or coming up the east coast of the United States? What is the possibility of that?

Mr. MORAN. I am glad you have asked Dr. McNutt this question. Incidentally, she just came from the incident disaster center. She hasn't had a chance to testify before the Congress yet because she has been down there, and she flew up just for this hearing. She has the most current information.

Doctor, thank you.

Dr. McNUTT. Thank you for that question.

There is, of course, concern about oil getting into the loop current, at which point it could go around Florida, it could get into the Gulf Stream—

Mr. DICKS. The Keys, I take it, the whole thing?

Dr. McNUTT. Absolutely. Of course, there is concern that this could eventually become not just a national incident but an international incident by impacting other nations that are in the Caribbean and perhaps even as far north as Bermuda.

One thing we have been doing, of course, is monitoring the oil as it has moved. From a study by the AVIRIS instrument, we did notice some heavy oil that was entrained at one point in the loop current. But then a counter-eddy from the loop current actually grabbed that piece of oil and rotated it right back out of the loop current almost as quickly as it got in. That shows it is possible for heavy oil to get in the loop current, and it probably is only a matter of time until more oil does get into the loop current.

I stood up a team of scientists who are looking at various scenarios, just as the one that you mentioned, to see what are the prospects, at what time scale do they play out, what are their consequences, and how do we look at the impacts of them and then make recommendations to people like Tom Strickland, Jon Jarvis, and other senior managers so they can work with the affected parties at messaging how we will respond to those scenarios.

MARSH BURN

Mr. DICKS. One final question to Tom.

On this question about burning the refuges, I would hope you would take appropriate time to do whatever studies you have to do here or to get the best advice, because I think that is something that should be carefully considered.

Thank you.

Mr. STRICKLAND. Mr. Chairman, yes, we will do that.

Mr. MORAN. Thanks very much, Mr. Dicks.

Ms. McCollum.

Ms. MCCOLLUM. Thank you.

I want to ask two questions here. One is on baseline.

BASELINE ASSESSMENTS

The baseline assessments that you started, I would like to know from Fish and Wildlife, do you see that as being part of the new protocols, the new regulations, so if something like this happens we

have a reservoir of information available to us? And, if so, how would that happen?

Mr. STRICKLAND. Well, thank you for that question, Congresswoman McCollum.

The fact is that we have been trying to do those assessments with respect to those refuges that are most immediately at risk. We have done them for all those that are immediately at risk. We are finishing them up for all of our assets along the coast. We have been able to complete them all, I think, for the Park Service.

The Gulf Islands National Seashore, in particular, has maybe 90 miles of coastline along Mississippi and Alabama and part of Florida. I know they have finished their assessment.

In terms of having the resources to do those as just a regular matter of our business, we would love to be able to have that kind of information on a regular basis. Now, this committee has been very good about supporting additional science capability. With our Climate Change Science Centers that will be working with Dr. McNutt and our Landscape Conservation Cooperatives on the ground, the whole point of that effort is to do better sharing of information, not just Federal, but State, Federal, NGO information, so we have really good information to deal with climate change, to deal with these kinds of impacts down the road.

It is something we want to do more of. Out of all of this, we would hope that we would do more than just deal with the effects of the spill, but also help restore this ecosystem, which has been very much manhandled by humans for sometime, and nature, because these hurricanes have had a huge impact.

ARCTIC BASELINE ASSESSMENTS

Ms. MCCOLLUM. So, taking that up north into the Arctic and from the conversation that this committee had with Secretary Salazar where there are other nations involved—Russia, Norway, ourselves, and Canada—do you know, internationally, if you are looking at how to come together and do baseline measures for up there?

Mr. STRICKLAND. I think Dr. McNutt should—

Dr. MCNUTT. Yes. Actually, even before this oil spill happened, the Secretary of the Interior had tasked the USGS to take a look at the impact of potential oil development on the Arctic and whether it was appropriate; and, if so, what sort of baseline science would need to be done before any development could take place.

REGULATIONS

Ms. MCCOLLUM. Okay. My time is going to be limited, so I thank you, but I have a little bit of a follow-up.

One of the things that I had mentioned to Secretary Salazar was that right now, the oil companies, determine the environmental impact. Are you going to be part of the discussion, the weigh-in, as the new regulations are being put forward? Do you anticipate you will have a place at the table?

Dr. MCNUTT. Absolutely.

Ms. MCCOLLUM. Okay. Thank you.

ENDOCRINE DISRUPTORS

To the EPA, I am a little confused here. Help me. Did I hear you right, you don't believe that there are endocrine disruptors that we should be concerned about or even in the product that is being applied? You don't believe, or you don't know, or you don't think, or you do know? What is it?

Mr. PERCIASEPE. Based on the information that we have, the byproducts of decomposition of the currently used dispersant do not have the same endocrine disruptor byproducts that some of the other ones might have. And we have a team of scientists right now looking at that in more detail.

Since this event has occurred—you know, the normal sequence of events with dispersants is you have a spill and you apply dispersants.

With this, we have this long-term situation here where the volumes keep going up. So we are reducing the volume. And the next step we are taking, if we need to continue to use them, is if there is any differentiation between these in terms of the byproducts because these dispersants decompose after a couple of weeks to maybe a month. That is what we are looking at, what happens when that occurs.

Ms. MCCOLLUM. But endocrine disruptors are emerging as being concerns. So there isn't as much science on that as we would like to have.

Mr. PERCIASEPE. Right. That is correct.

Ms. MCCOLLUM. In fact, when we did a bill last year on the House floor, an amendment that I offered pretty much passed unanimously to have institutes of higher education become more actively involved in emerging contaminants of concern in our waters.

So my question still goes back, then: What do you see the EPA needing to do with endocrine disruptors?

Because I am concerned not only when it hits the shore, but as these dispersants are falling down into the water offshore—which I understand where you think that that has somewhat of a positive effect—there is still sea life that is swimming through this stuff, and gill structures, and absorbing things through skin and flesh of these fish and other marine creatures. They also have the possibility of being affected by these endocrine disruptors.

Are you going to be putting together something to ask this Congress to do more for you to really get out ahead of these emerging issues of concern with the endocrine disruptors? I don't mean this as a criticism of you personally. You are speaking to me factually, but you don't believe, you don't know exactly the consequences of these chemicals?

Mr. PERCIASEPE. Right.

Ms. MCCOLLUM. You don't think, because that is the information in front of you.

What do you need so that you can answer that question more directly in the future? What is our role to make sure you can answer that question?

Mr. PERCIASEPE. There are a couple of things. First of all, we are going to need to change the way we allow dispersants and other

products that are used in emergency situations like this to be on the list to be used under the National Contingency Plan. How they got on that list was based on whether they work or not and then some very relatively rudimentary toxicity tests, which is something but it was not robust. It did not include looking at all these byproducts it will decompose to.

Now we have a situation where this thing is going on for over a month now. It could go even longer. This kind of situation was not really taken into account when those tests were created in the past for these products. So, going forward, we are going to need to have a different way and we are going to have to revise our regulations on how we decide what should be available in order to react when we have an emergency like this.

Right now what we are trying to do, as this thing continues to go on, is learn as much as we can with our existing science team as to what we can determine from these chemicals now. So we may still—and we have already told BP that we would do this—we may still ask them to absolutely switch if this is going to go on for a long period of time. Our science review that is ongoing right now—we are not going to rely on BP; we are also doing our own. If that shows that we have any more concern along these lines that we can tell from the information we have now—which we do have the list of the chemicals that are in these products under the agreements that we have—we will take further action.

So that is where we are right now. Part of the idea, also, of the \$2 million we are asking this committee for—and I recognize the budget issues related to it—is to begin that process of how would we look at how this all unfolded and what we could we learn from it for how we do this in the future so that we are better prepared for a long-term event as opposed to a short-term, low-volume usage. So, yes, we absolutely have to make those changes in the future.

Ms. MCCOLLUM. Thank you, Mr. Chair.

Mr. MORAN. Thank you, Ms. McCollum.

Mr. Olver.

Mr. OLVER. Well, thank you, Mr. Chairman.

DISPERSANTS

If I could start anywhere let me start with the EPA, a little bit more on the dispersants.

There is some question about what real alternatives are there? We have used large gallonages of the Corexit, and that seems to be manufacturable fairly quickly. But what is the real availability when you speak about being able to switch to others? I have seen some indication that there are very limited other dispersants that are there, and the storage of those, the availability, essentially, on the shelf, and the capacity to manufacture more, each one must be limited.

Do you have a whole list of these things that would do the same sort of thing, that you could begin to make decisions from or not?

Mr. PERCIASEPE. Yes, there is a list of dispersants. They all have different characteristics. They are all, more or less, effective. There are definitely issues of availability with all of them, and the ability of the manufacturer to produce them in the volumes that might be needed.

One step we have taken this week: By being able to rely perhaps more on the subsurface application, where you use a lot less than the surface application, which, you might imagine, is being applied by plane, has to be spread over a large area to get the oil you need, you are necessarily, in all likelihood, using more than you need to use. So if we move to a point where we can be as effective using less, it opens up doors for other potential products.

But, right now, we are in the middle of looking at all of the science that we have and looking at the constituents of these, and we have not gotten to the point where we would take another step on that.

Mr. OLVER. What happens to the oil if you disperse it subsurface? Where is it dispersed to? What are the oil plumes that are being talked about, columns of oil and so forth on the shore? You see pictures or at least—I am not sure what I am—imaging.

Mr. PERCIASEPE. NOAA and others are out there looking at those plumes and where they are. Most of those plumes are thin and small particles.

And let me just say, when we test inside the plumes for dissolved oxygen, we see dips in dissolved oxygen, not to any dangerous, low level, but we see enough dip that we know aerobic digestion has taken place. Because the bacteria that is attacking the oil in those plumes is dipping the dissolved oxygen.

So what we are hoping, with the bad choices that we are presented with here—and this was one of them that we have decided to move on—is that that biological activity will be increased by the increased surface area of all the many small particles and that that oil will degrade a lot more quickly than it would if we hadn't done it. That is the objective. That is what we hope to do. And that degradation of the oil will continue wherever it goes in that ecosystem.

PROTECTIVE BOOMS

Mr. OLVER. Okay. Let me ask, how many miles of booms are there now?

The Gulf Coast National Seashore, is that boomed?

Mr. STRICKLAND. Congressman Olver, as of May 27th, the deployed boom in feet is 1.875 million feet of deployed boom.

As far as the National Seashore is concerned, the key strategic areas of it are boomed. It is actually the backside of those islands that are the most fragile because that is where the marshes are. You can actually remove the oil from the front side, and you can't effectively deploy boom, a lot of time, where there is surf because it won't stay deployed.

There is almost 2 million feet of boom that has been deployed throughout the Gulf area.

Mr. OLVER. Would it be 400 miles? Is that roughly what that would be?

Mr. STRICKLAND. Well, divide that by 5,000. So, if somebody could help us with that.

Mr. OLVER. I guess that is around 4,000 miles. Is that deployed—

Mr. MORAN. Four hundred miles.

Mr. OLVER. Four hundred?

Mr. MORAN. Well, what is one digit among friends? But I think it is 400 rather than 4,000.

Mr. STRICKLAND. Congressman, to your point, it depends on the area. In some areas, I can tell you, having just flown over it again earlier this week, there are stretches that are openings in the marshes of wetlands. Those are fragile areas, and those are high-priority boom areas. They are the backside of some of the barrier islands, where there are nesting areas and marshes and cane that are growing.

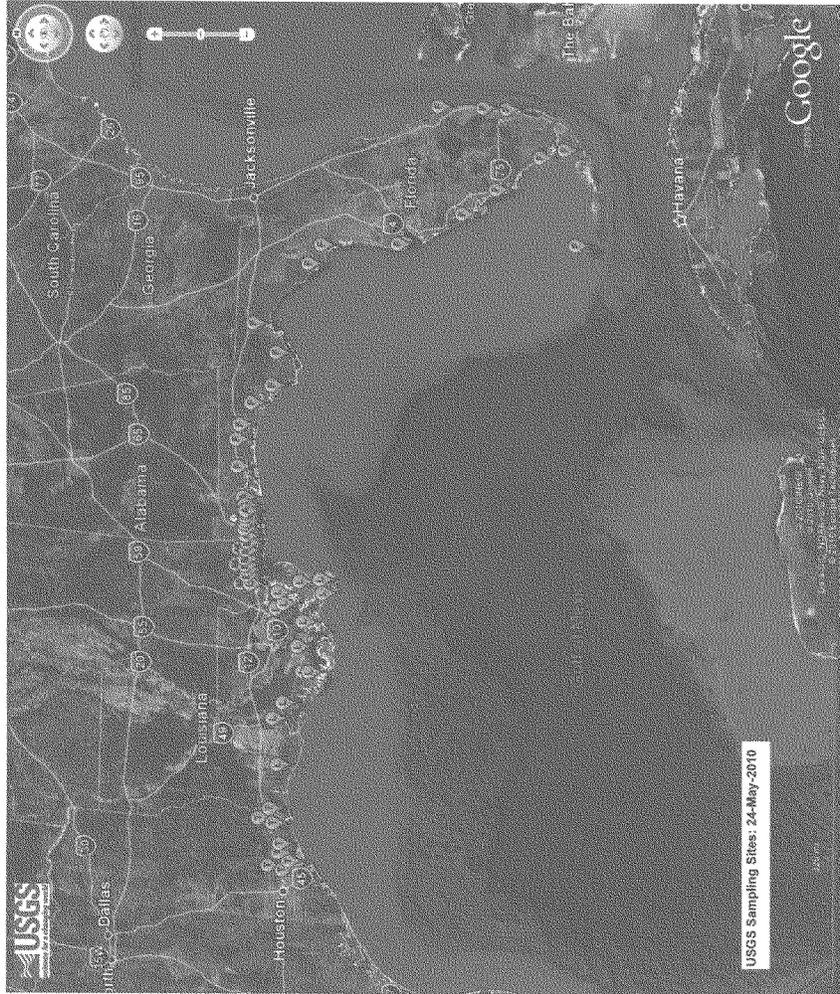
There are large stretches of the coast that aren't boomed. In fact, boom doesn't work everywhere.

Mr. OLVER. Okay, we are having trouble getting the booms. They are being manufactured. I heard that earlier.

SPREAD OF OIL

It is fascinating. I try to gather lots of information from maps, and I am trying to see if I can follow these maps. The actual COMSAT, LANDSAT maps are interesting, but I can't really tell where the oil is. By the time you get to the 24th of May, it looks to me as if this oil is over a huge portion of the Gulf of Mexico, although that must be just my misinterpretation of where that goes.

[The information follows:]



Mr. MORAN. Dr. McNutt.

Dr. McNUTT. You know, we don't actually use LANDSAT for mapping.

Mr. OLVER. This was in the packet that came from USGS that was on my table as information coming from USGS.

Dr. McNUTT. Yes. The LANDSAT can be used for some visual work. Usually we use that for the land side, but we don't actually use that for mapping on the ocean. There are far better tools.

Mr. OLVER. Well, I am looking at that. But, in fact—for the unpracticed eye—probably someone who has used these things would immediately know what they were looking at. But for the unpracticed eye, which most of us are, to see what the spread of the oil slick has been over the surface over the period of time since we have had a month to do that, a graphical picture of that, these are really tough to see.

It looks as if there is some oil now reaching land at the west end of Louisiana, which is a couple of hundred miles west.

Dr. McNUTT. Well, this is why we produce interpreted products like this that we think are more useful. For the untrained eye, we believe that with the interpreted products, the analysts can take input from a variety of sources, whether they are synthetic aperture radar, or whether they are AVIRIS flight with infrared imagery. They take a variety of sources and give a product that helps give the outline of the oil, thickness of oil, and helps people who are not practiced in interpreting satellite and airborne imagery a better idea of what they are looking at.

Mr. OLVER. Well, since there is no code on this map that you were holding up, maybe you could tell me what the navy blue, the royal blue, and the sky blue, essentially, are. There is a robin's egg. And then there is a whole bunch of these barrier islands that look as if, from some of these maps, as if they have oil right against them. But that certainly doesn't show from this map that you were referencing.

Dr. McNUTT. The red areas on that map show where, as of that date, the oil was already ashore. The red areas are the area where oil has already impacted.

Mr. OLVER. What is the date of that map? That doesn't show either.

Dr. McNUTT. This was May 20th, Thursday, May 20th, a.m.

Mr. OLVER. Ah, 20th, a.m.

Dr. McNUTT. Yes.

[The information follows:]

Mr. STRICKLAND. Congressman, if I could intervene, we just put up there—you have that in front of you, as well, a smaller version of that. This is a daily oil impact assessment report that we help generate out of Interior.

Mr. OLVER. The oil is all of those darker blues.

Mr. STRICKLAND. Well, it is coded. So red is heavy, yellow is moderate, green is light.

This one right here. If I could just shift over here. This map has been crosschecked with actual overflights and people on the ground.

Mr. OLVER. Yeah, I can see that map. But the other one looks as if oil is spreading out a good deal farther. The one that was really raising my alarm was the LANDSAT map from the 24th of May, which shows, as best I can see, what is a kind of a—

Dr. McNUTT. You may be looking at clouds.

Mr. OLVER. I don't believe that. I don't believe that. The LANDSAT of the 24th of May?

Dr. McNUTT. Let me see.

Mr. OLVER. That is one of these things that was right behind this—it was two from the end of this bunch of things, which the last two are schematics that show all of the coast of the U.S. and then the Atlantic coast. It is the last one before that.

Dr. McNUTT. Are you looking at this one?

Dr. OLVER. Yes.

Dr. McNUTT. Oh, okay. No, the colors are bathymetry.

Mr. OLVER. The colors are the symmetry? What does—

Dr. McNUTT. That is bathymetry. That is not oil. The dark blue is the deep ocean.

Mr. OLVER. Well, everything there looks very like the top of that second color of blue. Look, now, if you put these other ones there, I am seeing the shape of the top of that thing is exactly the same as this medium blue, not the navy, not the royal, but the—well, I don't know what I would call it.

Mr. MORAN. It is teal.

Mr. STRICKLAND. Aquamarine.

Mr. OLVER. Whatever. That one is the shape of the top of that thing, and yet exactly the same colors are spreading out much farther into the gulf.

Dr. McNUTT. This is the Yucatan Peninsula here.

Mr. OLVER. No, the Yucatan is the land below.

Dr. McNUTT. This is the offshore extension of it. This is bathymetry.

Mr. STRICKLAND. He is talking about the next one over, I think.

Dr. McNUTT. Okay, this is the oil spill.

Mr. OLVER. But this medium blue in there, which is the large mass of blue other than along the coast, is exactly the shape of the top of that very dark—that very dark on the other map.

Mr. MORAN. It is not the same location, though. Florida is much further removed than—

Dr. McNUTT. This is just right up in here. Here is the bird's foot.

Mr. OLVER. Oh, well. There is no point in our going through this this way.

Dr. McNUTT. Very different scale.

Mr. OLVER. I understand scales. I am sorry. It is very difficult to—I will let it pass.

Mr. MORAN. Well, it is a valid observation. The spread of the oil is outstanding.

Dr. McNUTT. It is maybe following the contours of the bathymetry, is that what you are saying, is that the spill seems to be following the contours of this right here.

Mr. OLVER. Exactly. Now you got it. That big thing—we are on a very different scale, a much larger scale on this map, but it is the top of that over against the—

Dr. McNUTT. But, you see, this is coming in here, which is not corresponding to any bathymetry here. So it is not exactly.

Mr. OLVER. There must be somebody that has a sense of where the oil is as it has been spreading. I would love to see what its spread has been over a period of these 30 days.

Dr. McNUTT. Yes. We could do a time lapse.

Mr. OLVER. Every 48 hours or something like that.

Dr. McNUTT. We could do a time lapse, definitely.

Mr. MORAN. Yes. And if we can get that to Congressman Olver.

Mr. STRICKLAND. Let me leave you the summary that NOAA produces every day. That shows Wednesday, Thursday, and Friday just this week. That is the spill, and you can see how it—I think that might get right at your point.

Mr. MORAN. John, do you want to move on? We will have one more round before we let these witnesses go.

Mr. OLVER. I will pass.

CREATING BARRIER ISLANDS

Mr. MORAN. Dr. McNutt, the commandant of the Coast Guard, Admiral Allen, just announced that he is creating a new barrier island. Now, I would like to ask you, what is the impact of creating these barrier islands?

Because people have suggested we should create any number of them. But it seems to me that that has to have some profound and long-lasting effect on the ecology, the topology, and the environmental condition of the Gulf, if we start dredging and creating new barrier islands.

Have you looked into this? And what is your assessment?

Dr. McNUTT. I understand the USGS has just produced a report that has gone through peer review. I have not yet seen the report.

I know the proposal in its original version for dredging these barrier islands was deemed as one that would do more damage than good because of where the source of the sediment was to be brought in. I believe the report has said there are some places where the sand could be found and brought in that could actually be nourishing rather than produce erosion.

So, under some limited circumstances, the project could go forward without causing damage.

Mr. MORAN. But it is not going to go forward without your approval, without input from you?

Dr. McNUTT. Well, USGS is not in a position where we actually can approve, but we can make recommendations on what we think scientifically would be a prudent approach to the project.

Mr. MORAN. Okay.

Mr. STRICKLAND. Mr. Chairman, if I could add, during the break, I was able to get updated information on the barrier island issue. What I understood from a very quick communication was that it was announced that the U.S. Army Corps is going to be approving a subset of the original request, kind of a preliminary approval, subject to—and I think it is half of what was originally proposed, but to do it in a phased way, and there would be one test project that could go forward.

Even that project had to acquire the appropriate environmental permits, one of which would have to be regarding endangered species, and would have to come to Fish and Wildlife Service, and one from MMS, in terms of the material that they would have to take, which would require a permit for the sand.

It is my understanding that what was announced today would be subject to review, to respond to your questions that you raised. We will provide that input and review.

DEEPWATER WELLS SUSPENSION

Mr. MORAN. Thank you.

Now, one last question before I go to Mr. Simpson, and we will do this final round, and that will conclude it.

I was just told—a lot is happening while we are sitting here. The President just announced 33 other deepwater wells will now be suspended.

Once we get paid for this bill, at least the short-term bill, from BP, BP leaves the scene. I am sure they are going to have a signed document that all their legal experts will put together making sure it absolves them of any further liability. But it is going to be years to clean up this mess.

FUTURE COSTS

We are told that BP announced a new \$500 million research fund. I don't know whether the Federal Government gets any of that. But I would like to hear from the three of you, if you have made any assessment of future costs as a result of this that are going to have to be built into future budgets, whether it be the USGS, Fish and Wildlife, or the cleanup of all of the marshes and, of course, EPA.

Do you have any estimate of the future costs?

Mr. PERCIASEPE. I will start.

I think it is fair to say that it is hard to put any kind of precision on this because, while the spill is under way, we still do not know the full extent of the damage, which was one of the reasons why the baseline is there, so we can look at the after-effect and what that cost would be.

I am fairly certain that there will be ongoing expenses that EPA will have for monitoring and assessing, remediation and restoration plans as we go forward, at a minimum. But predicting the full extent of that, Mr. Chairman, will be difficult until we move through the full event here.

Mr. MORAN. Dr. McNutt?

Mr. PERCIASEPE. I expect it will be ongoing for many years.

Dr. MCNUTT. USGS is a science agency. I will tell you, there have been many times over the last few weeks when we have been

asking ourselves, "why are we faced with fundamental science questions that would help us respond to this emergency that we don't already have the answers to?" We very much wish we did. I will tell you, we don't want to be caught in this position again.

In fact, one of the reasons why BP has announced this large, half-billion-dollar fund is that I have had these conversations with BP as well. BP understands the need to put more money into research on the effects of oil in the ocean, the best way to prevent it from happening again, and knowing what to do when it happens.

Believe me, USGS is going to have to put more effort into this. I don't have an exact figure. In our Coastal and Marine Geology Program, we need to put more effort.

Mr. MORAN. Thank you, Dr. McNutt.

Mr. Strickland, do you have anything to add?

Mr. STRICKLAND. As of May 14th, we had spent around \$7.0 million. Of that, about \$3.8 million we deemed to be nonrecoverable, and the rest came out of the oil spill trust fund.

We don't have a long-term estimate, but there are mechanisms under the law where a certain amount of money can also be put in trust for evaluation after 10 years and some period of time. We are doing everything we can to address the immediate impacts and make sure we clean things up properly.

One of the things we learned from Exxon Valdez is some of the cleanup strategies ended up sterilizing the environment. They came in with steam cleaners and steamed rocks and did a lot more harm than good. It really gets to, the message that Bob has been making, so we are very focused on that. We will keep the committee apprised of what we think this is going to cost short-term, mid-term, and long-term.

Mr. MORAN. Good. Good for you.

Mr. Simpson.

Mr. SIMPSON. Thank you, Mr. Chairman.

And thank you all again for being here today.

OIL AND GAS SCIENCE AT USGS

Dr. McNutt, let me ask you, following up on the last question, I get the sense that USGS doesn't have a base program dedicated to oil and gas science and remediation, particularly since you are calling in 80-year-old guys out of retirement to look at what they had done in the past.

Is that the case? And, if not, could you describe the program and whether this disaster has exposed any gaps in the program?

Dr. MCNUTT. We do have an energy program, and we have an environmental program, of which there is always activity going on at a low level but nothing that is sufficient to take on an emergency of this effort. I think you are right to say that, after Exxon Valdez, there was a whittling away at this program that has been truly tragic, and we need to energize it.

I organized, with the help of John Holdren's office at the Office of Science and Technology Policy, the week before last, a meeting of academic scientists in which we looked at what some of the questions would be of a program like this. It was amazing, at the fundamental level, some of the questions we didn't have answers to: about how quickly is oil taken up by microbes in the ocean, and is

there any way to stimulate them to work faster? What effect does sunlight have on oil in the ocean? What is the long-term fate, what are the chronic problems of oil in the ocean? Basic questions like that that we need to know the answers to.

Mr. SIMPSON. So can we expect that USGS will come up with some changes to the program to address some of these things?

Dr. McNUTT. Absolutely.

Mr. SIMPSON. And we will be able to see that in—

Dr. McNUTT. We are writing the science strategy right now.

Mr. SIMPSON. Okay, thank you.

Mr. MORAN. Will the gentleman yield for a moment?

Mr. SIMPSON. You bet.

OIL SPILL RESEARCH

Mr. MORAN. It has been brought to my attention, there is a program in the Minerals Management Service entitled "Oil Spill Research." And for the last 10 or 15 years, we have been putting more than \$6 million into that account. Have we ever learned anything from all that?

Dr. McNUTT. Mr. Moran, I took a look at that program, and I would say the issue about that program is that it is administered on contracts, not really research grants. So the quality of the program, when you do a contract, what you get out is as good as the questions you ask.

Mr. MORAN. So we have been wasting about \$6.3 million a year, one would seem to have to conclude from that. We have very little to show for it, it would appear.

Dr. McNUTT. I think the program could be more visionary and more strategic.

Mr. MORAN. All right. Well, I guess that is a diplomatic way of saying, what the heck are we doing that for?

Excuse me. Please, Mr. Simpson. Thank you for the interruption.

Mr. SIMPSON. Thank you.

DEBARMENT OF BP

Bob, I read in some articles that the EPA is looking at discretionary debarment from BP. Obviously, the EPA and BP have some differences of opinion. I don't know whether to believe them or not, but they say that EPA is frustrated with the management of BP. And they are looking at, and have been looking at, BP for discretionary debarment because of past violations and so forth.

Given that BP is the number-one provider of jet fuel for our military, the number-two provider of fuel to the U.S. Government, in terms of 1.5 billion gallons a year, what impact would that have on the contracts both with our military and with the Federal Government?

Mr. PERCIASEPE. Well, I have to say that, Mr. Simpson, that is something that has been going on for quite a while, and I am not completely familiar with exactly where it stands. I would have to go and get some detail for that, to let you know.

But obviously, you just laid out some of the issues that are involved with that. On the other hand, we have fiduciary responsibilities that I am sure that all of you would want us to—

Mr. SIMPSON. Sure.

Mr. PERCIASEPE [continuing]. Undertake when we are working with contracts and other grants that we are responsible for. However, I don't know the status of that.

Mr. SIMPSON. And I am not criticizing. It might be a totally appropriate action. But there are considerations that need to be made obviously, when some action like this is contemplated.

Would this be EPA doing this, or would it be the Department of Justice?

Mr. PERCIASEPE. Boy, I think I am going to defer from answering. I believe it is the actual agency that does the contracting, that makes some of those decisions. But I don't know for sure whether the Department of Justice gets involved. I am a little bit out of my lane, as they say, there, in terms of having to be up to date on that particular aspect of it. But—

Mr. SIMPSON. It would be interesting to know that.

Mr. PERCIASEPE [continuing]. Why don't I get some information back to the committee on the status of that?

Mr. SIMPSON. Okay. Because if EPA were to do a debarment of BP, I guess the question is, would it affect the military? Would they still be able to have a contract with the military in terms of jet fuel? I don't know, and that is why I ask. If you could get back to us, I would appreciate it.

Mr. PERCIASEPE. Yeah, I would have to provide you with that information from a more knowledgeable base. I do know it is going on, and I know it has been going on for quite a while, but I don't know the exact status of it.

FWS ENVIRONMENTAL CONTAMINANTS PROGRAM

Mr. SIMPSON. Okay. Thank you.

Tom, there is a program within Fish and Wildlife Service that remains largely ignored and level-funded. Yet every time there is a major environmental disaster, the folks in this program are usually first on the scene. I am talking about the Environmental Contaminants Program.

What is their role in this effort, and why are they not included in the supplemental request?

Mr. STRICKLAND. First of all, there is the ability, in the way the request comes in, for the Secretary to allocate that as it is ultimately deemed most effective, with the bulk of it going for strengthening the inspections program, of course. I think there is an understanding that some of this would go to the Fish and Wildlife Service.

That part of our operation has been engaged and on the ground. The truth of the matter is, the Fish and Wildlife Service probably does more with less than any of the land resource agencies, when you look at the number of employees per acre they manage, the incredible responsibility that they have. I certainly would not argue against any suggestion that we need to bolster this program.

Our Fish and Wildlife folks have come in from all over the country, from that program and others. We have refuge managers that have come down. I mentioned the head of the Fish and Wildlife Service, Rowan Gould, is on site. He hasn't come home in a month, and has been there in Houma. All of our resources, including from that program, are fully engaged.

It puts a stress on the rest of our capacity to manage the rest of what we have. I would say that more broadly in the Department. We are entering the fire season. We know and you know, Mr. Simpson, the situation in the Rocky Mountains with the pine beetle kill. To the extent that our capacities are stretched further with respect to emergency response this summer—we know they will be stretched to some extent with the fire season; we just don't know how much. Everyone has been holding their breath that we have avoided a catastrophic fire season, with all that fuel out there. That will have additional impacts on our Park Service, on our Fish and Wildlife, and on our BLM employees.

We are trying to staff for the long haul because we know this is going to be a long engagement down on the gulf coast, but we have other business to do as well.

Mr. SIMPSON. Appreciate it. Thank you.

Mr. MORAN. Thank you, Mr. Simpson.

Mr. Olver.

Mr. OLVER. I will pass. Thanks.

Mr. MORAN. It is the last series of questions. We would like to hear from you if you have any further questions on your mind.

DISPERSANT TOXICITY AND APPLICATION

Mr. OLVER. Well, to go back to the EPA, what do we know about the toxicity for workers who are using these dispersants? Do we know much about the toxicity and the variation of relative toxicity of the different dispersants?

Mr. PERCIASEPE. From that perspective, Mr. Olver, they are pretty similar. They are surfactants, and they are propylene glycols. For those who don't know what those words are, surfactants are like heavy-duty soaps. I think I got that right. Just checking my science partner over here.

The propylene glycol, I think, is the same material that is used in some de-icing of airplane wings. And if you have ever been in an airplane in cold weather and they are de-icing your wings, the guys that are out there have respirators on. So it is a lung irritant. It could be a skin irritant. And workers are advised and trained to wear proper equipment.

Usually, under the current circumstances, the handling takes place in loading it into the airplane for spraying, and pilots are obviously inside the airplane. But, currently, with it being applied at the subsurface, it is being applied by robots. So we are in better shape in that regard.

But the dispersants are not likely to be making it the 40-mile trip from where it is supplied to the coastal area where they are doing work around trying to restore the marshes or protect the marshes or do the near-shore skimming and cleanup. There, they are going to be more concerned about the actual continual, not as volatile, decayed and weathered oil.

Mr. MORAN. If the gentleman would yield, I noticed in the paper in this regard that BP and I think Horizon, as well, required all their workers to sign that they would not sue them for any illness contracted as a result of having to work with this material. Are you familiar with that? Is that something that is normally done?

Mr. PERCIASEPE. I am not familiar with whatever contracts BP has with anybody. But I do know that there are OSHA and product rules for handling by workers. The people you see that are volunteers on the shore are not dealing with dispersants. Those are dealt with by people who are trained to handle them. But I tell you, the kind of impacts it could have if you improperly expose yourself are more of the respiratory and skin irritation level.

Mr. OLVER. That sounds like that is very creative on the part of BP and Horizon, as well. I am surprised that the military didn't use that tactic with Agent Orange some years ago.

And could I just ask, how effective would Joy be?

Mr. PERCIASEPE. I can't really tell. I do know that, when you are cleaning wildlife, sometimes they use Joy or Dawn.

Mr. OLVER. Fairly mild.

Mr. PERCIASEPE. Those are much milder. Although, the generic nature of the chemicals are similar, those are much, much milder.

Dr. McNUTT. If I could add another perspective to this sub-sea dispersant issue, I know that BP had made a decision they were not going to go forward with the top kill procedure if EPA had not allowed the use of dispersant sub-sea. They knew they were going to have to pull the RIT tool once they started pumping mud, because mud would otherwise come up into the container on the ship.

They had so many ships in a small area on top of the ocean, several mud boats, all the boats that were deploying the ROVs. With all of the oil that would otherwise come up and all the vapors that were going to come off that oil, there was going to be such a hazard to the people working there and such a risk that they were going to have to cease operations with these high pressures from these ships in the middle of the top kill, that they decided if EPA had not given permission they would not even go forward with the top kill.

Mr. MORAN. That is interesting. That was nowhere to be found in the newspaper reports.

Mr. Olver.

Mr. OLVER. I am done.

Mr. MORAN. Done?

Mr. SIMPSON. Mr. Chairman?

Mr. MORAN. Yes?

Mr. SIMPSON. Before you close down the hearing, I do want to say, every time there is an emergency or a disaster, the armchair quarterbacks are numerous out there.

And I do want to thank you for all the hard work and hours that you all have put in and thank the employees that are down there working on this, trying to solve this incredible problem that we have down there. I know it is tough work, but I appreciate it, and all of us do.

Mr. MORAN. Good for you. Appropriate remarks. I think we would like to reiterate those.

We appreciate your informed testimony. We will continue to work with you on this. Thank you all very much.

[CLERK'S NOTE.—The Department of the Interior did not provide answers to the questions for the record in time for printing.]

[Mr. Chandler inserted the following statement for the record:]



U.S. Travel Association
 1100 New York Avenue, NW, Suite 450
 Washington, DC 20005-3934
 202.408.8422
 Fax 202.408.1255

The U.S. Travel Association thanks Chairman James P. Moran, Ranking Member Michael K. Simpson, and all the Members of the Subcommittee for holding this important hearing. The U.S. Travel Association welcomes the opportunity to submit its views to the Members of the Subcommittee on the response efforts to the Gulf Coast oil spill, and how state, local, and federal entities – in coordination with private business – can better respond in the future to similar emergencies.

The U.S. Travel Association is the national, non-profit organization representing all components of the \$704 billion travel industry. We represent over 2000 members ranging from travel service providers, airlines and travel associations, to hotels and destinations. Our mission is to promote travel to and within the United States. Travel annually generates \$1.7 trillion in economic activity and sustains 7.7 million direct travel generated jobs in the United States. In addition to those directly employed by the industry, millions of Americans are indirectly employed as a result of the business generated by travel, including caterers, audio/visual companies and retailers. In 2009, travel spending by U.S. and international visitors resulted in more than \$111 billion in tax revenue for federal, state and local government.

Because of the direct link between the vitality of the travel industry and the overall strength of the economy, any disruption or impediment to travel in the United States can have broad and far reaching consequences. In order for travel to thrive – and by extension the economy – many destinations rely on a clean, sustainable, and growing natural environment.

From pristine beaches to expansive national parks, the natural environment attracts tourists, generates business, and contributes to the livelihood of millions of Americans. But man-made environmental catastrophes such as the Deepwater Horizon oil spill threaten to damage or permanently destroy these sanctuaries and, in the process, cause significant economic harm. Unfortunately, examples of this strict cause and effect relationship – between the environment, travel, and the economy – can be seen throughout recent history.

One such tragedy, that bears a striking resemblance to the current situation in the Gulf of Mexico, is the 1989 Exxon Valdez Oil Spill that dumped over 10 million gallons of oil into the Prince William Sound. In 1990, a study examining the impacts of the Exxon Valdez Oil Spill on Alaska's tourism industry found that 43 percent of businesses in the spill-affected areas felt that their business had been "significantly or completely" affected by the oil spill and 59 percent reported spill-related cancellations. The same study found that visitor spending in the summer

following the oil spill dropped by 35 percent in the most spill-affected regions and lost \$19 million in direct visitor spending statewide.

While the full impacts of the recent oil spill in the Gulf of Mexico are still unclear, it remains certain that the travel industry in the Gulf Coast states of Louisiana, Mississippi, Alabama, and Florida could suffer sharp declines if adequate steps are not taken to stop the spread of oil to the coastline, mitigate the environmental damage already caused by the spill, and accurately communicate the full extent of the damage to the general public. Furthermore, immediate marketing efforts are necessary to promote the Gulf Region to potential travelers. Any decline – no matter how small – in leisure or business travel in the Gulf Coast region would have significant economic impacts.

In 2008, travel expenditures in Louisiana, Mississippi, Alabama, and Florida accounted for \$94 billion in direct spending. In the same year, travel expenditures generated \$13.6 billion in tax receipts, \$24 billion in payroll, and sustained 1 million travel-related jobs. If the Gulf Coast region experiences a decline in traveler spending similar to one experienced in Alaska following the Exxon Valdez spill, the economic impacts could be substantial. Using 2008 data as a baseline, a 35 percent drop in traveler spending in the Gulf Coast regions of Louisiana, Mississippi, Alabama, and Florida could lead to the loss of \$9.4 billion in travel expenditures, \$2.4 billion in payroll, and the loss of 108,800 jobs.

It is important to note that at present, the Gulf Coast tourism industry largely reports that their destinations and coastal attractions remain unharmed and open for business. Yet, evidence of travel cancellations to the Gulf Coast region has begun to surface. For example, the Florida Restaurant and Lodging Association estimates that occupancy rates along the Florida Panhandle beaches, between Pensacola and Panama City, are already down by 30 percent from 2009.

As was the case in the 2009 outbreak of the H1N1 flu virus and the 2005-2006 outbreak of the avian flu virus, travel to and within the United States suffered sharp declines because of an over-reporting in the news media of the threats posed by a “worst-case scenario” outbreak of the viruses – rather than accurate reporting of the limited danger posed by the outbreaks at that time. It is essential for the national and international news media to maintain an objective and reliable voice throughout any disaster and refrain from promoting unwarranted fear in the general public, which only serves to amplify the severity of a disaster.

Federal, state, and local policy makers should also consider how their actions and words impact travelers during emergency relief and disaster response efforts. For example, state of emergency declarations are often not the result of an assessment of danger posed to the public, but rather a procedural step enabling state and federal resources to be used accessed for disaster relief. Such declarations – when separate from an assessment of danger – can cause unjustifiable fear in the general public and result in an unnecessary slow-down of travel and economic activity.

Lastly, as the situation in the Gulf of Mexico continues to unfold, the U.S. Travel Association urges the responsible parties and Congress to consider the full economic impacts of the oil spill on the travel economies of the Gulf Coast when compensating for damages, and providing disaster relief. We also encourage the responsible parties, Congress, and the administration to ensure that losses incurred by affected destinations due to a decline in traveler visitation are

accounted for in disaster relief assistance and payment of damages. Compensation funds will be badly needed in marketing efforts to attract travelers back to a region after a spill-affected property or natural resource has been restored.

To that end, the U.S. Travel Association applauds BP's recent announcement that it will provide \$70 million in marketing assistance to the Gulf Coast states of Louisiana, Mississippi, Alabama, and Florida. This grant is an important first-step in ensuring that people from around the globe continue to travel to the beaches and coastal destinations of the gulf. However, our applause for this grant is tempered by the stark realization that the full economic impacts of the oil spill remain unknown. The U.S. Travel Association strongly urges the responsible parties and the federal government to provide the necessary economic assistance in direct proportion to the short and long term impacts of the oil spill.

If the responsible parties, Congress, and the federal government fail to mitigate or appropriately respond to the negative impacts of the oil spill on the travel industry, the country risks further job loss, financial hardships, and prolonged economic stagnation during an already troubling time.

We thank the Subcommittee for holding this hearing and giving us the opportunity to comment. Additionally, we look forward to working with you on these and other important issues in the future.

**U.S. Environmental Protection Agency
Responses to Questions for the Record from the
May 27, 2010 Hearing before the
House Committee on Appropriations
Subcommittee on Interior and Environment**

Questions Submitted for the Record by Representative Moran

ECONOMIC IMPACTS

MoranQ1: You have requested \$2 million in emergency supplemental funding for research on the impacts of the oil spill and use of the dispersants. How much has EPA spent to date on the response effort?

Answer: EPA's response effort has been under a Pollution Reimbursement Funding Authorization (PRFA) from the US Coast Guard, as manager of the Oil Spill Liability Trust Fund. EPA has received PRFAs for Region 6, Region 4 and HQ for approximately 42.2 million. As of August 25, 2010, EPA Region 6 has spent approximately 23.2 million, Region 4, approximately \$9.8 million and in Headquarters, over \$4 million. The \$2.0 million appropriated to EPA under the Supplemental Appropriations Act, 2010 (P.L. 111-212) will support research on the short and long-term environmental and human health effects associated with oil spill response technologies and dispersant use, and will further our research efforts to include innovative approaches to spill remediation. EPA, with our federal partners, will pursue an aggressive research agenda to address the mechanisms of environmental fate, effects, and transport of dispersants.

MoranQ2: How much has EPA spent to date on the 3 subsurface dispersant tests prior to approving the subsurface application?

Answer: As of August 17, 2010, EPA has spent in excess of \$25,000 in personnel costs in reviewing subsurface dispersant test data produced by the responsible parties. In addition, EPA has spent \$750,000 in extramural funds in its independent toxicity screening and testing of the dispersants on the NCP product schedule and the dispersant oil mixtures.

MoranQ3: How much has EPA spent to date on the on-going air monitoring?

Answer: EPA is conducting on-going air monitoring/sampling activities for dispersant-related compounds using the TAGA platform. As of August 17, 2010, costs for this activity are estimated at \$1,366,000 in EPA Region 6 (including the TAGA, ASPECT and stationary monitors), and approximately \$300,000 in EPA Region 4.

MoranQ4: How much has EPA spent to date on the on-going water quality and sediment monitoring, including analysis such as particle size measurements? How much of this is reimbursable by BP?

Answer: EPA is conducting ongoing near shore water quality and sediment monitoring/sampling, tracking the prevalence of potentially harmful chemicals in the water as a result of this spill, as well as sampling for dispersant related compounds. EPA is also conducting limited toxicity sampling. As of August 17, 2010, these activities totaled an estimated \$6 million. This activity was tasked under the Pollution Removal Funding Authorization (PRFA) issued by the U.S. Coast Guard and is eligible for reimbursement by the responsible parties.

ENDOCRINE DISRUPTOR

We are hearing more reports about illness in fisherman and other responders working in response to the oil spill. On May 19th, EPA and DHS issued a directive requiring that within 24 hours BP identify a less toxic dispersant on the National Contingency Plan list, and begin using such dispersant(s) within 72 hours. The parameters EPA set were based on toxicity values for fish and shrimp. This narrowed the scope of approved dispersants on the NCP list to four candidates and did not include the dispersant BP had chosen to use, COREXIT.

On May 20, BP responded with analysis defending its use of COREXIT 9500A from the initial response and identifying it as the best available option. BP expressed concern that one of EPA's four candidates, Sea Brat #4, may contain a chemical that degrades into an endocrine disruptor. BP learned of this issue after applying for permission to use Sea Brat #4.

MoranQ5: Has BP or any other entity used Sea Brat #4 or any other approved dispersant in the response effort to the BP Spill? And does EPA still consider Sea Brat #4 and the other approved dispersants to be a viable option?

Answer: EPA has not authorized BP to use Sea Brat #4 in response to the oil spill. COREXIT 9500A and 9527A were initially used until the supply of COREXIT 9527A was depleted. Since that time, only COREXIT 9500A has been applied at the Gulf spill.

Before directing BP to ramp down dispersant use, EPA directed BP to analyze potential alternative dispersants for toxicity and effectiveness. BP reported to EPA that they were unable to find a dispersant that is less toxic than COREXIT 9500A, the product then in use.

Following BP's response, and to ensure that decisions about ongoing dispersant use in the Gulf of Mexico are grounded in the best available science and data, EPA began its own scientific testing of eight dispersant products on the National Contingency Plan (NCP) Product Schedule. These dispersant products are: Dispersit SPC 1000, Nokomis 3-F4, Nokomis 3-AA, ZI-400, SAF-RON GOLD, Sea Brat #4, Corexit 9500A and JD-2000. EPA required toxicity tests to standard test species, including a sensitive species of Gulf of Mexico invertebrate (mysid shrimp) and fish (silverside) which are common species in Gulf of Mexico estuarine habitats. These species are considered to be representative of the sensitivity of many species in the Gulf of

Mexico, based on years of toxicity testing with other substances. These tests were designed to determine toxicity effects so that a relative comparison could be made. They were conducted over a range of concentrations, including those much greater than what aquatic life is expected to encounter in the Gulf.

On June 30, 2010, EPA released the results of initial screening tests to assess cytotoxicity (cell death), endocrine activity, and acute toxicity of eight available dispersants. In vitro assays were used to test the degree to which these eight dispersants are toxic to various types of mammalian cells. The results indicated that none of the eight dispersants tested, including the product currently in use in the Gulf, COREXIT 9500 A, displayed biologically significant endocrine disrupting activity.

While the results showed that dispersant products alone (not mixed with oil) have roughly the same impact on aquatic life, JD-2000 and Corexit EC9500A were generally less toxic to silverside fish and JD-2000 and SAF-RON GOLD were least toxic to mysid shrimp. Two dispersants showed a weak signal in one of the four estrogen receptor (ER) assays, but integrating over all of the ER and androgen receptor (AR) results these data do not indicate that any of the eight dispersants display biologically significant endocrine activity via the androgen or estrogen signaling pathways. None of the dispersants triggered cell death at the concentrations of dispersants expected in the Gulf.

The results from the second phase of EPA's testing, released on August 2, 2010, demonstrate that for all eight dispersants tested on both test species, the dispersant alone was less toxic than the dispersant-oil mixture. Tests on oil alone had similar toxicity to mysid shrimp as the tests on dispersant-oil mixtures, with the exception of the mixture of Nokomis 3-AA and oil, which was found to be more toxic. Oil alone was found to be more toxic to mysid shrimp than the eight dispersants when tested alone (data for the silverside fish was inconclusive and are being re-tested with oil alone). The dispersant-oil mixtures can be generally categorized in the moderately toxic range.

These externally peer reviewed results indicate that the eight dispersants, when tested alone and in combination with oil, are similar to one another. The results of this testing are posted on EPA's website: <http://www.epa.gov/bpspill/reports/phase2dispersant-toxtest.pdf>. To date, for subsurface monitoring, we have not seen dissolved oxygen levels approach levels of concern to aquatic life and no excessive mortality in rotifers. This confirms that the dispersant used in response to the Gulf oil spill, Corexit 9500A, is generally no more or less toxic than the other available and tested alternatives.

The Federal On-Scene Coordinator authorizes the use of dispersants in consultation with the Regional Response Team (RRT). USCG and EPA, via a joint May 20, 2010 directive, had responsibility for oversight of the volume of dispersant used for surface and subsurface applications. The criteria for the selection of a dispersant in the field are based, however, not only on toxicity, but also efficacy, availability as well as other criteria. If SeaBrat #4 or any other dispersant on the NCP Product Schedule met the necessary criteria, the Federal On-Scene Coordinator may have considered and authorized its use. As a result of the capping and sealing of the well, dispersants have not been applied since July 19, 2010.

DISPERSANT

MoranQ6: In order to list the dispersant on the NCP-approved list, EPA had to receive two sets of toxicity data in addition to data related to the dispersants effectiveness. EPA relies heavily on industry-provided data to make determinations related to many of the toxicity of those chemicals. What additional resources does EPA now require in order to thoroughly research the impacts these chemicals would have on human health and the environment?

Answer: EPA reviews all information submitted by industry regarding acceptance of a dispersant for inclusion on the NCP Product Schedule. This review includes both completeness of the information and adherence to the methodologies defined in the regulation (NCP Subpart J).

EPA's Office of Research and Development has been engaged in oil spill research for a number of years. The Deepwater Horizon oil spill has revealed, however, several gaps in potential areas of research associated with oil spill response technologies that EPA, in collaboration with our federal partners (e.g. NOAA, HHS, and the US Coast Guard) intend to pursue. While it is premature to draw any conclusions or cost estimates, potential topics of additional research could include expanding our knowledge of the following:

- Defining the factors of spilled oil that control dispersibility. The various types of spilled oil (crude vs. refined, fresh vs. weathered) and oil drilling related materials (e.g., muds, cements, produced water) and their properties and how water-soluble dispersants differ from oil-soluble ones;
- Understanding the natural or man-made conditions under which spilled oil is dispersible. These factors include temperature, mixing energy and diffusion, sub-sea vs. surface application, salinity, and sub-sea conditions, coalescence and resurfacing of dispersed oil;
- Increasing the body of knowledge on biodegradability of oils and dispersants and their constituents; the environmental fate, effects, and transport of released oils, dispersed oil, and dispersants on human health and the environment; and
- Understanding the effectiveness of dispersants on biofuels and the environmental fate, effects, and transport of non-petroleum biofuels and dispersed biofuels on human health and the environment.

WATER SAMPLES

MoranQ7: EPA receives daily water samples to analyze the impacts of the use of the dispersants on dissolved oxygen and other key indicators. Since this is the first time the dispersants are being used in this manner, these indicators may show what unintended consequences will result with this new application. Who collects the water samples?

Answer: EPA water samples are collected by EPA staff and contractors. In addition, other agencies and BP are also collecting and analyzing water samples.

Although dispersant have been applied in the past by surface application, the Deepwater Horizon Spill is the first time that dispersants have been applied to the subsea. To help evaluate the impact of this subsea application at the request of the US Coast Guard and EPA, BP is conducting water sampling in the subsea. EPA evaluates fluorescence, particle size, dissolved oxygen, conductivity, temperature, depth, and/or rotifer toxicity. Each instrument or test provides a unique piece of information that when taken together helps EPA and our federal partners monitor the use of subsea dispersants.

EPA conducted water sampling activities in the near shore and shoreline to track the prevalence of chemicals in the water as a result of this spill, in addition to sampling for dispersant constituents. The sampling and monitoring efforts continue even though dispersant application ceased on July 19, 2010 so that EPA can continue to evaluate any residual impacts from the application of dispersants. In addition, EPA also conducted toxicity tests on dispersants and dispersant/oil mixtures. All monitoring information and data are posted on EPA's website at: <http://www.epa.gov/bpspill/>.

MoranQ8: What labs receive the samples? Who conducts the analysis?

Answer: In Region 4, an EPA regional laboratory and a private company, ALS Laboratory Group, are analyzing water and sediment samples. In Region 6, an EPA regional laboratory and a private company, Accutest Laboratories, receive and conduct the analysis of the samples.

MoranQ9: What have the tests shown?

Answer: Prior to the capping of the well and while dispersants were still being applied, EPA and NOAA reviewed BP's subsea data each evening for dissolved oxygen and toxicity data to ensure subsea application could continue. To date, data has not indicated levels of concern, but we continue to review data monitor the results for any changes. In addition, EPA is monitoring surface water and sediments near shore and coast line for dispersant and oil constituents. Dispersant constituents have not been detected at levels consistent with known human health or ecological adverse impacts.

SUBSEA DISPERSANTS

MoranQ10: Over one million gallons of COREXIT has been applied since the April 20 explosion of the Deepwater Horizon rig, mostly on the spill's surface. On May 15, EPA conditionally approved the subsea application of dispersants. EPA's approval stipulated that a monitoring boat must be present at the time of application of the dispersant. That same day we heard reports that the application of dispersants may have been approved without a monitoring

boat present. Please tell us what operational requirements are associated with conditional approval of the subsea application of dispersants, and is monitoring required at the time of the application of the dispersant?

Answer: The operational requirements for dispersant application are outlined in a directive issued by EPA and USCG to BP on May 10, 2010 entitled: "Dispersant Monitoring and Assessment Directive for Subsurface Dispersant Application." The directive delineates data collection requirements during subsurface dispersant application. In addition, a letter dated May 20, 2010 from both EPA and the Department of Homeland Security identified the data reporting requirements for BP regarding dispersant use. The directive and letter can be found at: <http://www.epa.gov/bpspill/dispersants.html>. EPA has and may continue to amend the directive as warranted and as the situation in the Gulf progresses.

A series of analytical measurements are among the requirements for BP to gather information on subsea dispersant use. These technical elements helped the Federal On-Scene Coordinator (FOSC) and EPA to evaluate the effectiveness of the subsea dispersant use.

EPA scientists have been present on BP ships such as the Brooks McCall and Ocean Veritas during data collection activities. In addition, EPA scientists conduct detailed analyses of the BP data to ensure both completeness and quality of the data. The data EPA evaluates is obtained from a variety of instruments or tests that measure fluorescence, particle size, dissolved oxygen, conductivity, temperature, depth, and/or rotifer toxicity. Each instrument or test provides a unique piece of information that when taken together helped EPA and our federal partners monitor the use of subsea dispersants.

INDUSTRY PROVIDED DATA – ALTERNATIVES

MoranQ11: At the House Transportation and Infrastructure hearing on May 15, we heard criticisms that the government has not fully researched the effects of dispersants because there was virtually no money put into that research. EPA has not disputed the lack of information available on alternatives to COREXIT such that a determination could be made about a better option, and that EPA will continue to do its own research to gather more information. When asked why EPA had not already conducted some of the research regarding subsea applications, EPA indicated that they had been told by industry that this type of incident could not possibly happen. How reliable is that information if industry is providing it? And if EPA is using industry-generated data, what ability does EPA have to refute the industry-provided data on such specific products?

Answer: As indicated in the response to Question 2, EPA independently conducted its own testing and verified toxicity data for eight dispersant products listed on the NCP Product Schedule. Based on the results from EPA's acute toxicity tests, EPA does not believe at this time that data submitted under procedures of 40 U.S.C. Part 300 Appendix C by dispersant

manufacturers is unreliable.¹ EPA will continue to verify industry supplied toxicity data as new dispersants are submitted for consideration.

DISPERSANT QUANTITY TEST

MoranQ12: BP raised no objection to the effectiveness of the other alternatives, however BP claims that COREXIT, which is manufactured by a BP partner, is the only dispersant that has a sufficient inventory available for immediate use (268,000 gallons), and that can continue to be produced at a sufficient rate (68,000 gallons/day) to meet the response needs. BP claimed that 100,000 gallons of Sea Brat #4 are available but that the production capacity may not allow Sea Brat #4 to be a sufficient alternative for both surface and subsurface application. However the amount of Sea Brat that could be produced per day has not been publicly released. If we have applied over one million gallons of dispersant to date, we have used roughly 22,000 gallons per day, although I understand EPA has now limited the application to 15,000 gallons per day. Operationally, how much dispersant is required to meet the sufficient quantity test for EPA?

Answer: The USCG FOSC, in consultation with the EPA, makes daily operational decisions on how much dispersant to use, depending on factors such as current conditions and availability of dispersant supply, while always trying to maximize skimming and burning activities. As a result of the capping and sealing of the well, dispersants have not been applied since July 19, 2010.

On May 26, 2010, EPA and USCG directed BP to significantly decrease the overall volume of dispersant used. In the month following the directive, the total volume of dispersants used fell by 75% from their peak levels, in part due to the application of dispersants near the oil discharge point occurring 5000 feet below the surface water where it may be more effective at lower quantities. Effectively dispersing the oil below the surface avoided using even more dispersants that would have needed to be applied over a wide-spread area on the surface. As discussed in response to an earlier question, independent toxicity studies conducted by EPA indicated that Corexit 9500A is generally no more or less toxic than the other available and tested alternatives and switching to an alternative dispersant was unnecessary.

¹ U.S. Environmental Protection Agency. 2010. *Comparative Toxicity of Eight Oil Dispersant Products on Two Gulf of Mexico Aquatic Test Species* <<http://www.epa.gov/bpspill/reports/ComparativeToxTest.Final.6.30.10.pdf>>.

Questions Submitted for the Record by Representative Simpson

SUPPLEMENTAL FUNDING REQUEST

This Committee provided the EPA with \$25 billion in calendar year 2009. Let me repeat that: this Committee provided the EPA with \$25 billion in calendar year 2009. That's almost as much money appropriated in the entire Interior and Environment Subcommittee bill just three years ago.

Because this is an Appropriations Committee hearing, let's start with the obvious: According to the latest records filed with the Treasury Department, dated April 13, 2010 and available on OMB's website, the EPA is sitting on almost \$9 Billion in unobligated balances.

SimpsonQ1: Why would EPA seek \$2 Million in emergency funding to complete a study on dispersants when it's presently sitting on almost \$9 Billion of taxpayers' money in unobligated funds?

Answer: Congress provides EPA a specific appropriation from the Oil Spill Liability Trust Fund (OSLTF) to carry out the Agency's responsibilities under the Oil Pollution Act. In accordance with appropriations law, the Agency may not use other appropriations for this same purpose without authorization from Congress. Research conducted by EPA on technologies for preventing or mitigating the effects of oil spills or to support a specific response decision is funded from the OSLTF appropriation. In addition, the Agency uses its Science and Technology (S&T) appropriation to fund basic and applied research into the causes and effects of releases of oil into the environment.

In FY 2010, of the approximate \$10.3 billion, Congress appropriated just over \$846 million (8%) to the S&T account and \$18.4 million from the OSLTF (less than 1%), \$639 thousand of which was authorized to be expended on EPA's Oil Spill Research Program. As of August 6, 2010, EPA obligated \$536 million of its S&T appropriation for high priority research areas, including research on oil spill response technologies and the remaining unobligated balance had already been committed for payroll and outstanding grant competitions.

Due to the competing needs for scientific research under the S&T appropriation to support EPA's broader missions, historically, EPA's oil spill research and development program relied heavily on the modest funding levels appropriated from the OSLTF. Events associated with the Deepwater Horizon oil spill, however, have made it evident that this modest investment is needed to be supplemented to address the immediate need to address the uncertainties and gaps that have been highlighted from the use of dispersants.

This Congress approved the Administration's request for \$2 million in supplemental funds for dispersant research with the passage of the Supplemental Appropriations Act of 2010 (P.L. 111-212). EPA will engage academic institutions and other federal agencies, such as NOAA and DOI, who have the knowledge and expertise to supplement EPA's efforts, and this additional \$2 million will support research on the short and long-term environmental and human health effects associated with the release of crude oil and the application of dispersants, surface

washing agents, bio-remediation agents, and other mitigation measures listed in the National Contingency Plan Product List.

SUPPLEMENTAL REQUEST – HOW WILL YOU SPEND?

SimpsonQ2: I find it very difficult to believe that EPA is incapable of redirecting point-zero-two percent (.02%) of its unobligated funds for something as important as an oil spill emergency. That's like saying that everything else EPA is doing right now is a higher priority, and it won't take on an oil spill study unless Congress gives the agency even more money. Describe for us specifically how the EPA intends to spend the \$2 million in the emergency supplemental?

Answer: While EPA has done some research on dispersants, the Deepwater Horizon oil spill demonstrates that gaps in the knowledge base regarding response technologies remain and that a larger commitment to researching the near and long-term effects of spilled oil and dispersant use is needed.

The Supplemental Appropriations Act of 2010 provides an investment of \$2 million to study the potential human and environmental risks and impacts of the release of crude oil and the application of dispersants, surface washing agents, and other mitigation measures listed in the National Contingency Plan Product Schedule. Research will focus on:

- the human health and environmental impacts of chemical dispersants and dispersed oil;
- the efficacy of dispersants and other oil spill mitigation measures; and
- the near and longer-term impacts of the Gulf Spill to human health and a broad range of aquatic and land species.

Grants will be awarded to universities with expertise in oil spills and the use of dispersants, as well as expertise on the ecological systems in the Gulf region.

DISPERSANTS TESTING

The EPA has a Science and Technology budget of over \$846 million. One would think that the EPA could have used some of these funds to conduct scientific studies on the various aerial and subsea dispersants that could potentially be used to treat this type of oil spill. And, one would think that this testing would have been done as part of a comprehensive, government-wide, Oil Spill Response Plan to prepare for just this type of event. And, yes, one would think that if and when such an accident occurred, we would have adequate science to know exactly how to respond to such an emergency.

Earlier this year, the Administrator told this subcommittee that the science relating to climate change is settled. Today, it's appears that the science related to treating oil spills with

dispersants barely even exists. There is no question that BP should be held accountable for much of what has occurred. But, in this case, it's the EPA that screwed up.

I don't believe BP should be faulted for using chemical dispersants that were on EPA's approved list only to be "directed" by EPA to stop applying them until adequate testing could be completed. In this instance, it appears that the EPA was completely unprepared because adequate testing had not been done and it only began testing these dispersants *after* the spill occurred.

SimpsonQ3: Why hasn't the EPA conducted adequate scientific testing of dispersants to know the potential affects?

Answer: EPA and the outside scientific community have conducted research on the efficacy and effects of dispersant use. The National Contingency Plan includes research-based requirements for listing products to the Product Schedule, including ingredient lists, toxicity tests, and efficacy tests.

The fact that both regulators and the public are questioning the safety and effectiveness of the products used in response to the Deepwater Horizon spill illustrates that improvements are needed to the testing and evaluation processes by which oil response products are approved for use in an emergency response. For instance, most of the efficacy testing required to date has been based on surface application of dispersants. We have now seen that subsea dispersant application is effective in keeping some of the spilled oil from reaching shorelines. EPA is proposing that new research be conducted to evaluate the existing NCP Product Schedule data requirements, and to identify improved approaches for assessing product efficacy and safety.

SimpsonQ4: Why wasn't this work done in anticipation of a potential emergency situation?

Answer: The toxicity screening evaluations required by the subpart J NCP and EPA's previous experience in applying dispersants on the water surface (both in a laboratory and in the field) have provided information on the general toxicity of the dispersants to respond to contained spills. However, dispersants were applied at unprecedented levels in the Deepwater Horizon oil spill, and the use of dispersants in the subsea was a departure from prior applications. Data to date indicates that the subsea dispersant application worked, and that it decreased the amount of oil that is reaching the shorelines. Given the extremely large volume of dispersants used in response to the Gulf spill and the deepsea application, EPA and our Federal partners believe that additional research and testing is necessary in order to be better prepared and informed for future emergency situations.

DISPERSANTS TESTING – SURFACE AND SUB-SURFACE

SimpsonQ5: What causes more harm—using both surface and sub-surface dispersants to treat the oil or leaving the oil untreated?

Answer: Decisions to use dispersants involve environmental trade-offs which must take into account the amount of oil spilled and where it is located. Dispersant application alone is not a “silver bullet” but it is often used in combination with other measures such as burning, skimming, and booming. Spilled oil can have serious effects on marine life (e.g. oiled sea birds, oiled sea mammals, smothering shellfish and coastal ecosystems) and on the aquatic environment (eutrophication, reduced photosynthetic activity). The application of dispersant to an oil spill breaks up the oil into smaller particles and transfers oil from the water surface into the water column where it is more available for faster bio-degradation. This process decreases the oil’s exposure to surface organisms (sea birds) and intertidal organisms and ecosystems. Marshes and coastal ecosystems house extremely rich and diverse habitats. If the oil can be dispersed at sea, and therefore not reach the shoreline as an oil layer, then impacts to these habitats are reduced. However, dispersed oil (and the constituents of the dispersant) could potentially impact fish and plankton. Daily decisions are made about dispersants and they are considered only after mechanical (skimming and burning) are determined not to be sufficient.

Regarding the safety of seafood from the Gulf, while FDA has the lead for seafood safety issues, EPA notes that to date, every seafood sample from reopened waters has passed sensory testing for contamination with oil and dispersant. Modeling data on the individual components of the dispersant indicate that the dispersants used to combat the oil spill break down rapidly and become highly dispersed in Gulf waters. Science, to date, also indicates that dispersants do not accumulate in seafood. Thus, all our evidence shows that seafood from the reopened Gulf waters is safe to eat.

SimpsonQ6: Do we have enough scientific evidence to know?

Answer: The marine ecosystem is highly complex with natural fluctuations in species composition, abundance and distribution. Past dispersant use and scientific studies suggest that dispersant use helps mitigate the harmful effects of an un-dispersed oil slick. In response to the Deepwater Horizon spill, dispersants were applied in quantities never used before, and while current testing indicates that the dispersants are working effectively and as anticipated, this situation has revealed the need for additional scientific information about the long-term effects of large quantities of dispersant used to combat the ongoing oil spill from deep beneath the water surface in the Gulf.

DEBARMENT

I understand that EPA had been in talks with BP about possible debarment prior to the Gulf oil spill, and that EPA broke off those talks after the spill started. For better or worse, BP is the largest supplier of jet fuel to the U.S. military, and the second largest supplier of oil products to the Federal government at 1.5 billion barrels per year.

SimpsonQ7: Does the Administration intend to proceed with debarment, and will it include revoking BP’s existing contracts and leases with the Federal government? If so, what is

the Administration's plan for proceeding in a manner which does not present a risk to our national security?

Answer: EPA's previous discussions with BP regarding debarment actions related to the statutory disqualification prohibiting two BP facilities from performing government contracts. BP's Texas City Refinery was disqualified based on BP's conviction for violating the Clean Air Act (CAA) as a result of an explosion at the facility, and BP's Prudhoe Bay pipeline facility was disqualified due to BP's conviction for violating the Clean Water Act. The current statutory disqualifications do not extend beyond the two BP facilities involved in the actions giving rise to the convictions under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act (CWA).

EPA is required to disqualify companies convicted of violating the CAA or CWA from receiving federal contracts and financial assistance that will be performed at the violating facility. Disqualifications are facility-specific and do not extend to an entire company. A disqualification remains in effect until the company files a petition for reinstatement with EPA's Suspension and Debarment Official (SDO) and the SDO certifies that the conditions that led to the conviction have been corrected. The procedures governing the disqualification and reinstatement of a violating facility are set forth at 2 C.F.R. Part 1532 Subpart J.

At this point, EPA is actively monitoring the investigations into the Deepwater Horizon events, and has not made a decision regarding whether a company-wide debarment of BP is necessary to protect the integrity of Federal programs.

The governing Federal debarment regulations applicable to national security are as follows:

- Under 2 CFR Part 180 (non-procurement regulations) and 48 CFR Subpart 9.4 (procurement regulations), existing contracts and leases with Federal agencies would not be terminated.
- Under 2 CFR 180.135 and 48 CFR 9.405(a) of the debarment regulations, agencies may grant an exception to allow a debarred party to participate in future contracts or leases for compelling reasons such as national security.
- Under 2 CFR 180.635, EPA may enter into administrative agreements that allow parties subject to debarment to continue to receive contracts and leases as long as they comply with stringent requirements relating to business ethics and environmental stewardship.

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