

**THE PRESIDENT'S FISCAL YEAR
2003 BUDGET REQUEST FOR
THE U.S. GEOLOGICAL SUR-
VEY; THE OFFICE OF SURFACE
MINING, RECLAMATION AND
ENFORCEMENT; AND THE
MINERALS MANAGEMENT
SERVICE**

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND
MINERAL RESOURCES

OF THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

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**OVERSIGHT HEARING ON THE PRESIDENT'S
FISCAL YEAR 2003 BUDGET REQUEST FOR
THE U.S. GEOLOGICAL SURVEY (EXCEPT
THE WATER RESOURCES DIVISION); THE
OFFICE OF SURFACE MINING, RECLAMA-
TION AND ENFORCEMENT; AND THE
MINERALS MANAGEMENT SERVICE**

**Thursday, March 14, 2002
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Resources
Washington, DC**

The Subcommittee met, pursuant to call, at 10:11 a.m., in room 1310, Longworth House Office Building, Hon. Barbara Cubin [Chairman of the Subcommittee] presiding.

**STATEMENT OF THE HONORABLE BARBARA CUBIN, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF
WYOMING**

Mrs. CUBIN. The Subcommittee is now called to order. We meet today to review the program budgets for the coming fiscal year for three agencies within our jurisdiction from which we have not already heard. These are the U.S. Geological Survey (USGS), the Office of Surface Mining Reclamation and Enforcement (OSM), and the Minerals Management Service (MMS), all of which are within the Department of Interior.

The USGS, established in 1879, is the premier earth sciences agency in this country, and now does research in the biological sciences as well, in support of our public lands managers and for societal needs in general. Our water resources investigations are a large part of this agency's efforts, but oversight of those programs falls within our sister panel, the Subcommittee on Water and Power. Dr. P. Patrick Leahy, Associate Director for Geology at the USGS, is here today to outline the agency's proposed programs and the budget to support them.

OSM was established under the Surface Mining Control and Reclamation Act of 1977, or as we fondly call it, SMCRA, to oversee State and tribal efforts to regulate the impacts of modern-day coal mining operations and reclaim the pre-1977 abandoned mine lands.

OSM is a relatively small bureau, in large measure because Congress wanted to ensure a consistency in State regulation of coal mining impacts by creating a Federal review of the adequacy of the State programs, but not by regulating the mines directly. Likewise, most reclamation efforts are conducted in response to State program-identified needs, where OSM's role is to administer grant monies, not to do the dirt-work per se.

The newly sworn in Director of OSM, Mr. Jeffrey Jarrett, who most recently was the Deputy Secretary in the Commonwealth of Pennsylvania's coal mining regulatory and reclamation program, is here with us today. He will outline plans for the Federal agency and describe the 2003 budget proposal in which, by the way, he had no input because it was created well before he came. So I expect him to know every detail and reason for each line item.

[Laughter.]

Last, MMS is the Federal agency established by way of an appropriations law in 1982 from functions formerly in the Geological Survey and the Bureau of Land Management. MMS owes its birth actually to the mismanagement of Federal and Indian royalty collection efforts which prompted then Secretary of the Interior James Watt, who is from my State as well, to work with Congress to reform the program and establish this agency. MMS lacks an organic act but it has a big job to do in managing offshore leasing and operations for oil and gas beneath Federal waters of the Outer Continental Shelf and collecting Federal and Indian mineral lease revenues.

I am proud to say that Ms. Johnnie Burton, currently the Director of Revenue for the great State of Wyoming, has been announced as the new Director of MMS effective mid-March this year, but today we are happy to have the Acting Director, Lucy Denett, with us to outline the MMS proposed budget. And she is here in spite of recent surgery, and we really appreciate the extra effort.

Together, these three bureaus are proposing to spend over \$2 billion, some from appropriated general funds and some from dedicated trust funds. On the other hand, the two regulatory agencies will collectively take in somewhere on the order of \$6 billion to be distributed to States, tribes, and individual Indian allottees, land and water conservation trust funds, reclamation funds, and the general fund.

The USGS, in the conduct of sound science, will take in matching funds from State and local governments in support of its cooperative programs, and will part with some Federal dollars to State geological surveys to pay for peer-reviewed geological mapping grants.

While not a part of this Subcommittee's jurisdiction, I would note that the administration is proposing to shift some \$10 million in previous USGS funding for hydrologic research in toxic compounds to the National Science Foundation, and the National Science Foundation is to competitively grant to researchers in academic institutions throughout the country for the studies that will be done. Perhaps this is a sign of things to come—I don't really know—as government science goes down the "contracting out" route that industry takes lower costs into consideration, and makes efficiencies work and be shown that making efficiencies is as productive.

Before I turn to our ranking member, let me give a collective welcome to all three of our witnesses, and thank you in advance for your testimony. We look forward to hearing from all of you.

The Chair now recognizes the ranking member, Mr. Kind.

[The prepared statement of Mrs. Cubin follows:]

Statement of The Honorable Barbara Cubin, Chairman, Subcommittee on Energy and Mineral Resources

The Subcommittee meets today to review the program budgets for the coming fiscal year for the three agencies within our jurisdiction from which we have not already heard. These are the U.S. Geological Survey, the Office of Surface Mining, Reclamation and Enforcement, and the Minerals Management Service, all of which are within the Department of the Interior.

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Together these three bureaus are proposing to spend over two billion dollars, some from appropriated general funds and some from dedicated trust funds. On the other hand, the two regulatory agencies will collectively take in on the order of six billion dollars to be distributed to states, tribes, individual Indian allottees, land and water conservation trust funds, reclamation trust funds, and the general fund.

The USGS in the conduct of "sound science" will take in matching funds from state and local governments in support of its cooperative programs, and will part with some Federal dollars to state geological surveys with matching funds for peer-reviewed geologic mapping grants. While not a part of this Subcommittee's jurisdiction, I would note the Administration is proposing to shift some \$10 million in previous USGS funding for hydrologic research in toxic compounds to the National Science Foundation to be competitively granted to researchers in academic institutions throughout the country. Perhaps this is a sign of things to come, as government science goes down the "contracting out" route that industry takes to lower its costs when and where efficiencies can be shown by doing so.

Before I turn to our Ranking Member, Mr. Kind, let me give a collective welcome to our witnesses. Thank you in advance for your testimony. We look forward to working with all of you over the coming year.

**STATEMENT OF THE HONORABLE RON KIND, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF
WISCONSIN**

Mr. KIND. Thank you, Madam Chair, and I too want to thank the witnesses for your presence today and the testimony you are about to give. Obviously we in the Subcommittee and the Full Committee as a whole have been very busy over the last year and 3 months or so dealing with national energy policy, and there are still a lot of remaining questions in regards to where we go here in the 21st century in developing a sustainable and reasonable and logical energy policy that is going to not only meet our energy needs in this century but also deal with some very basic facts of life, one of which is we have roughly 3 percent of the oil reserves in the world yet we are consuming about 25 percent of what is being produced today.

In fact, if you just access the Department of Energy's web site, they too, taking into account the additional expenses of maintaining security interests in the Persian Gulf, have estimated that it cost our country roughly \$57 billion last year alone in trying to maintain a continuous and reliable oil supply line from the Persian Gulf region. In fact, during the decade of 1980 to 1990 that cost, including the military expenditure in the region, was roughly \$360 billion for the American taxpayer, which equates to roughly \$100 a barrel of oil from the region or \$5 for a gallon of gasoline in this country.

So there are tremendous costs incurred in this country in trying to maintain the fossil fuel consumption or dependence that we are currently on. That is why so many of us have been working hard, and trying to work with the administration as well, in developing a much more sustainable energy policy, one that also recognizes the value of alternative and renewable energy sources, the potential of wind, solar, geothermal power, looking at the nuclear industry.

But I appreciate the chance to be able to listen to the budget implications in your respective agencies, because you are going to be playing a very important and vital role in regards to the energy policy, whatever happens to pass this Congress. I am particularly concerned in regards to some areas of cutbacks being proposed in the President's budget and the impact on your areas.

The USGS budget, and although we don't have direct jurisdiction over it, but the water resources aspect and the cutbacks in the water resources program, and I have a particular interest in that, along with a bipartisan coalition of Members, and we are hoping to be able to work with the administration to find out the reason for some of these program cutbacks, but the impact that is going to have on the type of data collection and water resource monitoring that is going on with the USGS, which I think is an incredibly important and vital role in regards to the management of the watershed areas and the water quality in this country.

And for OSM, we are seeing a significant decrease in the Abandoned Mine Lands Fund which is used to reclaim the environment from past coal mining practices. I think that, too, is something we are going to have to take a closer look at and see what the real impact of the funding reductions in that program is going to be.

And then with MMS, it is going to be losing some funding under the proposed budget provided last year for marine research, for instance.

So these are, I think, some serious issues of concern that a lot of Members share with myself. We will be interested to hear your testimony, and perhaps some specific questions in those areas in particular. I just think we have so much potential in this country in developing the technology we need to really make the transition to a more sustainable energy policy that becomes more reliant, and understanding that we are going to be consuming a lot of fossil fuels and we are not going to make that transition quickly or easily, nonetheless I think more needs to be done in the research area to develop these alternative and renewable possibilities that exist in this country.

Just quickly, I met again with the Ministry of Fisheries from Iceland yesterday and had a follow-up conversation that I had last year with them in regards to their hydrogen-powered program that they are implementing in Iceland, a 10-year program to have fuel cell powered vehicles and a bus fleet and their fishing fleet. And the technology that they are using to enable them to do that is being developed by Enable Fuel Cell Corporation, located in Middleton, Wisconsin, my home State. So it is not that we don't have the know-how or the potential to do it here, I think we are just lacking the will and the dedication of resources and really the vision and the leadership in order to help this country develop those type of alternative energy resources, as well.

So thank you again for coming. We look forward to your testimony. Thank you, Madam Chair.

Mrs. CUBIN. The Chair would like to also recognize Mr. Rahall for an opening statement, but before I do that, I would like to compliment him on his appearance today, and I was wondering if his tie represented some of those AML dollars—

[Laughter.]

Mr. RAHALL. Yes, Madam Chair, we wish we were rolling in the green that we ought to be in order to do the job that is necessary, but unfortunately we are not. My tie expresses that hope, you are correct.

Mrs. CUBIN. Mr. Rahall.

STATEMENT OF THE HONORABLE NICK RAHALL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

Mr. RAHALL. Thank you, Madam Chair and distinguished ranking member, Mr. Kind, for allowing me to give an opening statement, and I salute you both for holding today's hearing.

I would like to welcome the directors of the U.S. Geological Survey and OSM who are with us, as they attempt to justify their proposed Fiscal Year 2003 budgets. I would like to limit my remarks to matters pertaining to the Office of Surface Mining Reclamation and Enforcement, and I do so for a number of reasons.

First, I do want to thank Director Jarrett for spending time with myself and my staff and allowing us to go over a number of these issues beforehand with you. The agency is very important not only to myself, but my home State of West Virginia. I was intimately

involved with the establishment of SMCRA back in 1977 during my first year in this august body.

It is one of those accomplishments, or lack thereof, that have a direct effect on the health and welfare of many of those that I have the true honor of representing in the Congress of the United States. And if for no other reason, OSM deserves our attention because it has often been treated, as I have said before, like a poor stepchild of the Department of Interior. That is unfortunate, but it is true.

Director Jarrett, I do welcome you. I pray you recognize the challenges you face, that we all face, because these are trying times in our Nation's coal fields. As we continue our efforts to reclaim land that has been ravished by past mining practices, we witness a proposed cut in the Abandoned Mine Reclamation Program funds. The money is there. The unspent balance in the fund, as Madam Chair so well knows, is approaching \$2 billion. It should be put to use improving the health and safety of our coal field residents and providing jobs.

Our retired coal miners continue to see the stability of their health care system dealt severe blows time after time by the judiciary. Today the provision of health care for 50,000 retirees whose average age is 78 years old may very well rest with this body and this administration. It may only be through increased AML interest transfers to their special health care fund that can avoid cruel cut-backs in their health care coverage—health care, I might add, that has been promised to them by our Federal Government, by administration after administration after administration.

And our regulatory program, almost 25 years after the enactment of SMCRA, still remains unsettled. The mountaintop mining controversy that erupted in West Virginia a few years ago was a wake-up call to the regulatory authorities. The matter has yet to be fully put to rest.

There are other challenges we face that you know that we must grapple with, as the Director of the Office of Surface Mining Reclamation and Enforcement, and you have that responsibility. A West Virginia coal miner once wrote to me, and I quote, "Every law that has ever been enacted dealing with coal mining was penned in blood."

Indeed, the Farmington mine disaster gave rise to the enactment of the Federal Mine Safety Act in 1969, and the events that took place at Buffalo Creek, West Virginia, in my district, on that grim morning 30 years ago when a coal waste dam was breached, with the resulting torrent leaving 125 dead, over 1,000 injured, and wiping out almost 5,000 homes, that disaster gave rise to the enactment of SMCRA in 1977.

As you go about your official duties, Director Jarrett, I urge you to keep the words of Psalm 23 close to your heart: "Yea, though I walk through the valley of the shadow of death, I will fear no evil."

Thank you, Madam Chair.

Mrs. CUBIN. I am having trouble finding the button. Amen.

[Laughter.]

Mr. RAHALL. I was waiting for that.

Mrs. CUBIN. I would now like to introduce the panel. We have with us today, as I said in my opening statement, the Honorable

Jeffrey Jarrett, Director of the Office of Surface Mining Reclamation and Enforcement; Dr. P. Patrick Leahy, the Director of the USGS; and Ms. Lucy Denett, Acting Director of Minerals Management Service.

I now recognize Director Jarrett to testify for 5 minutes. Oh, you can go 10 minutes, the boss says. Oh, I said so in the letter of invitation. Excuse me. And if you don't have time for your whole testimony, then the entire testimony will be included in the record. Mr. Jarrett.

STATEMENT OF JEFFREY D. JARRETT, DIRECTOR, OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT, U.S. DEPARTMENT OF THE INTERIOR

Mr. JARRETT. Thank you, Madam Chairwoman and members of the Committee. I think I can probably keep it under 5 minutes. I have prepared a written statement, opening statement for the record, that discusses OSM's proposed budget, so I will not discuss those budget issues in any detail in my opening comments.

As you know, I have been on the job now for just a little over a month, and during that month I have been spending my time being briefed by my staff and meeting with various stakeholders of the OSM to learn about their concerns and impressions of the office. While I am continuing to learn, and clawing rapidly up the learning curve, I do have some initial impressions about some of the things that are going on within OSM.

One of those issues has to do with the bonding programs that we oversee. As you know, Federal SMCRA requires operators to post bonds or other financial guarantees to ensure that the reclamation and the environment can be taken care of in the event of operator default.

We have identified some fairly significant problems with the bonding program across this country, specifically the bonding mechanism established in Federal SMCRA. Our regulations are not very well suited to dealing with some of the perpetual environment obligations that we are encountering now. Specifically, within the mining industry it would be acid mine drainage. So we are going to be searching for better mechanisms available to the industry which could provide those required financial guarantees.

At the same time, we have some renewed concerns about the adequacy of bonds for land reclamation across this country, I do not know enough at this point in time to say whether those concerns are legitimate or not. I just know that those concerns are such that I want to take a closer look at the issue.

Having said that, the larger issue with bonds is that bonding capacity is severely reduced in this country, and whatever the bonding program is, I think it is incumbent upon us to make sure that we are not asking our industry to provide a financial guarantee that simply is not available in the marketplace. So we are going to be working with the insurance industry and the surety industry to explore ways of increasing the availability of adequate financial guarantees, not only for the coal mining industry, but for some of the other mineral and resource extraction industries as well.

Overall, I think my impression is that one of the key themes of my tenure is going to be to create some stability within the Office

of Surface Mining. I think stability is something that industry certainly needs. It is something that our citizenry needs. It is something that the State regulatory authorities need, because the projects that we work on and the job that we have to do requires us to think long term, and we can't think long term without adequate planning.

So to have that adequate planning, we need a little bit of stability. We are going to be working in several areas to provide that stability, and I won't go into a great deal of detail, but some of the issues we are looking at is our rulemaking calendar, where we have to make some decisions about some of the proposed rulemakings to decide which ones we really want to proceed with and which ones we don't. My philosophy is that if a rule is not going to fix a problem, we probably shouldn't be doing it.

On the other hand, we do have a lot of very serious problems out there that can only be fixed through rulemaking. We have other significant single issue problems that we need to get resolved. Mr. Rahall, you mentioned the mountaintop mining issue. That is certainly one of them. The 106 consultation review required by the National Historic Preservation Act is another issue.

But ultimately I think all of the issues that we are struggling with right now because of the lack of stability in our regulatory programs can only be resolved through proper planning, and I think proper planning has to have two cornerstones to it. One is forecasting where we want to be in the future and where some externalities are going to force us to be in the future. The other is to work on defining what we are all about, answering the questions about why do we do all of the things that we do, looking at our performance outcomes as opposed to, checking off the list of numbers and the bean-counting that we traditionally get accused of.

So we are going to be working hard on those issues. I think that if we can do that forecasting, if we can accurately measure the things that we are trying to accomplish, that we will be able to do the one thing that I am committed to do, that I think is most important to create stability, and that is to be able to provide and achieve some level and fair budgets and grants to the States, not only for their Title V programs but also their Title IV programs. Having been responsible for managing a State regulatory authority for 7 years prior to this job, I know that even more critical than the level of funding is the stability and predictability of that funding. That is true in the Title V program and in the Title IV program.

And of course one of the criticisms leveled against OSM by industry, is that we have spent a great deal of money on overhead in the AML program. As a former State regulator I can tell you that one of the contributing factors to overhead is not knowing what your grant is going to be next year and not having level grants. States simply can't staff up to handle large grants, and then lose the grant the next year and then have to staff back down.

So we want to work real hard to develop the information that we think we need, and I will take the blame for this, but I think as an agency we need to do a much better job of making a case for those grants, both Title IV and Title V. We need to be able to debate, internally and up the line, about the importance of those pro-

grams, and we can only do that if we come up with better ways to measure what those programs are all about.

Having said that, I will be glad to answer any questions that anyone has.

[The prepared statement of Mr. Jarrett follows:]

**Statement of Jeffrey D. Jarrett, Director, Office of Surface Mining
Reclamation and Enforcement, U.S. Department of the Interior**

Madam Chairwoman and Distinguished Members of the Subcommittee, I am pleased to present to you the Fiscal Year (FY) 2003 budget request of the Office of Surface Mining Reclamation and Enforcement (OSM).

In August, OSM will mark the 25th Anniversary of its creation. OSM was established with the passage of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). Since then, working closely with the States and Tribes, OSM has been responsible for assuring that coal mines are operated in a manner that protects citizens and the environment and to assure that the land is restored to beneficial use following mining. Additionally, we are responsible for reclaiming and restoring lands and water degraded by past mining operations.

In the last 25 years, OSM has provided nearly \$1 billion in grants to the States and Indian Tribes to assist in funding the regulation of active coal mines. Since 1979, OSM has provided about \$3 billion in grants to the States and Tribes to clean up mine sites abandoned before SMCRA's 1977 enactment.

In fact, more than 180,000 acres of abandoned coal mine sites have been reclaimed under OSM's Abandoned Mine Land Program.

Our record of consultation and cooperation with States, Tribes, local entities, industry and the public has been a key factor in achieving these results. In fact, we have been praised as "Feds Who Get It" by *Governing Magazine*. That same professional, cooperative approach must continue if, in the next few years, we hope to continue to match these past achievements.

The United States possesses one-fourth of the world's coal resources, with over 275 billion tons of recoverable reserves. Because of these vast domestic coal resources and the fact that over one-half of electricity generated in our country comes from coal-fired utilities, coal must be an integral part of our Nation's energy policy. In Fiscal Year 2003, OSM will work to identify innovations it can implement that will help maintain environmental quality and protect public health and safety while enhancing domestic coal production.

Fiscal Year 2003 Budget Request

To address some of the issues I have just outlined, I would like to present some highlights of our Fiscal Year 2003 budget proposal. OSM's Fiscal Year 2003 budget request totals \$283.6 million in current authority, \$70 million in permanent authority, and 637 FTE's. Included in this amount is \$4.2 million to reflect a government-wide legislative proposal to shift the full cost of the government's pension system and employee health benefits program for current employees to their employing agencies. Without this proposal, OSM's Fiscal Year 2003 request is \$279.4 million, a decrease of \$27.1 million below the Fiscal Year 2002 enacted level of \$306.5 million. In addition, we have a continuing obligation under the Coal Act of 1992 to make payments from interest earned on the Abandoned Mine Land (AML) Fund to the United Mine Workers of America Combined Benefit Fund (UMWACBF). These payments help defray the health care costs of retired coal miners and their dependents where the employing company or related entity for which they worked have gone bankrupt or are no longer in business. As of January 31, 2002, \$574 million had been transferred to the UMWA since Fiscal Year 1996. I will discuss this transfer in more depth, but first let me describe the discretionary portion of our Fiscal Year 2003 request.

Our Fiscal Year 2003 budget is a fiscally responsible proposal that enables OSM to effectively and efficiently implement its mission goals.

OSM's net Fiscal Year 2003 request includes \$105.4 million for the Regulation and Technology (R&T) appropriation and \$174 million for the AML appropriation. This request represents an increase of \$2.3 million for the R&T program and a decrease of \$29.4 million for the AML program, thus accounting for a total decrease of \$27.1 million from Fiscal Year 2002.

The Fiscal Year 2003 request for the Regulation and Technology appropriation will enable OSM to provide sufficient financial support for the 24 State regulatory programs. OSM is requesting a net \$1 million increase in State regulatory grants. This is comprised of a \$2 million increase for West Virginia offset by a \$1 million

reduction to other States' grants. State regulatory funding was increased by over \$6 million during the period from Fiscal Year 2000 to Fiscal Year 2002, from \$50.6 million to \$56.6 million. OSM is also requesting \$1.3 million for uncontrollable cost increases.

In the Abandoned Mine Lands Program, the budget proposes a \$17 million reduction for State reclamation grants. Additionally, the budget proposes to transfer \$2 million in carryover for Federal emergencies to State reclamation grants, resulting in total grant funding of \$144.1 million. It eliminates a \$0.5 million grant to Pennsylvania for an acid mine drainage demonstration project. It provides a \$10.9 million one-time reduction in funding for the Federal emergency program; this reduction should have no programmatic impact since OSM has sufficient carryover funds to operate the Federal emergency program for Fiscal Year 2003. The proposal also reduces funding for Federal high priority projects by \$1.3 million. The budget identifies savings of \$0.2 million in travel costs and \$0.1 million in general services efficiencies. It requests \$0.6 million for uncontrollable costs.

OSM is also continuing its funding support for the Appalachian Clean Streams Initiative at the Fiscal Year 2002 level of \$10.0 million. This initiative supports local efforts to eliminate environmental, economic, and public health impacts of acid mine drainage from abandoned coal mines in Appalachia. OSM has partnered with over one hundred Government agencies and private groups to leverage our resources with other parties' resources to assure increased reclamation of streams polluted by acid mine drainage.

Let me now address the other component to our budget—the annual transfer payment to the UMWACBF.

The Coal Industry Retiree Health Benefit Act of 1992 (the "Coal Act") amended the Surface Mining Control and Reclamation Act (30 U.S.C. section 1232) to provide for annual transfers of interest from the Abandoned Mine Reclamation Fund to the Combined Benefit Fund (CBF) to defray health care costs for unassigned beneficiaries. The CBF provides health care and death benefits for eligible union coal mine workers who retired on or before July 20, 1992, and their dependents.

The Coal Act holds coal operators and related companies responsible for paying monthly premiums for the costs of health benefits related to their retired mine workers and dependents (known as "assigned" beneficiaries). Under the Coal Act, the Social Security Administration (SSA) is responsible for computing the per beneficiary health premium and for assigning retired mine workers to their former employers or related companies. Those for whom a responsible company cannot be identified, are considered "orphans," or unassigned beneficiaries. For Fiscal Year 2003, we estimate the amount of this mandatory transfer will be \$70 million.

Government Performance and Results Act

OSM recognizes the importance that both the Administration and the Congress have placed on implementing the Government Performance and Results Act (GPRA). The Fiscal Year 2003 budget request fully addresses GPRA requirements. OSM has established a Strategic Plan to carry out its mission, vision, and goals and to implement a budget that relates resource requests to strategic goals in a more understandable way. OSM also has developed a business-line based accounting system to determine the cost of each program activity, provide a mechanism for linking costs to performance outputs, and enhance OSM's management decision-making process. OSM's Business Lines are:

- Environmental Restoration;
- Environmental Protection;
- Technology Development and Transfer;
- Financial Management; and
- Executive Direction and Administration.

Government-wide Management Reforms

This budget proposal also supports the President's Government-wide management reform agenda of:

- Integrating Budget and Performance Measures
- Improving Strategic Management of Human Capital
- Increasing Competitive Sourcing
- Improving Financial Performance
- Expanding E-Government

OSM's budget proposals have integrated strategic goals and associated measures with its budget structure for the past several fiscal years and in 2002, OSM is implementing activity based costing. OSM has already developed a succession plan to help strategically manage its human resources. Consistent with Administration guidance, OSM updated its Commercial Activity Inventory in Fiscal Year 2001 and

has just completed another update for 2002. To address improved financial performance, OSM has made nearly one hundred percent of its financial transfers through electronic funds transfers. Because of OSM's expanded Electronic Government initiatives, such as electronic payment of reclamation fees and the new on-line Abandoned Mine Lands Survey, greater opportunities exist for citizens to access OSM provided information.

Proposed Appropriation Language

OSM is also proposing an appropriation language change in its Fiscal Year 2003 budget proposal. This change will allow OSM to:

- Remove the funding and twenty-five percent limitations on the amount of emergency program funding that can be spent in any one state; and
- Eliminate the earmarking of funds for the Pennsylvania demonstration project.

Madam Chairwoman, I consider myself fortunate to have been given the opportunity to lead the Office of Surface Mining as it completes its first quarter century and prepares itself for the demands of the future. OSM began as an enforcement agency enforcing SMCRA directly. As states adopted their own regulatory programs, OSM evolved into a partner with the states—enabling, advising and providing much-needed technical assistance. Today, state programs are maturing and OSM will be called upon to adapt to the new needs of the states, intensifying its efforts to protect the American people and their environment and creatively using the great potential of our natural resources. I am pleased to be part of the OSM team at this important juncture.

I thank the Subcommittee for providing this opportunity to present OSM's Fiscal Year 2003 budget request.

Mrs. CUBIN. Thank you, Director Jarrett.
The Chair now recognizes Dr. Leahy to testify.

**STATEMENT OF P. PATRICK LEAHY, ASSOCIATE DIRECTOR
FOR GEOLOGY, U.S. GEOLOGICAL SURVEY**

Mr. LEAHY. Thank you, Madam Chairman. It is a pleasure to be here and to discuss the administration's proposal for the U.S. Geological Survey's budget for 2003 with you and the members of the Subcommittee.

The proposed budget requests \$904 million, and this includes \$37 million for a government-wide legislative proposal to shift to agencies the full cost of the Civil Service Retirement System and the Federal Employee Health Benefits Program. Without the legislative proposal, the request is \$867 million, which is a decrease of \$47 million from the Fiscal Year 2002 enacted level. Although 2003 is less than the 2002 enacted level, this request will enable us to maintain our core science and monitoring programs to continue to provide the Nation with relevant and impartial scientific information.

Before I begin, Madam Chairman, I would like to thank the Subcommittee for its strong support of the USGS over the years. Your support for the scientific programs of the Survey has provided a wealth of valuable information to assist the citizens of this Nation in making sound decisions. As the science bureau in the Department of the Interior, USGS provides information and technologies that are critical to achieving the missions of the department's land management bureaus and research management bureaus.

Let me take just a few moments to share with you a few of our accomplishments of the past year, which show that the taxpayer investment in the programs of the USGS has paid sound dividends.

After the September 11th attacks on America, USGS staff provided critical geospatial data and coordination to many State and Federal agencies, helping them respond to the crisis. Well over

100,000 maps were distributed as part of this effort. The USGS topographic maps are the only complete nationwide coverage of the Nation's land surface and infrastructure. As part of the process of modernizing this topographic data, we are conducting eight national map pilot projects, and these pilots are the foundation upon which we will build future partnerships for data sharing and maintenance of this resource.

In the water resources arena, a team of hydrologists in Nevada has conducted an intensive restudy of the ground water in the Fallon area, where 16 children have been diagnosed with two forms of leukemia, and unfortunately two have died since 1997. This is a rate 100 times higher than expected for a community of this size. Earlier USGS reports document a broad spectrum of metals, organic compounds, and radioisotopes in the ground water of the area. The USGS has worked closely with State agencies and the Center for Disease Control to design the study that is ongoing, and the results of the study are expected soon.

Finally, the Nisqually earthquake in Washington fortunately did not cause widespread death and destruction in the Seattle area. One reason certainly was the depth of the earthquake. The epicenter was more than 30 miles below the surface. But clearly another is the 15 years of work by USGS scientists to assess the seismic hazard in the area and to provide the information to local officials.

USGS scientists have worked closely with the University of Washington, FEMA, and others to raise awareness of the earthquake risk among local businesses—including Boeing, Microsoft, and the Bank of America, to name a few—perhaps most importantly raising the consciousness in the general public, so that people could take effective action to mitigate their risk to the seismic events up there.

The earthquake also provided the first major test of the Advanced National Seismic System stations that had recently been installed in and around Seattle, and I am pleased to report that all 20 instruments were active and provided valuable information on ground shaking for immediate data analysis and damage assessment that was critical in terms of the effort up there.

The budget preserves a number of significant program increases received in recent years that provide science support to Interior bureaus and to other high priorities. For example, in the hazards area the request preserves the 2002 funding increase for continued implementation of the Advanced National Seismic System.

Similarly, USGS will continue to provide scientific information that is vital to the President's national strategy for a sound energy policy. The 2003 budget request proposes an increase of \$27 million for USGS to step up its efforts in support of the National Energy Policy. Of that \$2.7 million, \$1.2 million will enable USGS to more fully implement the requirements of Section 604 of the Energy Act of 2000, which requires USGS to conduct estimates of undiscovered oil and gas on Federal land.

During 2002, with reimbursable funds provided by the Bureau of Land Management, the USGS will estimate volumes of oil and gas on Federal lands in five study areas in the Rocky Mountains. The 2003 increase will enable USGS to expand this work beyond these

initial study areas. The budget also includes an additional \$1 million to produce digital base maps in Alaska, with the work focused initially on the potential lease areas in the National Petroleum Reserve.

The USGS proposal also supports alternative nonfossil fuel energy development, as well, with \$500,000 for the USGS to begin the process of updating the Geothermal Energy Assessment. I believe in an earlier testimony to this Committee I pointed out that the last Geothermal Energy Assessment conducted was in 1979, so it is quite out of date. Our initial efforts in terms of that energy assessment will focus on the Great Basin.

The net funding decrease for 2003—and as I mentioned, it was a substantial one—reflects the elimination of unrequested funding increases, many of which were for short duration projects that are now complete, and it also includes reductions to lower priority programs.

In closing, Madam Chairman, I know that the USGS will do its best to remain a strong, dynamic, and ready organization to meet the science needs of the Nation. I will be pleased to respond to any questions that the Subcommittee may have.

[The prepared statement of Mr. Leahy follows:]

**Statement of Dr. P. Patrick Leahy, Associate Director for Geology,
U.S. Geological Survey**

Madam Chairman, and Members of the Subcommittee. I come before you today to present the Administration's proposal for the budget of the U.S. Geological Survey (USGS) for Fiscal Year 2003. The proposed budget requests \$904 million, including \$37 million for a government-wide legislative proposal to shift to agencies the full cost of the Civil Service Retirement System (CSRS) and the Federal Employee Health Benefits Program for current employees. Without the legislative proposal, the request is \$867 million, a decrease of \$47 million from the Fiscal Year 2002 enacted level. Although less than the 2002 enacted level, this request will enable us to maintain our core science and monitoring programs to continue to provide the Nation with relevant and impartial scientific information.

Before I begin, Madam Chairman, I would like to thank the Subcommittee for its strong support of the USGS over the years. Your support for the scientific programs of the Survey has provided a wealth of valuable information to assist the citizens of this Nation in making sound decisions on environmental, resource, economic, agricultural, and social issues.

The Survey's 123-year history of excellence in the earth and biological sciences is a solid foundation from which we provide scientific solutions to many national issues. The USGS, through its scientific activities—long-term monitoring and data collection, innovative research and process understanding, and informative assessments and interpretive studies—is well poised to provide the natural science information that society demands to address critical issues, such as

- mitigating the impacts of earthquakes,
- developing strategies to detect and control harmful invasive species,
- developing a better knowledge base for the sustained development of the Nation's water resources, and
- providing information on the availability, quality, and development impacts of energy and mineral resources.

As the science bureau of the Department of the Interior, USGS provides information and technologies that are critical to achieving the missions of the Department's land and resource management bureaus. Scientific support from the USGS to these bureaus ensures that the increasingly complex management decisions for Interior's vast resources are informed by relevant, impartial, credible science.

Let me take just a moment to share a few of our accomplishments over the past year, which show that the taxpayer investment in the science and monitoring programs of the USGS has paid sound dividends for the Nation.

After the September 11 attacks on America, USGS staff provided critical geospatial data and coordination to many State and Federal agencies, helping them respond to the crisis; well over 100,000 maps were distributed. The USGS topo-

graphic maps are the only complete, nation-wide coverage of the Nation's land surface and infrastructure. As part of the process of modernizing these topographic data, we are conducting eight National Map pilot projects in Delaware, Florida, the Lake Tahoe area, Missouri, Pennsylvania, Texas, Utah, and Washington-Idaho. These pilots are the foundation upon which future partnerships for data sharing and maintenance will be built.

Our science is respected and valued. In the December issue of *Environmental Science and Technology*, 10 papers were selected for high impact in the field of environmental research over the past 35 years. I am proud that three of those papers were authored by scientists who currently work at the USGS in our hydrology programs.

We are using the Internet to maximize the availability of our information, so that taxpayers have easy access to the scientific results of their investment in our research and monitoring. The new National Water Information System online database provides 14 gigabytes of real-time and historical streamflow, ground-water, and water-quality data collected from 1.5 million sites in all 50 States, Puerto Rico, and the District of Columbia. Since the online database was formally launched last July, the number of pages served has continued to grow, and we have received many compliments praising USGS for the usefulness of this site. Furthermore, the website was selected as one of only 25 finalists in the Federal Chief Information Officers Council Excellence.Gov Awards.

Partnerships remain an essential component of how we do business, to ensure cost-effective operations. In the Tampa Bay region, USGS worked with the National Oceanographic and Atmospheric Administration to develop a seamless merged topographic/bathymetric elevation model of the Tampa Bay region. The new model is proving very useful to local planning, natural resource, and regulatory agencies. We continued to work with the Centers for Disease Control and other public health entities to provide biological and geospatial data about the spread of West Nile Virus. By the end of summer 2001, this disease had been found in birds in most States east of the Mississippi River. In addition, USGS research demonstrated that the disease can be transmitted bird-to-bird, rather than only through mosquito bites. This is a critical advance in understanding how the disease moves between birds, mosquitoes, and humans.

In Nevada, a team of hydrologists has been conducting an intensive re-study of the ground water in the Fallon area, where 16 children have been diagnosed with two forms of leukemia and 2 have died since 1997—a rate 100 times higher than expected for a community of this size. Earlier USGS reports document a broad spectrum of metals, organic compounds, and radioisotopes in the ground water; the samples collected this past summer indicated 10% of the samples have arsenic concentrations greater than 500 $\mu\text{g/L}$ (a maximum concentration of 2,900 $\mu\text{g/L}$ has been observed) and some uranium activities are greater than 200 pCi/L. The USGS Nevada District office has worked closely with State agencies and the CDC to design the study, and results are expected soon.

Finally, the Nisqually earthquake did NOT cause widespread death and destruction in the Seattle area. One reason certainly was the depth of the earthquake—30 miles below the surface—but another is the 15 years of work by USGS scientists to assess the seismic hazard in the region and provide the information to local officials in ways that they could use to protect and prepare communities for such events. USGS scientists have worked closely with the University of Washington, the Federal Emergency Management Agency, and others to raise awareness of the earthquake risk among local businesses—including Boeing, Microsoft, and Bank of America—and the general public, so people can take effective action to mitigate their risk. The earthquake also provided the first major test of the 20 Advanced National Seismic System stations that had been recently installed in and around Seattle. All 20 instruments provided valuable information for immediate data analysis and damage assessments, as well as information on the effects of local soil conditions and geologic structures.

The 2003 budget request focuses resources on our core mission programs of geology, mapping, biology, and water. The budget preserves a number of significant program increases received in recent years that provide science support to Interior land- and resource-management bureaus and other high priorities. In the area of hazards, the request preserves the 2002 funding increase for continued implementation of the Advanced National Seismic System, which provides both immediate information on the intensity of ground shaking, for use by emergency responders, and high-quality data on building response, used by engineers to improve building safety. The request also includes funding to address Administration priorities. The USGS will continue to provide the scientific information that is vital to the President's national strategy for a sound energy policy. In addition to ongoing national

assessments of coal, oil, and natural gas, and other energy and mineral commodities, the 2003 budget request proposes an increase of \$2.7 million for USGS to step up its efforts in support of the National Energy Policy and the overall goal of increasing domestic energy production. Of that \$2.7 million, \$1.2 million will enable USGS to more fully implement the requirements of section 604 of the Energy Act of 2000, which requires USGS to conduct estimates of undiscovered oil and natural gas resources on Federal lands in the continental United States. During 2002, with reimbursable funding provided by the Bureau of Land Management, the USGS will estimate volumes of oil and gas resources on Federal lands in five study areas in the Rocky Mountains. The 2003 increase will enable USGS to expand this work beyond the initial five study areas. The budget includes an additional \$1.0 million to produce digital base maps in Alaska, with work focused initially on potential lease areas in the National Petroleum Reserve. The mapping effort will provide resource managers with information they need to make timely and environmentally sound resource and management decisions. The USGS budget proposal supports alternative, non-fossil fuel energy development as well, with \$500,000 for USGS to begin the process of updating geothermal energy assessments. The USGS will initiate this effort in the Great Basin region.

Besides these energy-related budget increases, USGS is also proposing a \$1.0 million initiative to utilize its core mission expertise to study the relationship between environmental change and human health issues in the U.S.–Mexico border region. The border area is a significant contributor to our economic vitality and encompasses important natural resources. In partnership with the National Institute of Environmental Health Sciences, USGS will bring its expertise in geologic, geochemical, and hydrologic processes to bear on these issues. The proposal aims to improve the understanding of naturally occurring and introduced disease-causing agents in the environment—like radiation, pesticides, and pathogens—and their specific exposure pathways in water, air, and soil. For example, USGS will produce geologic maps showing the distribution of rock types likely to produce elevated levels of potentially toxic elements such as mercury, arsenic, and selenium.

The budget maintains recent funding increases that have enabled USGS to undertake a multi-disciplinary coastal initiative, as requested by the Congress. Coastal regions are under enormous pressure due to population growth, and USGS science will lead to a better understanding of the impacts of natural and human-induced change on the coastal environment. In 2003, the current USGS pilot study in Tampa Bay, Florida, will focus on developing a comprehensive understanding of coastal and marine systems. The study will provide Internet-accessible data and decision support systems to inform the responsible use and management of the Nation's coastal and offshore resources.

The budget proposes a \$4.0 million increase for the Critical Ecosystems Science Initiative for the Everglades. This will enable USGS to provide the long-term science, analysis, monitoring, modeling, and decision support systems needed for the adaptive implementation of the Comprehensive Everglades Restoration Plan. The budget retains increases appropriated in 2001 and 2002 for base USGS biological science center operations and high-priority tactical science support for the Fish and Wildlife Service. It also retains funding increases that have accelerated the pace of the biological Gap Analysis Program and expanded the National Biological Information Infrastructure. These programs develop and disseminate data that are beneficial to land and resource managers at all levels of government.

The 2003 budget also retains funding increases provided in Fiscal Year 2001 that expanded the Ground–Water Resources Program, in response to the Nation's growing reliance on these resources. There is a recognized need for more sophisticated knowledge to support sustainable development of complex aquifers and to protect inter-related surface waters and riparian habitat.

The net funding decrease for Fiscal Year 2003 reflects the elimination of unrequested funding increases, many of which were for short-duration projects that are completed, and reductions to lower priority programs. The budget includes a 10% reduction to the National Water Quality Assessment Program. The budget proposes to offset this decrease with funding contributions from NAWQA customers and beneficiaries. Finally, the budget reflects a transfer of \$10 million in Toxic Substances Hydrology Program funding to the National Science Foundation, where it will be used for a water-quality research grants program. This transfer reflects the Administration's goal of realigning the Federal Government's investment in research and development to give greater support and emphasis to competitive research.

In closing, Madam Chairman, I know that the USGS will do its best to remain strong, dynamic, and ready to meet the science needs of the Nation. I will be pleased to respond to any questions you may have.

Mrs. CUBIN. Thank you, Dr. Leahy.
I would like to now recognize Ms. Denett.

**STATEMENT OF LUCY QUERQUES DENETT, ACTING
DIRECTOR, MINERALS MANAGEMENT SERVICE**

Ms. DENETT. Thank you. Good morning, Madam Chairman and members of the Committee. Thank you for the opportunity to testify before your Committee. I would like to make a few remarks and then answer any questions you may have.

First, I am pleased to say, as Madam Chairman indicated, tomorrow MMS will have a new director, Regine "Johnnie" Burton. Ms. Burton's background provides a solid mix of experience in State government, the oil and gas industry, and education. Since 1995 she served on the Governor of Wyoming's Cabinet as the Director of the Department of Revenue. Before that she served as Vice President of TCS, Inc., an oil and gas exploration company based in Casper, Wyoming. Her background, particularly in State government and industry, will be a good fit with our operations in the Minerals Management Service.

I would like to spend a few minutes discussing some of our accomplishments. The MMS's Offshore Minerals Management Program saw recordbreaking activity in the Gulf of Mexico in Fiscal Year 2001. Deep water drilling reached an all-time high, with over 45 rigs drilling in water depths over 1,000 feet. That is compared to only nine in 1990. The number of wells drilled in a single year in water depths greater than 200 meters reached a record high of 302, and 1,408 new well starts were drilled in the Gulf of Mexico last fiscal year, another new record.

The Minerals Revenue Management Program also reached a new milestone in Fiscal Year 2001, collecting over \$11 billion in Federal receipts, with more than \$1 billion in shared mineral revenue receipts being distributed to the States.

In Fiscal 2003, MMS will account for a projected \$4.2 billion in Federal receipts, \$200 million for American Indian tribes and individual American Indian owners, and \$39 million in shared mineral revenue receipts with coastal States. The Federal receipts include \$2.8 billion from OCS receipts and \$1.4 billion from onshore receipts.

From a taxpayer perspective, that converts to \$1.9 billion deposited to the general fund of the U.S. Treasury, \$674 million in mineral revenue payments made to onshore States, \$897 million transferred to the Land and Water Conservation Fund, \$536 million credited to the Reclamation Fund, and \$150 million for the Historic Preservation Fund.

There are challenges, however. While new sources of energy may be on the horizon, oil and gas will continue to be imported during the next 20 to 30 years. DOE estimates that dependence on oil and natural gas will increase significantly during that time. Because of this dependence, MMS programs are vitally important to the security of the Nation and the well-being of the national economy.

Production from deepwater wells will continue to increase as compared to prior years, and drilling activities continue to reach record highs in the Gulf of Mexico. The continuing increase in production and drilling activities places additional work load demands

on the MMS in the areas of field determinations, engineering, inspection, production, and deepwater operation plan reviews, as well as environmental assessments.

Since the oil and gas resources of the OCS, though abundant, are ultimately exhaustible, MMS must manage these resources in the most prudent manner possible. To do this, MMS must impose data requests and reporting requirements on the oil and gas industry, and must also share information, analysis, data bases, with other government and public entities. Together, these management responsibilities create intense pressure for automation of many recurring processes.

The Offshore Minerals Management Program has developed an e-government framework to address the need to facilitate the exchange of OCS-related information with a complex network of stakeholders. The MMS's reengineering initiatives in the Minerals Revenue Management Program have provided a new financial system, a robust data warehouse, and an array of new tools and applications for financial management and mineral revenue compliance. These new tools and capabilities will, however, require ongoing maintenance and support, including continuous upgrades to ensure a stable, secure computing and communication backbone for the new systems.

The President's November 13, 2001 decision to fill the strategic petroleum reserve greatly expands the role of the royalty-in-kind in the Gulf of Mexico. When completed in 2005, MMS will have delivered approximately 120 million barrels of crude oil taken in kind from Federal leases in the Gulf to the onshore market centers for utilization by DOE in filling the SPR.

MMS has requested additional funding for an automated oil RIK system in Fiscal Year 2003. However, there are associated transportation costs and a need to expedite the oil RIK system as a result of this decision of the President.

Our budget request: The MMS is requesting \$281 million, a net increase of \$21.5 million above the MMS's enacted Fiscal 2002 level. This includes \$10.4 million for a government-wide legislative proposal to shift to the agencies the full cost of the CSRS and the FEHB program for current CSRS employees. That is a tongue-twister. Also included in the request are program decreases of \$14.3 million.

The increases that we are requesting are to manage the increased demand from the industry for drilling and production activities in the Gulf of Mexico region, which as I have indicated have reached record high levels; to initiate the first phase of the e-government initiative that will dramatically reform and streamline OMM's business operations; to provide ongoing maintenance and support for MRM's new mineral revenue compliance tools and capabilities; and, finally, to fund the development of the automated infrastructure needed to support the expanding of the oil RIK program.

I appreciate the opportunity to talk to you, and will be happy to answer any questions you may have.

[The prepared statement of Ms. Denett follows:]

**Statement of Lucy Querques Denett, Acting Director,
Minerals Management Service, U.S. Department of the Interior**

Madam Chairman and Members of the Subcommittee, I appreciate the opportunity to testify today on the Fiscal Year (FY) 2003 budget request for the Minerals Management Service (MMS). We have looked closely at our ongoing operations and responsibilities and this request reflects our best assessment of the funds needed to carry out critical MMS programs during Fiscal Year 2003.

The MMS is requesting \$281.0 million, including \$10.4 million for a government-wide legislative proposal to shift to agencies the full cost of the CSRS pension system and the Federal employee health benefits program for current CSRS employees. Without the legislative proposal, the request is \$270.6 million, a net increase of \$11.1 million above the 2002 enacted level, and includes both programmatic and uncontrollable cost increases.

Our budget request is based upon our accomplishments in successfully implementing and completing past budget initiatives. It is also based upon the challenges confronting us during the next fiscal year and beyond, which are the reasons for the increases in budgetary requirements. The request includes funding to:

- manage the increased workload and complicated industry requirements for drilling and production-related activities in the Gulf of Mexico Region,
- provide additional resources to keep pace with the increased demand on our revenue management network and enterprise systems,
- acquire an automated liquids (oil) management system to support the pilot royalty-in-kind programs, and
- begin a five year e-government initiative that will deliver web-based, paperless transactions and better manage data, resulting in reduced future costs and improved information delivery to citizens.

The MMS manages the nation's oil, natural gas, and other mineral resources on the Outer Continental Shelf (OCS), and collects, accounts for, and disburses revenues from offshore Federal mineral leases and from onshore mineral leases on Federal and American Indian lands. To carry out this mission, MMS manages two very important programs—the Offshore Minerals Management (OMM) Program and the Minerals Revenue Management (MRM) Program. These programs provide major economic and energy benefits to the Nation, taxpayers, states and the American Indian community.

The MMS has leased and currently manages more than 40 million acres of the OCS. More than 13.1 billion barrels of oil and 146.4 trillion cubic feet (tcf) of natural gas have been produced from the OCS since 1953.

From an economic standpoint, MMS will account for a projected \$4.2 billion in Federal receipts in Fiscal Year 2003. MMS will also account for an additional \$200 million in receipts for American Indian tribes and individual American Indian owners, and \$39 million in shared mineral revenue receipts with coastal states. The Federal receipts include \$2.8 billion from OCS receipts and \$1.4 billion from onshore receipts. From a taxpayer's perspective, that converts to:

- \$1.9 billion deposited to the General Fund of the U.S. Treasury;
- \$674 million in mineral revenue payments made to onshore states;
- \$897 million transferred to the Land and Water Conservation Fund;
- \$536 million credited to the Reclamation Fund; and
- \$150 million for the Historic Preservation Fund.

The receipts I have described above are derived from the accomplishment of the Bureau's two program missions. MMS has recently celebrated its 20th anniversary, and during this relatively short time these two programs have experienced dramatic and profound changes in the business, energy and government climates in which they operate. These changes have challenged MMS to keep pace, and I believe that the bureau has risen to the challenge. I would now like to review a few of MMS's recent achievements and what MMS sees as its challenges for the future.

OMM PROGRAM ACHIEVEMENTS

OCS and the Nation's Energy Supply

The OCS continues to play a critical role in supplying the nation's energy needs. It is estimated that oil and gas production from the OCS will account for over 25 percent of the country's total production in Fiscal Year 2003. The average combined shallow and deepwater production in 2003 is estimated to be about 587 million barrels of oil and 5.1 tcf of gas.

Record Setting Activity in the Gulf of Mexico (GOM)

Drilling in the GOM deep water has increased dramatically over the last decade. Today, deepwater drilling continues to be at an all time high with over 45 rigs drill-

ing in water depths of over 1,000 feet, compared to just nine in 1990. The number of wells drilled in a single year in water depths greater than 200 meters reached a record high of 302 in 2001, and a record 1,408 well starts were drilled in the GOM last fiscal year. This is a 52% increase from the 928 well starts drilled in Fiscal Year 1995.

Safety Remains a Top Priority.

The MMS regards the safety of personnel, the environment, and operations as top priorities. Prevention is our most important safety strategy. The continued movement of industry into deeper waters and the overall increased industry activity in the GOM have increased both the level and complexity of monitoring and ensuring safe OCS operations. Likewise, there has been a significant rise in the number of operators on the OCS, some without the same level of experience as the more seasoned operators.

MMS continues to work with industry and other agencies to ensure the continued safety of offshore operations. In 2002, the MMS will be authorized to inspect and enforce U.S. Coast Guard safety regulations on fixed OCS platforms. By authorizing MMS to also check for compliance with Coast Guard safety regulations, we avoid duplicating functions, reduce Federal costs, and increase the frequency of these critical safety inspections.

OMM PROGRAM CHALLENGES

Meeting Future National Energy Needs

The U.S. is the most mature petroleum-producing region in the world. Much of the Nation's easily located oil and gas has already been extracted. Despite this, domestic discoveries and reserve additions over the past decade have replaced 100 percent of the natural gas and 79 percent of the crude oil produced during this period. Advanced technologies have allowed economical access to domestic resources that are concentrated in deeper formations, tighter zones, deeper water, more sensitive environments, and increasingly more unconventional settings. In 1998, the U.S. Department of Energy (DOE) estimated that two-thirds of the 603 billion barrels of known oil reserves in the U.S. remained untapped.

While new sources of energy may be on the horizon, oil and gas will continue to be important during the next 20 to 30 years, and the DOE estimates that dependence on oil and gas will increase significantly during that time. Because of this dependence, MMS programs are vitally important to the security of the Nation and the well being of the national economy. One such example is our royalty-in-kind program that will enable MMS to meet the President's November 2001 directive to fill the Strategic Petroleum Reserve.

Demand for oil and gas uncharacteristically declined in 2001. This is attributed mainly to the decline in air travel after September 11th and an unseasonably warm winter. Nevertheless, demand for oil is expected to increase once again in 2002. By 2003, DOE projects annual average petroleum demand to exceed 20 million barrels per day for the first time.

While oil production on the OCS is projected to increase through 2010, the long-term overall U.S. oil production is projected to decline. This decline is projected at an average annual rate of 0.7 percent between 1999 and 2020, to 5.1 million barrels per day. The share of U.S. oil demand met by net imports is projected to increase from 56 percent in 1999 to 70 percent in 2020, an average annual increase of 2.5 percent.

U.S. demand for natural gas is projected to increase from 22 tcf in 1998 to as high as 29 tcf by the year 2010 and 31.3 tcf by 2015. This is a 50 percent increase over what the Nation consumes today. If the OCS is expected to maintain the same percentage contribution towards future U.S. gas consumption, the annual gas production from Federal waters will have to increase 7 to 8 tcf. Natural gas is clearly the fuel of choice for the Nation's future energy use because it is a cleaner burning fuel.

Safety and Environmental Protection

While development of offshore mineral resources has already meant billions of dollars in revenues to the United States, MMS is responsible for ensuring that those economic benefits are not made at the expense of safe operations and environmentally responsible development. The move into deeper water and the overall rise in activity have increased both the level and complexity of monitoring OCS operations. The number of operators drilling in the GOM has increased over the past several years by about 30 percent. Some of these new operators are not as experienced as those that have been working in the GOM for a longer time. There is also a much greater reliance by all operators on the use of contractors. In addition, the

offshore industry downsized significantly throughout the 1980s and 1990s. All of these events have reduced the pool of skilled offshore workers. The presence of workers with a minimum of offshore experience is placing an added burden on the inspection and compliance program.

One of MMS's top priorities is ensuring that industry maintains its excellent safety and environmental record as the level of activity increases in both amount and complexity. From a safety perspective, recent statistics indicate that the rate of injuries and illnesses for offshore workers is less than half the rate for the private sector as a whole. On the environmental front, since 1985, over 63 billion barrels of oil have been produced from the OCS with only 0.001% spilled. Natural seeps contribute more than 150 times this amount to the marine environment. Maintaining the OCS's good safety and environmental record is critical to preserving the public's confidence in the integrity of the program and to facilitating further OCS production. If a serious incident were to occur and we were prohibited from further development of these promising areas, the Nation would lose the significant contributions that the Offshore Program makes to the economy in the form of revenues and secure supplies of oil and natural gas.

Deepwater Production

Production from deepwater wells continues to increase as compared to prior years. In 1985, for example, only six percent of the GOM's oil production came from deepwater wells as compared to over 50 percent in Fiscal Year 2001. Natural gas production from deepwater areas in the GOM increased from less than 1 percent of total gas production in 1985 to over 20 percent in Fiscal Year 2001. As discussed earlier, drilling activities continue to reach record highs in the GOM.

The continuing increase in production and drilling activities in the GOM places additional workload demands on MMS in the areas of environmental assessments, field determinations, engineering, inspection, and production and deepwater operation plan reviews.

Maintaining a Viable OCS Program

One of the agency's core responsibilities in managing OCS leasing and development is to ensure that our leasing decisions fully consider the possible risks to coastal communities and environments of offshore development, and that our regulatory efforts ensure the highest degree of safety and protection possible in day-to-day operations.

The MMS is entering the final stages in the development of its next OCS 5-Year Program covering the 2002–2007 timeframe. The comment period on the Proposed Program and the draft environmental impact statement closed in January 2002. A final EIS will be prepared and a proposed final program will be submitted to the President and Congress in April 2002. Following a 60-day waiting period, the Secretary is scheduled to approve the new program in June with an effective date of July 1, 2002.

Expanding Electronic Government

Since the oil and gas resources of the OCS, though abundant, are ultimately exhaustible, MMS must manage these resources in the most prudent manner possible. To do this, MMS must impose complex requests and reporting requirements on the oil and gas industry. It must also share information, analysis, and databases with other government and public entities. Together, these management responsibilities create intense pressure for automation of many recurring processes. To fulfill each of its mandated tasks, MMS must facilitate the exchange of OCS-related information within a complex network of stakeholders (industry, other agencies, states, the public). That fact is the basis of OMM's e-Government vision.

OMM's e-Government framework consists of investment in core infrastructure, such as a regulatory data model, redesigned web-enabled corporate database, document management, security, and a data warehouse to support its business functions. A strong OMM infrastructure will support web-based, customer-responsive solutions; facilitate internal analysis; and set a foundation for future integrated systems. Additional investments will support processes such as permitting, inspections, Freedom of Information Act, public commenting, and industry reporting. To ensure that the foundation is flexible, capabilities will be built in a coordinated and modular fashion, using commercial off-the-shelf applications and outsourcing when feasible. MMS's approach is driven by customers and stakeholders, focused on mission and strategy, process-efficient, and technology-enabled.

MMS will also work closely with the Bureau of Land Management to ensure data exchange compatibility with future onshore oil and gas program applications.

FY 2003 Budgetary Impact

To address these challenges, we are requesting \$5.0 million to accommodate the increased demand for services in the GOM region, and \$8.7 million as first-year funding for development of OMM's E-government initiative.

MINERALS REVENUE MANAGEMENT PROGRAM ACHIEVEMENTS

Reengineered Program, Processes, and Systems

FY 2002 brought the culmination of many fundamental changes that were presented in the Roadmap to the Future published in November 1998. In Fiscal Year 2001, the MRM realigned its organizational structures and resources to support the reengineered business processes that will yield the significant and recurring benefits sought from the royalty reengineering initiative. In its realignment MRM also changed its name from Royalty Management Program to better reflect the program's mission. The new MRM organizational structures were developed based on extensive input from employees and in close consultation with industry, State, and tribal partners.

In Fiscal Year 2002, MRM implemented a new systems infrastructure to support our reengineered business processes. These fundamental changes to organizations, infrastructures, and processes require significant new skill sets, bringing opportunities to build knowledge of new systems, understand relationships, develop expertise, and refine processes. The two reengineered end-to-end business processes support the continued emphasis on our Indian trust responsibilities as well as help us achieve our stretch goals.

- The Financial Management Process manages the information and money that flows through the MMS to program beneficiaries. The new process shortens the receipt and distribution cycle, providing beneficiaries with access to their funds sooner.
- The Compliance and Asset Management Process ensures that all revenues, whether received through in-kind or in-value royalties, are paid timely and accurately. This process introduces fundamental change to the way MMS has historically done compliance work. Instead of focusing on payors in evaluating royalty payments, the MRM now focuses on properties and producing areas. This new process introduces a significant reduction in business cycle time, with a goal of completing all compliance work, including audit, within 3 years or less after the payment was made. With the property and producing area focus, this process also well positions the MRM to support its royalty in-kind asset management strategies.

Consummate Asset Manager

The asset management concepts developed through reengineering and demonstrated by the RIK pilots and operational model support MRM's mission to be "the best in the business", pursuing fair market value and cost-effective collection and disbursement of royalties whether collected in-kind or in-value. MMS is currently focusing its development of the RIK asset management strategy in the Gulf of Mexico. At present, about 84 percent of the Federal oil and gas revenues are produced from leases on the Outer Continental Shelf. Most of these revenues come from the Gulf of Mexico, which offers the following asset management advantages:

- Close proximity to market centers
- Access to extensive systems for the delivery of mineral production to buyers
- Relatively few lease contracts to administer

In Fiscal Year 2002, MMS began the development of the automated infrastructure to support the gas RIK program. When complete, this development effort will provide the needed tools to support gas RIK business processes. MMS expects to complete implementation of the RIK gas automated infrastructure in early Fiscal Year 2003.

Indian Trust Responsibilities

In accordance with the Department's American Indian trust responsibilities, MMS has a special dedication to the tribes and individual American Indian mineral owners. MMS serves American Indian tribes and individual American Indian mineral owners by ensuring that they receive accurate returns for mineral production on their land. Distribution of payments is made twice monthly for revenues collected for leasing and production activities on Indian lands.

In response to feedback from the Indian community, MRM proposed a separate royalty valuation rule for crude oil produced from Indian leases. The new rule, when final, will add more certainty to the valuation of oil produced from Indian lands, eliminate reliance on posted oil prices, and address terms unique to Indian leases.

The rule is expected to result in additional Indian oil royalties of approximately \$4.7 million.

In Farmington, New Mexico, MMS participates in a Departmental effort, implementing a new concept in serving our Navajo constituents. The Farmington Indian Minerals Office (FIMO) unites employees from the Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), and MMS, under one director for outreach, inspection, enforcement, and mineral revenue compliance services to industry and American Indian stakeholders. The FIMO office was established as a permanent DOI office on September 28, 2001. In addition, the Department's Indian Minerals Steering Committee, made up of representatives from BIA, BLM, MMS, and the Office of Special Trustee for American Indians (OST), is assessing the feasibility of expanding the program to other geographic areas having a significant population of Indian mineral leases and lessees.

MINERALS REVENUE MANAGEMENT PROGRAM CHALLENGES

Continuous Improvement

MRM's reengineering initiative has provided a new financial system, a robust data warehouse, and an array of new tools and applications for financial management and mineral revenue compliance. When fully realized, the reengineering initiative will dramatically modernize both the financial and the compliance and asset management business processes and supporting systems. MRM plans to gradually introduce additional enhancements, especially in the area of mineral revenue compliance. As these changes are embraced and applied by the compliance staff, the environment will continue to allow for more and more changes and improvement. This phased approach was anticipated from the outset of the reengineering effort in order to allow for staged implementation as more knowledge is acquired and applied.

These new processes and system enhancements address MRM's continuous improvement objectives for mineral revenue compliance. However, several offsetting factors contribute to the need for an overall increase in operations and support funds during Fiscal Year 2003 to support MRM's new information technology environment:

- Robust new tools and capabilities will improve MRM's ability to accomplish its mission and goals but will require ongoing maintenance and support.
- The new systems and tools, coupled with growing requirements for remote access, place an increased demand and a growing dependency on MRM's networks and enterprise systems. This requires continuous upgrades to ensure a stable, secure computing and communication backbone for the new systems.
- Industry is anticipating major cost increases for enterprise software systems (database, operating systems, office automation, etc.) upon which our new systems and networks rely. For the past 5 years, IT professionals' salaries have been increasing at a rate greater than 10% per year in the Denver area. The only way MRM has been able to maintain adequate funding for its primary IT providers is by reducing enhancement work performed on systems scheduled for replacement because of the reengineering effort. The cumulative effect of the increased costs of IT professionals and the implementation of the reengineered system prevent a similar approach in Fiscal Year 2003.

Expanding RIK Opportunities

The President's November 13, 2001, decision to fill the SPR greatly expands the role of RIK in the Gulf of Mexico (Gulf). When completed in 2005, MMS will have delivered approximately 120 million barrels of crude oil taken in-kind from Federal leases in the Gulf to onshore market centers for utilization by DOE in filling the SPR. There are associated transportation costs and a need to expedite the oil RIK system as a result of the President's decision to fill the SPR. MMS has requested funding for an automated oil RIK system in Fiscal Year 2003, which will enable the program to handle the added SPR effort. Timing for the implementation of the oil system depends on funding availability.

The SPR RIK initiative at 130,000 barrels/day and the continuation of the Small Refiner Program at some 50,000 barrels/day, will result in much of the Gulf oil production royalties being taken in-kind.

FY 2003 Budgetary Impact

To address these challenges while maintaining our accomplishments, we are requesting \$2 million to cover increasing automated systems operations and maintenance costs. Additionally, we are requesting \$6.015 million to fund development of the automated infrastructure to support the expanding oil RIK program.

MMS'S FISCAL YEAR 2003 BUDGET REQUEST—HIGHLIGHTS

The MMS budget request totals \$281 million, a net increase of \$21.5 million or slightly more than 8 percent above the 2002 enacted level of \$259.5 million. The \$21.5 million increase combines program decreases of \$14.3 million with \$3.6 million for uncontrollable and related cost changes (primarily pay raises and GSA rent increases); \$21.8 million for programmatic increases, and \$10.4 million for a government-wide legislative proposal to shift to agencies the full cost of the CSRS and the FEHB Program for current CSRS employees. In addition to the programmatic increases described above for the OMM Program (+\$13.7 million) and the MRM Program (+\$8 million), we are requesting the following decreases:

- a decrease of \$0.8 million for the Center for Marine Resources and Environmental Technology which will be eliminated due to higher priorities for oil and gas exploration and extraction; and
- a decrease of \$0.8 million for the Marine Minerals Technology Center which will be eliminated due to higher priorities for oil and gas exploration and extraction;
- a decrease of \$0.5 million for the Offshore Technology Research Center that will have funding reduced due to higher priorities for oil and gas exploration and extraction;
- a decrease of \$3.0 million for the Royalty Legacy System, which was replaced by the reengineered system in Fiscal Year 2002;
- a decrease of \$2.2 million for the Environmental Studies Program that will allow for the continuation of existing projects and starts for limited but critical new projects;
- a decrease of \$1 million in the Pacific OCS Regional office from a review of its operations; and
- a decrease of \$6.0 million for the completed gas management system acquired in Fiscal Year 2002 in support of continuing RIK pilots and longer-term projects.

Revenue Sources

FY 2003 Proposed Operating Appropriations/Offsetting Collections <i>dollars in thousands</i>	
Royalty and Offshore Minerals Management	\$174,640
Offsetting Collections	\$100,230
Oil Spill Research	\$6,105
Total	\$280,975

The MMS receives funding for operations from three sources: the Royalty and Offshore Minerals Management (ROMM) appropriation, Oil Spill Research (OSR) appropriation, and offsetting collections (primarily from rental receipts from offshore leases). Since 1994, when MMS received authority to retain a portion of OCS rental receipts (offsetting collections) the share of the agency funded with appropriated funds has decreased substantially. The share of MMS's total budget funded from offsetting collections peaked in Fiscal Year 2000 at 52 percent. In Fiscal Year 2003, approximately 37 percent of MMS's funding is proposed to come from offsetting collections.

Several years ago, dramatic increases in leasing activity in the GOM made it possible to shift a larger portion of MMS funding from direct appropriations to offsetting collections. The increased GOM activity was made possible by new technologies that allowed exploration and development in very deep water. Examples of these new technologies included the rapid expansion in the availability of high quality 3-dimensional seismic data, inexpensive geo-science workstations, and seismic processing advances that allowed geo-scientists to look below the previously impenetrable layers of salt. In addition to the technological advances, Congress enacted legislation (Deep Water Royalty Relief Act of 1995) that has encouraged deepwater exploration and production.

The combination of very favorable geologic characteristics, technological advances, and economic incentives caused leasing in the GOM to increase almost ten-fold between 1992 and 1997. In 1998, however, the number of tracts leased in the two GOM sales declined by 37 percent from the record levels of 1997. While 1998 marked the first time that the number of tracts leased in the GOM had declined in the past several years, the number of total active tracts actually increased in 1998 by over 12 percent. In 1999, the number of new tracts leased (333) fell 71 percent below the 1998 level and 81 percent below the peak level reached in 1997. In Fiscal Year 2000, the number of tracts leased (553) in the GOM increased by almost 70 percent over Fiscal Year 1999. In Fiscal Year 2001, the number of tracts leased grew again as 753 new leases were issued.

While Fiscal Year 2000 and Fiscal Year 2001 saw the number of tracts leased increase, MMS does not expect new leasing activity to return to the Fiscal Year 1996–1998 level in the near future. Because of this lower level of new leasing activity, MMS is requesting the cap on currently authorized offsetting collections be lowered to \$100.230 million in Fiscal Year 2003.

In addition to appropriations for operations, MMS receives appropriations for distribution of the states' share of onshore mineral receipts. In Fiscal Year 2003, MMS estimates that the states' share of these onshore mineral receipts will be approximately \$674 million. This amount is slightly more than our Fiscal Year 2002 estimate of \$670 million.

FY 2003 Proposed Permanent Appropriations (dollars in thousands)	
Mineral Leasing Associated Payments (MLAP)	669,880
National Forest Fund Payments to States (Forest Fund)	3,475
Payments to States from Lands Acquired for Flood Control, Navigation, and Allied Purposes (Flood Control)	951
Total	\$674,306

CONCLUSION

Mr. Chairman, that concludes my written testimony. At this time I would be happy to answer any questions you or other Members of the Subcommittee may have regarding any aspect of our budget request for Fiscal Year 2003.

Mrs. CUBIN. Thank you. We will now begin our questioning. I would like to remind the members that the Committee Rule 3(c) imposes a 5-minute limit on questions. I will begin the questioning.

I want to make a little statement first, actually. It never ceases to amaze me that the Interior Department and the agencies that you work for are charged with—are probably the only agency in government that actually brings in a lot of money for the Treasury of the United States and for the States, and you are also charged with looking after the environment, doing it scientifically, doing it well, and yet every time the administration, this one or others, want to cut—whack—they cut the Department of Interior, and it just doesn't make sense to me.

I really do relate to Mr. Rahall's opening statement, and want to point out, just to emphasize it, money that was paid into the AML by the State of Wyoming for 2001, \$120,987,000, the 50 percent that Wyoming got was \$28,820,000. West Virginia paid in \$35,640,000. They got, their half was \$23,490,000. Washington paid in \$1,720,000. They got nothing. It is not right, and we have to work together to try to change that.

But now that I have had my say, I will start the questioning with Director Jarrett. The authorization for fee collection under Title IV of SMCRA for the Abandoned Mine Land Trust Fund expires in September of 2004, as you know. I wondered, what is the position of the administration regarding the extension of this fee collection authority? Do you anticipate that the administration will seek any other adjustments to Title IV of SMCRA?

But before you answer please be sure to take into consideration that my State alone pays nearly 42 percent of the—it pays 42 percent of the entire AML fee, and yet we receive 20 cents, roughly 23 cents back on the dollar. And then we find a way to spend the rest of it, even though the interest would meet the needs that we have, interest alone.

So what is the administration planning on expiration of this fee?

Mr. JARRETT. Currently the administration does not have a position on reauthorization. It is my plan to start identifying all of the various positions on reauthorization, and there are many splits on this issue, as you know. Some of the States, such as Wyoming, that have certified completion of the AML inventory, have a different position, I am sure, than States like Pennsylvania who have a lot of unreclaimed abandoned mine lands.

But we want to identify all of those various positions on reauthorization, and at a minimum evaluate what the impact of those positions would be on our ability to complete at least all of the Priority 1 and Priority 2 AML projects throughout this country. We have done that evaluation assuming that there is no change other than an extension of the current system, but we want to do that evaluation for a lot of the other proposals and options that we have been hearing about. And of course that information we will make available to this Committee or to anyone, so that we can all make intelligent and wise decisions in the future based on what we think is best for the American people.

At the same time, I think it is very important that we also explore ways to make that program more efficient and to learn ways to leverage the money a little bit better than we have in the past. And I can give you just one example from my experience in Pennsylvania.

We got a little friendly competition going between our AML folks and our Title V folks over who could get the most AML reclamation done, the Title IV folks with their at the time \$22 million AML grant from OSM, or the Title V regulators through creating remaining incentives with the industry. And that was a program we worked very hard on, and within a few years we were getting about \$30 million worth of free reclamation through re-mining, compared to the \$22 million we were getting from our AML. So I think it is very important that we also explore those options for leveraging those dollars better.

Mrs. CUBIN. Well, I hope that you will stay in touch with us throughout the process of the decisionmaking on what changes might be made, because it would really be better to be working together as we go rather than have something dumped on us that we will have trouble—

Mr. JARRETT. OK. We will be glad to do that.

Mrs. CUBIN. Thank you. Funding for the implementation of State regulatory programs under Title V of SMCRA has been reduced this year by about \$1 million in comparison to last year's amount, and is \$6 million less than what the coal mining States had requested. While the proposed budget recognizes special needs in West Virginia that I don't disagree with, and probably because of the fierce debate over mountaintop mining, will OSM be prepared to assist other States that find themselves with additional funding needs, should they too require it to adequately comply?

Mr. JARRETT. I think the Title V grants are actually \$1 million more, but \$2 million extra was going to West Virginia to help us through some of the problems there. That did result in sort of a net \$1 million decrease that is spread out among the other States.

We are still in the process of identifying any problems that that cut will have in any of the other States, and we expect there to be some problems, but by and large we have had more concerns raised to us over the proposed cut in the Title IV grants than in the Title V grants. But we are prepared to work through that with all of the States and provide whatever assistance they need, should that become necessary.

Mrs. CUBIN. My time has expired. I would like to ask unanimous consent that each member be allowed to question 10 minutes rather than doing two rounds.

Mr. KIND. That is fine, Madam Chair.

Mrs. CUBIN. The next question is for Dr. Leahy. I am just going to go directly to homeland security, although we have other questions that certainly we hope that you will all answer in writing. What is the Department of Interior's involvement in homeland security?

Mr. LEAHY. As I pointed out in my testimony, we have supplied a number of topographic maps. We were also involved in an effort to provide spatial data focused on the 120 cities that are being looked at in detail, and we will be providing the information along with our partners in an organization called NEMA.

So that is just one area. We are also looking at water resources areas in terms of ways to monitor water resources more effectively, particularly biologically as well as chemically. Also, we had involvement in terms of the World Trade Center collapse, in terms of using techniques that have traditionally been used in the mineral resources area to look at the composition of the collapsed piles up there.

Mrs. CUBIN. So how have your efforts been funded?

Dr. LEAHY. Basically, we have funded them through our existing appropriation. For example, in the 120 cities effort, one of our major efforts in the cooperative topographic mapping effort is to create more recent topographic maps, and clearly the priorities will be focused on the 120 cities initially.

Mrs. CUBIN. So we have appropriated from Congress a lot of money to help with that terrorist attack, and do you have any idea how much—I know you don't, so I won't even ask that right now, but it seems that there ought to be some money coming to you, as well.

Dr. LEAHY. In fact, we are in discussions with OMB in terms of a potential supplemental that they may push forward.

Mrs. CUBIN. Good. \$500,000 has been budgeted to update the Geothermal Energy Assessment, which was last updated, as you said in your testimony, in 1979. When do you expect that assessment to be completed, and will you be working with the land management agencies, the BLM, within the Department?

Dr. LEAHY. Basically, the assessment is not a national assessment. It will focus specifically on the Great Basin region. To do a national assessment of geothermal would require significantly more resources than \$500,000. We have decided to target on an area that has the highest potential initially. I believe that study will probably take on the order of 3 years. We are obviously in the process of planning that. Depending on the outcome of the budget, we will proceed.

BLM also has funds in their budget request, but they, much like we are doing in NPRA, the survey will be looking at the resource base, whereas the BLM—which we will work closely with, by the way—will be looking more at the leasing issues associated with the development of geothermal.

Mrs. CUBIN. And that is certainly something that needs to be done, as well.

Now to Ms. Denett. We anticipate that there will be increased interest in developing and producing renewable energy resources. In this light, the royalty calculation methods for geothermal energy production, particularly low temperature geothermal resources used for direct heating applications, are complicated and an administrative nightmare, frankly. Regarding low temperature geothermal resources, how much revenue does MMS collect annually for royalties?

Ms. DENETT. From geothermal?

Mrs. CUBIN. Low temperature. Do you know that?

Ms. DENETT. I don't have that number offhand. We can provide it to you.

Mrs. CUBIN. Do you think that the amount collected—well, I guess if you don't—

Ms. DENETT. It is only a couple million dollars.

Mrs. CUBIN. Yes, it isn't very much.

Ms. DENETT. It is not very high, but I would have to give you the breakout. I would have to check into that.

Mrs. CUBIN. OK, but I think we can agree that it is a real minimal amount.

Ms. DENETT. Very small, right.

Mrs. CUBIN. And do you think that the amount collected justifies the effort that is required to collect those low temperature geothermal resources? I personally think that the rate is discouraging and the process is discouraging to produce low temperature geothermal.

Ms. DENETT. I know that in 1999 there was interest from the California congressional delegation that we re-look at the geothermal evaluation regulations, and in fact the agency issued an Advance Notice for Proposed Rulemaking to see if there was an interest in reevaluating, or should we be making changes to the valuation regulations.

The comments we received, and we also had a workshop, ultimately everyone from the congressional delegation as well as from

industry and State representatives, it was decided that we should leave well enough alone, that the regulations that are there were working, and that in fact for unique situations within the framework of the regulations we could develop with a particular company, whichever the geothermal company is, and with the collaboration of the State—California, Utah, etcetera—that we could develop future valuation methodology through a settlement process, and we have done that in numerous cases.

I will add one other thing, that there has recently—a couple of weeks ago there was a renewable conference, a meeting with the various agencies to develop what else can we do, and there were some companies from the geothermal industry that again put on the table or at this time put on the table, maybe we should re-look at the geothermal valuation regulations to simplify. We will be looking at all of those things.

Mrs. CUBIN. Thank you. My time has expired. I now recognize Mr. Kind.

Mr. KIND. Thank you, Madam Chair. And thank you again for your testimony here today, and I do echo Ms. Cubin's sentiments that there seems to be a game in play that is played out every year with the administration's budgets, where the Department of Interior is always on the chopping block, where those of us who know what value comes of these very valuable programs understand that there is going to be an effort to try to restore the funds, and the administration is able to stand back and say, "Well, it's just the spendthrift Congress. That's why we're in deficits and everything else." And I just think it is an unfair game. If they would just submit some more realistic budgeting, rather than this constant battle with the appropriators and trying to restore funding for crucial programs.

Dr. Leahy, let me start with you. You indicated that \$500,000 for the geothermal survey is going to be mainly for the Great Basin area. Are you going to be able to complete a complete survey of the Great Basin area with \$500,000, or is more going to be required for that 3-year study?

Mr. LEAHY. I think the initial effort will focus primarily on re-evaluation of the initial assessment and bringing it up to modern standards. We will have to look at what additional data is available out there to really determine if the resources are adequate.

Mr. KIND. Do you have any cost estimate of what it would take to have a true national survey for geothermal potential in the country?

Mr. LEAHY. I would prefer to provide that for the record. We certainly know what it cost us the first go-round.

Mr. KIND. Right. Well, I would be interested in working with you on that. Obviously we have some shared interests here. I know Mr. Gibbons from Nevada, too, has been a pretty strong proponent of developing the geothermal potential in this country, too. I think if we can get a good snapshot of what that potential actually looks like, we might have a better idea of how it can fit into the long-term energy policy in this Nation.

Mr. Leahy, I will stay with you for a second. In the President's proposal he is calling for a \$500,000 in the Central Great Lakes Mapping Coalition. As you are aware, this is binational. Canada is

chipping in, as well as the States in the Upper Midwest area, the Great Lakes area. What would be the practical impact of that funding reduction as far as the mapping program?

Mr. LEAHY. OK. I don't think Canada is chipping into that effort, but it is a bi-state effort in terms of a partnership between the U.S. Geological Survey, the State of Ohio, the State of Indiana, the State of Illinois—and, let's see, who have I missed?—State of Michigan. So there are five partners in it.

It is basically a recognition that traditional geologic mapping has tended to look at the bedrock. However, in that part of the world there is a very thick cover of glacial deposits that basically is where humans interact most with the environment, and it supplies the water resources for the area, it supplies the sand and gravel resources, it is what we farm on, so there are pathways for water quality issues and so forth.

The focus of the effort is to provide modern, three-dimensional geological maps of the glacial deposits of that area. There are an enormous number of maps, and it would be a 25-year effort to basically map all the surficial areas of those States.

There has been a prioritization to develop those new techniques, be they geophysical or even three-D visualization, to show this complex information. There are pilot efforts in terms of individual quadrangles in each of those States, and the elimination of that will eliminate the mapping activities to look at those surficial deposits.

Mr. KIND. Could you do me a favor and just double-check your facts in regards to the Canadian role in what is taking place up there? I know they have some sort of involvement. I am just not sure of the extent of—

Mr. LEAHY. We have done a lot of collaboration with the Canadians in terms of geologic map standards, and in fact the State Geologist of Illinois is a former Geologic Survey of Canada employee. He is a U.S. citizen, actually. But certainly there have been many discussions with the Canadians, but I don't believe there has been any cost-sharing, but I will check.

Mr. KIND. Thank you.

Ms. Denett, it is nice to see you again. Thanks for your testimony, as well. Your testimony indicated you are anticipating about a \$4.2 billion raise in regards to offshore/onshore leasing and mineral development. In 2001 I believe it was over \$6 billion or so, so it is roughly a \$2 billion dropoff from just the previous year. Could you explain to us what factors are contributing to that \$2 billion dropoff?

Ms. DENETT. Sure. A lot of it deals with prices and production, so it depends on level of production and the prices of the oil and the gas and the coal, and that has a direct impact on the revenues that we collect, and as well the bonus bids that come in from the offshore program, which we collect close to a couple billion or so dollars just from those type of activities.

Mr. KIND. Thank you.

Ms. DENETT. We can give you a more detailed breakout if you would like.

Mr. KIND. That would be great, yes, some type of breakdown, show us what factors are contributing to that. I would appreciate that.

Director Jarrett, again in the proposed budget there is about a \$17 million reduction, I believe, if I have got my facts right, for the Abandoned Mine Land reclamation grants that would be available. According to some quick calculations, that would leave roughly \$144 million left which would provide a potential of roughly 6,900 to 7,000 acres or so of land that could be reclaimed under the proposed budget. What could \$17 million do in regards to the number of acres that potentially could be reclaimed? How many acres?

Mr. JARRETT. I could get you that number, but from my perspective that is not an important number. The primary purpose of the AML program is to abate hazards to human health and safety, and that is one of the concerns that I have had.

One of the things I think we need to do, that I addressed earlier, is come up with better ways to measure the value and answer the question, what are we buying with those dollars, because it is not reclaimed acres. We need to ask ourselves, why are we reclaiming those acres, and it is to save lives. It is to protect people and children. That is the reason that we want to spend dollars to reclaim an abandoned high wall that is near a highway or a school yard, as opposed to one that is many miles from a population center.

Mr. KIND. Let me just rephrase that. What won't get done with a \$17 million shortfall?

Mr. JARRETT. I can't answer that question because we haven't measured it properly. If you want an answer to the question in terms of acres, it will be 6,900 acres versus 8,200 acres that won't get done. But there are other programs out there that we are looking at to help get more problems corrected.

One of the programs in the department's proposed budget is the CCI program, which looks to me like about \$50 million would be available on a competitive basis for our State AML authorities, to use AML dollars to match against those dollars. I personally think that is a better delivery mechanism, because it covers environmental remediation projects that go beyond just those related to mining and allows the department to focus on the most important environmental problems, as opposed to just the important mining ones. And it also requires that you have some other participation from not just local governments but from citizens, and I think any time you can start building coalitions out there, you are going to end up with a better product.

Mr. KIND. Let me also state, as you and your department get in a position to start taking a look at reauthorization of AML and that, we would be interested in working with you, and trying to get some feedback from you on some thoughts that we would like to share with the administration on where we need to take the program and whether it is worthy of reauthorizing when it is due to expire.

Mr. JARRETT. OK. I would be more than happy to do that.

Mr. KIND. Dr. Leahy, can I throw you a quick curve? I know we don't have specific jurisdiction over these water resource issues and that, but I am very concerned, there are quite a few of us in Congress that are very concerned in regards to the funding cutback for

the National Stream Flow Information Program, you know, the stream gauging, in light of the flooding and the drought conditions we are facing.

I think this is not the appropriate time to have a significant reduction in stream flow gauging information that USGS has been doing. There is a \$2 million proposed cutback. What would be the impact of that on the work that is being done right now?

Mr. LEAHY. The impact would be the loss of 130 stream gauges nationally. And those 130 gauges have been identified on a State-by-State basis, and we have a priority order for our stream gauges. And currently the length of record is extremely important, so we don't want to lose that length of record, so they tend to be some of the ones that were added most recently. The priorities were established with our cooperators at the State level.

Mr. KIND. Right.

Mr. LEAHY. Many of these, of course, are co-funded with the States, so it is particularly challenging.

Mr. KIND. There is a lot of cost-sharing, and the data that is being collected I think is invaluable. And if we start seeing a significant dropoff or a discontinuation of the collection of the data, I think it is going to start throwing things out of whack. So we are going to need to get that word out, and I will be happy to work with you in regards to that program.

And, finally, you know, you have the proposal on the Toxic Substances Hydrology Program of taking the money, shifting it over to the National Science Foundation competitive grant process. But again it seems to me, from personal experience in working with the experts at USGS and the fine work that they are doing, there is a certain amount of quality and expertise that has been built up now within USGS in order to conduct this important work that is being done under the hydrology program and that. Could you give us a little bit of insight as far as the reasoning or the justification in this shift away from USGS expertise?

Mr. LEAHY. Well, certainly the NSF is very capable of high quality science, and that is one of issues here, is to ensure that the water quality work in terms of toxics is done in the highest quality manner.

Mr. KIND. I assume NSF is just turning around and contracting out this money to private entities.

Mr. LEAHY. There is a transition plan that is being developed between the USGS and NSF, that will take a period of 3 years, I believe, to effect the transition. Clearly the toxic program, one of the benefits is, these are long-term field laboratories, so that the body of information that is collected is a research value that supports or is the foundation for the next research question that comes up. We are hoping, as part of the transition, that that capability is not lost, and discussions are underway.

Mr. KIND. I think this is going to require more careful thought and study and that before we go down that road, because I can just think of a myriad of private property interests, too, and concerns that might be raised with private contracting doing this type of data collection, where safeguards are already built in with the work that USGS is doing.

Well, thank you again. I have gone over my time. Thank you, Madam Chair.

Mrs. CUBIN. Thank you, Mr. Kind.

Perhaps an answer to that would be to allow USGS scientists to compete with other scientists in whoever would get the grants. I don't know, but I agree with you that you hate to lose institutional knowledge that you have already built up and things that you have already paid for.

I would like to thank the witnesses for their testimony, and thank Mr. Kind for his questions. I know that there will be more questions that will be submitted to you in writing, and we do ask you to respond to those. The hearing record will be held open for 10 days for the responses.

So if there is no further business before the Committee, the Committee now stands adjourned.

[Whereupon, at 11:17 a.m., the Subcommittee was adjourned.]

[Responses to questions submitted for the record by the Minerals Management Service follow:]

FOLLOW-UP QUESTIONS FOR THE RECORD

MINERALS MANAGEMENT SERVICE

HOUSE RESOURCES COMMITTEE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

MARCH 14, 2002, OVERSIGHT HEARING ON:

FY 2003 U.S. GEOLOGICAL SURVEY; THE OFFICE OF SURFACE MINING,

RECLAMATION & ENFORCEMENT; AND THE MINERALS MANAGEMENT SERVICE

Questions from Chairman Cubin

Question 1. (a).

We anticipate that there will be increased interest in developing and producing renewable energy resources. In this light, the royalty calculation methods for geothermal energy production, particularly low-temperature geothermal resources used for direct heating applications, are complicated and an "administrative nightmare."

Regarding low-temperature geothermal resources:

- a. How much revenue does the MMS collect annually for royalties on low-temperature geothermal resources?
- b. Do you think the amount collected justifies effort required to collect royalties on low-temperature geothermal resources?
- c. Do you think the royalty rate is discouraging use of low-temperature resources?

Answer:

- a. How much revenue does MMS collect for royalties on low-temperature geothermal resources?

The Minerals Management Service does not require the reporting of low vs. high temperature geothermal royalties on our financial system. However, equating low-temperature with direct-use, we currently have seven geothermal leases in California, Nevada, and New Mexico that produce geothermal fluids for direct-use operations. MMS historically collects between about \$30,000 and \$70,000 per year in royalties for these resources, mostly from the Honey Lake project in northern California.

- b. Do you think the amount collected justifies the effort required to collect royalties on low-temperature geothermal resources?

Low-temperature geothermal resources have broad commercial applications (for example, aquaculture, greenhouse heating, vegetable dehydration) that displace large amounts of conventional fuels. As such they are a valuable public asset. MMS expends little additional effort in collecting royalties on these resources as opposed

to conventional fuels, as they are reported in the same manner as oil and gas royalties.

c. Do you think the royalty rate is discouraging use of low-temperature resources?

To our knowledge, the royalty rate applied to direct-use resources, 10 percent—the minimum allowed by statute—does not appear to be discouraging direct-use applications.

Question 1. (b).

Regarding medium- and high-temperature geothermal resources, do you think that a simpler royalty calculation method, based on gross proceeds (similar to oil and gas royalty determination) would be equitable to the producers, while resulting in a net savings from what is currently devoted to the geothermal royalty management program?

Answer:

MMS's current valuation rules do provide for royalties based on gross proceeds, providing the geothermal resource is actually sold. Few geothermal resources, however, are subject to sales transactions, thus requiring valuation by indirect methods such as a netback from the sale of electricity. (The Geothermal Steam Act, as amended, 30 U.S.C. 1001 et seq., provides for royalty only on the produced resource itself and not on a created product, such as electricity. Thus, for value to be directly determined by gross proceeds, those proceeds must come from a sale of the resource.)

There are simpler, less costly indirect methods than the one currently commonly used—the netback procedure—to value those medium- and high-temperature resources used to generate electricity. However, when MMS reopened its current valuation rules to public comment and potential revision in 1999, with one of our express purposes of finding an equitable alternative to netback valuation, the geothermal industry responded against any changes, indicating that the current netback procedure was working as intended. As a result, MMS withdrew its notice of proposed rule-making. The MMS recognizes the difficulty in auditing royalties paid under netback valuation and is open to initiating discussions on the current rules if interest is expressed.

Question 2.

Senator Boxer (D-CA) recently introduced S. 1952, the “California Coastal Protection and Louisiana Energy Enhancement Act” to buy out the interest of 40 non-producing leases on the OCS off the coast of California in exchange for credits that can be applied to bid on lease sales in the Western and Central Planning Areas of the Gulf of Mexico or to make royalty payments on existing production in those planning areas. If this legislation were to be enacted, what effect would there likely be on the U.S. Treasury?

Answer:

Due to the way the language of the bill is constructed, there could be two possible scenarios with different associated costs. That is because the language of the bill requires that, for the lease credits to be offered, all eligible lessees must agree to the terms of the settlement offer as they relate to their individual leases. Under the first scenario, it is very likely that some of the lessees may not accept the settlement offer. If that were to be the case, the effect on the U.S. Treasury is zero.

Under the second scenario, if all eligible lessees agreed to the terms of the settlement offer as they relate to their individual leases, then the language of the bill stipulates that the value of the credits is to be calculated in an amount equal to the sum of the amount of consideration paid the Federal government for the eligible lease; and the difference between the amount of direct expenditures made after the date of issuance of the eligible lease in connection with the exploration and development of the eligible lease, and the amount of revenues earned from the eligible lease before the date of cancellation.

MMS has no way to accurately calculate the effect on the Federal Treasury based on the criteria above since we have no information on the amount of direct expenditures made on the leases by the current lease holders nor the amount of revenues earned from the eligible leases. However, MMS does have the data on bonus and rental amounts paid on the leases to the Federal government by the original lease holders. Specifically, the 40 undeveloped leases in the Pacific region are composed of 36, which were granted suspensions in late 1999 and 4 which expired. For the 36 leases, the total amount of all cash bonuses paid to the Federal government was about \$1.1 billion (current dollars at time of payment). The total bonuses paid the Federal government on the 4 leases that expired was about \$144 million. Rentals paid on the 40 leases were—about \$6.5 million.

It is MMS's understanding that the current lease holders paid the original lessees much less than the \$1.1 billion.

Question 3.

Recent news articles have reported that peer-reviewed studies commissioned over the past twenty years by MMS "strongly suggest that oil and gas rigs in the Gulf amount to islands of intense mercury contamination..." and that they may be poisoning seafood. Was MMS consulted prior to the publication of these stories? Can you comment on the accuracy of those claims?

Answer:

The news articles mainly reference one study, the Gulf of Mexico Offshore Monitoring Experiment (GOOMEX), performed by Texas A& M University (TAMU) scientists with MMS funding in 1992 - 1995. MMS had received an anonymous information request, but was not consulted before the initial article was published. The lead scientist for the study, (Dr. Mahlon Kennicutt, TAMU) has explained to the Mobile Register that they had substantially misinterpreted the study's findings, but the newspaper fails to accept the scientific interpretation of data. In fact, the study demonstrated no differences in mercury levels found in fish and other organisms living near the three oil/gas platforms and those living far away from the platforms. Therefore, the study concluded that drilling operations at platforms do not contribute to mercury in marine organisms. This was also the conclusion of an article on the study in the scientifically peer reviewed Canadian Journal of Fisheries and Aquatic Sciences.

Question 4.

Would you please describe MMS' efforts to minimize and mitigate the impact of offshore drilling and production activities on the environment and the effect the proposed budget has on this aspect of MMS' environmental and compliance program?

Answer:

To minimize and mitigate impacts from offshore activities, MMS evaluates the potential effects during pre-lease and post-lease activities. The key products of this effort are identification and implementation of mitigation measures designed to protect sensitive biological communities and habitat, air quality, archaeological resources and protected species. MMS studies, in general, are designed to contribute to the knowledge base and enhance the MMS decision making process; and those efforts will continue. The less than 2 percent reduction of funds from the fiscal year 2002 enacted level should not limit our ability to address unforeseen or priority environmental issues.

Question 5.

The royalty-in-kind (RIK) pilot programs have had their share of controversy. Would you describe MMS' efforts to measure the success of both on-shore oil and off-shore gas RIK programs? Does MMS believe that the Federal Government is getting its fair share when royalty is collected in kind rather than in value? What effect, if any, will the recent circuit court decision styled IPAA v. DeWitt have upon in-kind versus in-value analyses?

Answer:

Beginning in 1998, MMS commenced a series of royalty-in-kind (RIK) pilots to test and evaluate the viability of MMS taking its production royalty-in-kind and selling it through a competitive bid process. For the first pilot, the MMS and the State of Wyoming's Office of State Lands and Investments cooperatively developed an oil RIK sales initiative with first deliveries beginning October 1998 under six-month contracts. After four succeeding sales, the MMS conducted an assessment of the success of the initiative and published for comment its draft report of findings in March 2001. The following criteria were used for evaluation:

1. Simplicity, accuracy, certainty for lessees and government;
2. Revenue neutral (or better) for government; and
3. Reduced administrative burden for lessees and government.

The assessment concluded that:

1. The RIK approach simplifies the royalty process and significantly reduces the period of uncertainty for lessees and government;
2. RIK receipts were at least revenue neutral compared to the in-value approach; and
3. The RIK approach can result in administrative savings for industry and government.

Regarding natural gas, MMS initiated its first RIK pilot in a cooperative effort with the State of Texas General Land Office. The pilot was initiated in 1998, with first deliveries from Outer Continental Shelf Section 8(g) leases beginning in 1999. The MMS is nearing completion of its evaluation of this pilot and will be publishing its draft report for comment in Spring 2002. Initial assessment results indicate that for sales of RIK gas at robust market centers, under standard contract terms, we will get the same price as anyone else who sells that way.

Based on its assessment results to date, MMS believes that, in its RIK Pilots, the Federal Government is receiving revenues at least equivalent to what would be received if royalties were collected in-value.

MMS is evaluating the impact of the circuit court decision in *IPAA v. DeWitt* on its royalty program. Currently, MMS believes that the court decision will have little, if any effect on MMS's economic analyses of royalty-in-kind versus royalty-in-value.

Question 6.

In your statement, you say that "...oil and gas will continue to be important during the next 20 to 30 years, and DOE estimates that dependence on oil and gas will increase significantly during that time." You also state that U.S. imports will increase from 56% in 1999 to 70% in 2020. This is a significant increase. Does MMS have any suggestions on how to increase domestic production from the OCS to decrease our dependence on foreign oil?

Answer:

There are several options available which can be taken to increase production from the OCS. These include: 1) continuation of 5-year leasing programs, perhaps with larger/more frontier sales, 2) development of economic incentives to encourage increased production from areas included in these programs, and 3) increased funding of hydrate exploration/production research.

Question 7.

Will natural gas production from the OCS be able to keep pace with its same annual percentage contribution if the anticipated increase of 50%, from 22 TCF to 32 TCF by 2015 occurs? Will MMS' next five-year leasing plan help assure that the OCS can meet the forecasted demand for natural gas?

Answer:

At present, about 25 percent of the Nation's natural gas is supplied from the OCS. With the anticipated 50 percent increase in demand, it is expected that, despite increased OCS production, the percentage supply contribution from the OCS will range from 20 to 22 percent. The next 5-year leasing plan, together with deep water and deep drilling royalty suspension programs already in place, will help ensure that the OCS can meet its projected share of the forecasted demand.

Questions from Ranking Member Kind

Question 1.

MMS collects the royalties from onshore federal and Indian and outer continental shelf mineral leases, and administers the OCS lease program. In 2003, you are projecting that MMS will collect about \$4.2 billion in revenues in 2003 from minerals produced from offshore and onshore Federal and Indian lands. This is about \$2 billion less than MMS collected in 2001. Please explain the drop in revenues.

Answer:

Actually the change from fiscal year 2001 receipts to fiscal year 2003 projected receipts is even more dramatic. MMS collected over \$10 billion in fiscal year 2001. The change in receipts is a factor of declining oil and gas prices over the last three years, overall moderating production levels, and plans to transfer oil to the Nation's Strategic Petroleum Reserve.

	FY 2001	FY 2002	FY 2003
Combined collections (\$billions)	\$10.2	\$5.2	\$4.2
Oil price per barrel	\$26.60	\$19.30	\$18.63
Gas price per mcf	\$5.40	\$2.31	\$2.31
Oil production (millions of barrels)	669.6	666.5	673
Gas production (bcf)	4,643	4,981	5,019
Transfer to Strategic Petroleum Reserve (millions of barrels)	0	14.6	47.5
Transfer to Strategic Petroleum Reserve (\$billions)	0	\$0.3	\$0.9

As can be seen from the above table oil and gas prices declined dramatically from fiscal year 2001 to the projections for fiscal year 2003 (fiscal year 2002 and 2003 prices are estimates in the 2003 budget). Oil prices are projected to decline by 27 percent and gas prices by more than 57 percent. Production levels are projected to climb moderately with oil production growing by 0.5 percent. Gas production is projected to increase at a higher rate, 8.1 percent, but not enough to overcome the more than 57 percent projected decline in prices.

In addition, the decision to add oil to the Nation's Strategic Petroleum Reserve affects projected receipts. The SPR will be filled by taking in-kind Outer Continental Shelf royalties on oil production. This, of course, reduces the dollars collected in fiscal year 2002 and fiscal year 2003. The reduction of adding to the SPR on fiscal year 2003 royalty collections is currently projected to be \$885 million based on OMB economic price assumptions used for preparing the fiscal year 2003 budget and a transfer of 47.5 million barrels of oil.

Question 2.

In fiscal year 2003, the President is requesting an increase of \$11.1 million in appropriated funds for MMS. One area you will spend this increase on is to develop software to allow greater royalty-in-kind collection programs where warranted. What exactly do you expect to accomplish with this effort?

Answer:

The requested funding for systems development is needed to support the MMS's royalty-in-kind program activity. With this funding, MMS will complete the development of the needed systems support to manage business activities that are unique to the in-kind approach versus the in-value approach. These royalty-in-kind business activities include the identification and management of oil and gas volumes from point of production to point of sale or other disposition; management of production imbalances from point of production receipt to production disposition; and contract management for sales, processing and transportation of production. Furthermore, this needed systems support will be integrated with MMS's financial and compliance systems infrastructure. With the completion of the royalty-in-kind development effort, MMS will have the needed systems support for efficiently and cost-effectively executing its asset management strategy of utilizing both the in-kind and in-value options in achieving its business objectives.

Question 3.

MMS also plans to increase funding by \$5.0 million for OCS activities in the Gulf of Mexico to increase oil and gas production in support of the President's energy policy. What exactly will these funds be used for?

Answer:

The requested resources will be used to ensure that offshore operations are conducted in a safe and environmentally sound manner, to assure that the public receives fair value for its mineral resources, and to process industry plans.

* \$0.94 million for leasing and environmental assessment activities

- \$0.24M is for two FTE for lease administration. Lease inventory grew 43 percent from 1995 through 2000. Bonding issues are becoming more complex and more critical.
- \$0.60M is for five FTE to prepare environmental reviews. Special environmental assessments are required for new and unique proposals, such as pipelines for regassification of LNG, commercial waste disposal into salt caverns, and complex pipeline scenarios involving multiple projects and platforms. NEPA and Coastal Zone Consistency workload continues to grow.

- \$0.10M will be used for a periodic journal of Environmental Studies results.
- * \$1.62 million for resource evaluation and decisions
 - \$0.60M for five positions to handle field determinations. Since the passage of the Deepwater Royalty Relief Act of 1995, this has evolved into a resource-intensive responsibility having a huge economic impact to both Government and industry. One determination could result in \$300M more revenues to the U.S. Treasury. Decisions affect billions of dollars of revenue to the U.S. Treasury. If there are about 340 new discoveries in the next 10 years, the impact to royalty payments could be in the range of \$45 billion.
 - \$0.48M for four FTE to collect, process, distribute, and archive technical data and records derived from new wells that are drilled. New wells drilled increased 40 percent in fiscal year 2000. A backlog in this work slows resource assessments, tract evaluations, reserves inventory, and field determinations—all of which affect revenues to the U.S. Treasury.
 - \$0.29M is needed to digitize well logs.
 - \$0.25M will be used for regional sand resource identification
- * \$1.89 million for regulation of operations
 - \$0.24M for two FTE to process deepwater operations plans. Submittals increased by 36 percent from 2000 to 2001. Billion dollar industry projects depend on timely review of these plans. Approval delays cause production and revenue delays.
 - \$0.12M for a corrosion engineer. Aging infrastructure presents a potential prospect of corrosion problems that could result in premature abandonment of some platforms.
 - \$0.12M for a position to deal with the 27 percent increase in pipeline applications.
 - \$0.36M for three inspectors for workplace safety on fixed facilities. This function was previously handled by the US Coast Guard.
 - \$0.24M for two positions to review production completions, and violations for flaring, maximum production rates, and downhole commingling. This is essential to assure ultimate recovery of oil and gas.
 - \$0.15M for engineering and other technical training. Changing technology requires increased training of the current workforce.
 - \$0.585 million for increased helicopter contract costs.
 - \$0.075 million for contractual accident and prevention analysis. Accidents and pollution incidents undermine confidence in program.
- * \$0.25 million for contractual information technology support for the new fiscal year 02 and fiscal year 03 FTE
- * \$0.30 million for one FTE and increased administrative services required for the expanding GOM workload.

Question 4.

MMS proposes to reduce funding for environmental studies by \$2.2 million, the Center for Marine Resources and Environmental Technology (CMRET) in Mississippi by \$800,000, the Marine Mineral Technology Center (MMTC) in Alaska by \$800,000, and the Offshore Research and Technology Center \$499,000. The Centers, in particular, were funded through Congressional add-ons last year. What will MMS not be able to accomplish if these decreases are maintained through the appropriations process?

Answer:

Environmental studies allow us to study current issues and conduct environmental monitoring related to oil and gas activities and marine minerals development, as well as conduct research on evolving topics such as methane hydrates, biotechnology and invasive species. The proposed budget reduction should not limit our ability to address unforeseen or lower priority research.

The Mississippi CMRET is constructing a methane hydrate monitoring station to be placed in the Green Canyon area of the Gulf of Mexico in 2004. When completed, the facility will be the only one of its kind in the world. As such, many of the components of the station have to be specially designed and constructed. The station will monitor, on a continuing basis, changes in the stability of the seafloor and amounts of gas released to the sea and atmosphere. These conditions may result when man-induced activities such as drilling and production of oil and gas occur on or adjacent to methane hydrate deposits. The station will also monitor changes to environmentally-sensitive seafloor biological communities that depend upon methane hydrates for survival. The Green Canyon contains a number of methane hydrate

deposits that are considered prime candidates for future gas production. Without additional funding CMRET's design and construction work on the monitoring station would be delayed or stopped.

The MMTC at the University of Alaska plans to continue resource and environmental studies in support of future placer gold leasing in the outer continental shelf of the Norton Sound offshore Nome. The Norton Sound contains the largest known placer gold reserves in the U.S. and is one of the largest in the world. Included in this work is the design and testing of an unmanned, underwater mining machine that could work beneath the 6-month long ice cap in the Norton Sound. Another planned project is the location and testing of offshore sand and gravel deposits for use in building beach berms to protect the native fishing villages of Kivalina and Shishmaref, located on the Chukchi Sea. This project is unrelated to offshore minerals activity. Without additional funding in fiscal year 2003, these MMTC projects would be delayed or discontinued until future funds became available.

MMS signed a Cooperative Agreement with the Offshore Technology Research Center (OTRC) in June 1999, which provides funds to support basic engineering research and test technologies for deepwater oil and gas production. The funds are allocated among three categories: (1) specific research applicable to MMS regulatory program responsibilities; (2) basic research projects jointly funded with industry sponsors focused upon new and innovative technologies applicable to deepwater oil and gas production; and (3) operational and administrative support of the Center. Reduction in the MMS funding level will shift to industry the obligation to increase funding for the basic research activities and operational and administrative costs of the Center. Currently, MMS has provided about 50 percent of the OTRC funding.

[Responses to questions submitted for the record by the Office of Surface Mining follow:]

QUESTION FOR THE RECORD

HOUSE RESOURCES COMMITTEE

ENERGY AND MINERAL RESOURCES SUBCOMMITTEE

PRESIDENT'S FISCAL YEAR 2003 BUDGET REQUEST

MARCH 14, 2002

QUESTION 1

AUTHORIZATION OF FEE COLLECTION

Mrs. CUBIN. Authorizations for fee collection under Title IV of SMCRA for the Abandoned Mine Land Trust Fund will expire in September of 2004. What is the position of the Administration regarding extension of this fee collection authority? Do you anticipate that the Administration will seek other adjustments to Title IV of SMCRA? If so, what might they be? But, before you answer please consider carefully that coal producers in one state alone—Wyoming—pay nearly 42 percent of the fees collected nationwide, yet my state receives but 23 cents back on each dollar sent to Washington DC rather than the mandated minimum of 50 cents on the dollar.

Mr. JARRETT. The Administration has not yet taken a position on extension of AML fee collection. Over the next several months, OSM staff plans to discuss the issue of possible fee extension with representatives of States and Tribes, industry, environmental groups, Members of Congress, and others to gain a better understanding of the various positions. Based on these discussions, the Department will work with the Administration in formulating a position. In addition to exploring the issue of fee collection, we will be looking at other possible issues in the AML program. We have not yet determined, however, what, if any potential statute changes might be sought.

QUESTION FOR THE RECORD
 HOUSE RESOURCES COMMITTEE
 ENERGY AND MINERAL RESOURCES SUBCOMMITTEE
 PRESIDENT'S FISCAL YEAR 2003 BUDGET REQUEST

MARCH 14, 2002

QUESTION 2

REGULATORY GRANT FUNDING

Ms. CUBIN. Funding for the implementation of state regulatory programs under Title V of SMCRA has been reduced this year by \$1 million in comparison to last year's amount and is almost \$6 million less than what the coal mining states had requested. While the proposed budget recognizes special needs in West Virginia (perhaps because of the fierce debate over mountaintop mining and valley fill practices) will OSM be prepared to assist other states with additional funding should they too require it to adequately regulate current operations?

Mr. JARRETT. Regulatory grants to primacy states have increased by approximately 10 percent over the last two years. OSM works cooperatively with the States throughout the year to avoid similar situations and to ensure that the States are able to continue operating viable programs. As with the state of West Virginia, OSM would work with the Congress to prevent the failure of a state regulatory program.

QUESTION FOR THE RECORD
 HOUSE RESOURCES COMMITTEE
 ENERGY AND MINERAL RESOURCES SUBCOMMITTEE
 PRESIDENT'S FISCAL YEAR 2003 BUDGET REQUEST

MARCH 14, 2002

QUESTION 3

STATE ABANDONED MINE LAND PROGRAM GRANT FUNDING

Mrs. CUBIN. Funding for state AML programs has been reduced by \$17 million in comparison to last year's amount, and this is in the face of an increasing Fund balance and increased receipts to the Fund. Given that state and tribal share balances continue to increase (from a cumulative \$881 million at the end of fiscal year 2001 to over \$918 million at the end of calendar year 2001, just three months later!) what plans does OSM have for future appropriations requests to insure that the states can gain access to these increasing balances and put the money to work on the ground to remediate outstanding AML priorities.

Mr. JARRETT. The proposed reduction of \$17 million for reclamation grants to states is partially offset by a \$2 million request for transfer of prior-year carry over funding from the Federal emergency program. The resulting reduction of \$15 million to state reclamation grants in no way signals a lessening of this Administration's support for the Abandoned Mine Land program. This is a valuable program that the participating States and Indian tribes carry out very effectively. The proposed reduction from the fiscal year 2001 grant level is a result of difficult budget choices. The Administration supports the Abandoned Mine Land program to the greatest extent possible within the context of existing budgetary constraints. Also, the President's Budget will result in an additional 6,900 acres reclaimed and will maintain the Clean Streams Program at the fiscal year 2002 level.

QUESTION FOR THE RECORD
 HOUSE RESOURCES COMMITTEE
 ENERGY AND MINERAL RESOURCES SUBCOMMITTEE
 PRESIDENT'S FISCAL YEAR 2003 BUDGET REQUEST

MARCH 14, 2002

QUESTION 4

MOST PRESSING ISSUES

Ms. CUBIN. What do you consider to be the most pressing issues that you will be called upon to handle during the early weeks and months of your term as Director of OSM?

Mr. JARRETT. There are three issues on which I most want to focus at this. First, we need to create a stable regulatory framework to ensure responsible and environmentally sound energy production. One way to do this is to review our regulatory activities and set priorities to identify and work with other Federal and state agencies on a consistent approach for regulating coal mining and reclamation operations. We are in the process of analyzing this issue. Second, I want to continue moving toward resolution on several difficult surface and underground coal mining issues, particularly those related to longwall mining and mountaintop mining operations. For instance, we are continuing to work with other Federal and State agencies to resolve the many issues that surround mountaintop mining, in order to complete the programmatic Environmental Impact Statement that should provide a basis for coordinated decision making to minimize the adverse effects of excess spoil in valley fields. Third, I want us to pursue the means to encourage re-mining and recovery of coal from coal refuse piles by developing alternative regulatory approaches. Toward this end, we are examining options for providing financial incentives for re-mining.

QUESTION FOR THE RECORD

HOUSE RESOURCES COMMITTEE
 ENERGY AND MINERAL RESOURCES SUBCOMMITTEE
 PRESIDENT'S FISCAL YEAR 2003 BUDGET REQUEST

MARCH 14, 2002

QUESTION 5

STATE-FEDERAL PARTNERSHIP

Ms. CUBIN. As a former State regulator, you bring a unique perspective to the job as OSM Director. What is your sense of how well OSM is doing to fulfill its mandate of ensuring an effective State/Federal partnership under SMCRA? What, if anything, should be done to bolster the relationship between OSM and the States?

Mr. JARRETT. My sense is that OSM supports and recognizes that States serve as front-line regulators performing the bulk of the required inspection, enforcement and permitting activities, while OSM provides monitoring, and technical and financial assistance. In effect, the States and OSM are working well together to co-implement SMCRA. As a result, I believe SMCRA has become one of the most effective regulatory programs in the country. The program is working well in large measure because of the stability that has gradually come to the Federal/State relationship, which is so integral to achieving the goals of SMCRA. I believe the program is operating at its most successful level where it counts - on the ground.

OSM, the States and Tribes have developed several initiatives to enhance cooperation on a number of important issues concerning oversight, technical training, technical assistance, and enforcement of environmental laws. Examples of this cooperation include: making State program oversight more effective by measuring results and solving problems cooperatively; increasing technical knowledge and improving working relationships among Federal, State, and tribal personnel through technical

training; making regulation more effective through advanced technology and data capabilities for hydrology and geology; and implementing the Endangered Species Act through cooperative efforts. To bolster the relationship, OSM will continue to further and enhance our partnerships with the States and Tribes on issues of mutual concern.

QUESTION FOR THE RECORD

HOUSE RESOURCES COMMITTEE

ENERGY AND MINERAL RESOURCES SUBCOMMITTEE

PRESIDENT'S FISCAL YEAR 2003 BUDGET REQUEST

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QUESTION 6

STATUS OF THE ABANDONED MINE LAND PROGRAM

Ms. CUBIN. Can you give us a quick summary of the status of the AML program? How many high priority sites have been reclaimed? How many high priority sites remain to be reclaimed? Where most of these sites are, etc.?

Mr. JARRETT. The total inventory includes 18,252 sites, which have priority 1, 2, or 3 problems (both coal and non-coal). Of these, 12,487 are high priority coal sites (priority 1 and 2, coal, health, safety and general welfare). OSM has completely reclaimed 6,064 high priority coal sites and partially reclaimed an additional 1,552 sites. Unfunded sites total 4,871. It is estimated it will cost \$6.6 billion to reclaim all these unfunded and partially funded coal sites.

The total number of sites is shown below by State and Indian tribe. Sites shown in the "Partially Funded/Completed" column represents locations where some reclamation problems have been addressed, but others remain to be reclaimed.

STATE/INDIAN TRIBE	UNFUNDED SITES	PARTIALLY FUNDED SITES	COMPLETED SITES
Alabama	328	247	460
Alaska	20	8	23
Arizona	0	0	2
Arkansas	37	50	50
Blackfeet	1	0	0
California	3	1	2
Cheyenne River	5	1	14
Colorado	88	277	290
Crow	5	7	41
Northern Cheyenne	0	0	8
Fort Berthold	2	0	1
Fort Peck	1	0	5
Georgia	2	3	19
Hopi	0	0	10
Iowa	91	8	61
Idaho	1	0	0
Illinois	99	106	749
Indiana	83	71	635

Jicarilla Apache	0	0	3
Kansas	276	104	208
Kentucky	894	347	714
Massachusetts	1	0	0
Maryland	46	26	85
Michigan	4	22	19
Missouri	116	29	90
Montana	239	1	467
Navajo	0	9	119
North Carolina	0	0	4
North Dakota	33	28	45
New Mexico	18	68	53
Ohio	196	246	563
Oklahoma	196	98	48
Oregon	16	0	5
Pennsylvania	1166	616	868
Rocky Boys	2	0	3
Rhode Island	0	0	2
San Carlos Apache	1	0	0
South Dakota	0	0	4
Southern Ute	6	0	5
Tennessee	140	77	83
Texas	16	2	28
Uintah and Ouray	1	0	3
Ute Mountain Ute	0	0	1
Utah	48	16	107
Virginia	191	223	108
Washington	26	16	18
White Mountain Apache	1	0	0
Wind River	11	7	10
West Virginia	2338	102	1273
Wyoming	538	9	835
Total	7,286	2,825	8,141

All Programs, Priorities 1, 2, and 3. Source: OSM Abandoned Mine Land Inventory;
0/30/01

STATE/INDIAN TRIBE	UNFUNDED SITES	PARTIALLY FUNDED SITES	COMPLETED SITES
Utah	31	8	85
Virginia	172	177	118
Washington	25	16	11
Wind River	6	0	14
West Virginia	1,751	69	1,175
Wyoming	148	3	171
Total	4,871	1,552	6,064
Acid Mine Drainage Plan, Coal Interim Site Funding, Coal Insolvent Surety Site Funding, Clean Streams Initiative, Federal Reclamation Program, State Emergencies, and Pre-SMCRA Coal State/Indian Tribe Grant Funding, Priorities 1 and 2			
Source: OSM Abandoned Mine Land Inventory, 09/30/2001			

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QUESTION 7

APPALACHIAN CLEAN STREAMS INITIATIVE

Ms. CUBIN. Regarding the Appalachian Clean Stream Initiative, can you give us an idea of the extent of acid rock drainage in Appalachia before the initiative was undertaken versus the extent of acid rock drainage now? To what extent will the proposed fiscal year 2003 funding remediate the problem?

Mr. JARRETT. According to a survey of State fisheries biologists (U.S. Environmental Protection Agency - 1995, 1997), 7,500 stream miles in Appalachia were adversely affected by acid rock drainage. According to State Abandoned Mine Land agencies, approximately 100 stream miles and 52 lake acres have been improved by Appalachian Clean Streams Program projects. An additional 400 miles of streams will be improved by projects currently in progress and new projects launched with fiscal year 2003 funding would improve about 150 stream miles.

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QUESTION 8

APPALACHIAN CLEAN STREAMS INITIATIVE

Ms. CUBIN. The media commonly says that 12,000 miles of streams in the United States are impacted by mining. This figure is at least several decades old, but I believe that OSM is the original source. Did this figure originate with OSM? If so how much of the impact is due to coal mining and where are these impacts? How much progress have we made in reducing those stream impacts due to coal mining since SMCRA was passed in 1977?

Mr. JARRETT. The Office of Surface Mining did not originate the cited statistic on stream impacts. Of the 12,000 miles of streams impacted by mining nationwide (U.S. Environmental Protection Agency, et al.), acid drainage from abandoned and active coal mines accounts for more than half of the total, predominantly in Appalachia and to a small extent in the Midwest and West. The most dramatic progress in

dealing with mine drainage under the Surface Mining Control and Reclamation Act has to do with active mines. Because of concurrent reclamation and water treatment at active mining operations, mine drainage impacts have not increased since Congress promulgated national reclamation standards. The aggregate effects of 25 years of land and watershed restoration under the Abandoned Mine Land Program, coupled with targeted programs such as the Appalachian Clean Streams Program and State Ten Percent Acid Mine Drainage Set-Aside have made substantial but unquantified improvements to impacted streams.

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QUESTION 1

COAL WASTE IMPOUNDMENTS

Mr. RAHALL. What actions has OSMRE taken, or intend to take, in response to the recommendations contained in the National Research Council (NRC) report Coal Waste Impoundments: Risks, Responses, and Alternatives?

Mr. JARRETT. Staffs from the Office of Surface Mining (OSM) and the Mine Safety and Health Administration (MSHA) have established a standing committee to work on areas of mutual concern, including the recommendations in the NRC report. The committee will focus its initial efforts on the recommendations relating to (1) improving engineering standards and practices, and (2) improving the accuracy of mine maps. In addition, OSM will encourage technology development including research to reduce coal waste such as slurry.

Prior to release of the NRC report, OSM had initiated several actions relating to impoundments. In July 2001, we issued review criteria for the States to use in re-evaluating existing and proposed impoundments. We have just released our investigative report on the Martin County Coal impoundment breakthrough. Finally, OSM and the state regulatory authorities in the Appalachian region have largely completed an initial re-assessment of the breakthrough potential for all existing impoundments. As a part of this re-assessment, states have required corrective measures, e.g. geotechnical drilling, lowering the pool elevation, improved engineering analysis, etc., for impoundments identified with concerns. Joint efforts will continue on the structures with the highest risk for breakthrough. Finally, OSM is working on a proposed rule that would require an emergency action plan in the event of an impoundment failure such as the one in Martin County, Kentucky.

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QUESTION 2

MOUNTAINTOP MINING

Mr. RAHALL. Has OSMRE modified its approach to conducting oversight of State regulatory programs since the mountaintop removal controversy erupted in West Virginia?

Mr. JARRETT. The mountaintop mining issue in West Virginia apparently goes back several years to a time when Office of Surface Mining's (OSM's) oversight policy required a review of all aspects of state programs. For whatever reasons, OSM did not clearly identify the mountaintop mining issue for the problem it would become. In 1996, OSM made significant changes in its oversight strategy to evaluate primacy state regulatory programs. OSM's new regulatory approach focuses on end results and on-the-ground success of states meeting SMCRA's environmental protection goals. The approach relies on performance agreements with primacy states. The

approach has been successful in general. The agreements have improved relationships, shared responsibilities, fostered interest in joint reviews, and achieved a more open discussion of difficult issues. I intend to review and, if necessary, refine OSM's current oversight policies.

In response to the mountaintop mining controversy, OSM initiated technical assistance to West Virginia to improve the state's performance in permitting decisions and documentation. This effort is ongoing. Also, the mountaintop mining litigation in West Virginia identified permit findings documents as not being fully supportive of permitting decisions. In June 1999, OSM launched a national oversight objective that required each OSM field office to review state permit files to determine if those files provided adequate support for the required findings. Further, as part of its technical training program, OSM developed a Permit Findings Workshop in fiscal year 2000 to assist regulatory authority personnel in preparing permit findings that are technically and legally sufficient and appropriately documented. To date more than 100 state and federal permitting and program staffs have attended the training. House Resources Committee

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QUESTION 3

ABANDONED MINE RECLAMATION FUND

Mr. RAHALL. Does the Administration support extension of the reclamation fee which finances the Abandoned Mine beyond its current expiration date in order to raise the necessary revenues to address all priority 1 and 2 projects on the inventory?

Mr. JARRETT. The Administration has not yet taken a position on the extension of the Abandoned Mine Land (AML) fee. I would be very interested in discussing your ideas about the extension of the fee.

[Responses to questions submitted for the record by the U.S. Geological Survey follow:]

RESPONSES TO FOLLOW-UP QUESTIONS SUBMITTED BY THE HOUSE RESOURCES SUBCOMMITTEE ON ENERGY AND MINERALS AS A RESULT OF THE OVERSIGHT HEARING ON USGS BUDGET ON MARCH 14, 2002

QUESTIONS FROM THE HOUSE RESOURCE SUBCOMMITTEE - OVERSIGHT HEARING ON FISCAL YEAR 2003 BUDGET

Questions from Chairwoman Cubin

1.) Question: The Committee is concerned and wants to see that the Department's infrastructure is protected but two particular areas of interest are the EROS Data Center and the National Earthquake Information Center. The Federal government has quite an investment worth protecting at the EROS Data Center which holds the world's largest collection of civilian remotely sensed data covering the Earth's land masses and houses millions of satellite images and aerial photographs. The National Earthquake Information Center receives the seismic data nationwide critical to monitoring earthquake activity within the United States.

Can you comment on the steps Interior has taken in securing its facilities?

What measures have been taken to protect these two facilities?

Have additional funds been provided for these facilities?

Comment on steps DOI/USGS has taken to protect the National Earthquake Information Center? Have additional funds been provided for these facilities?

Answer: DOI/USGS has taken two important steps to protect the security of the National Earthquake Information Center (NEIC). First, an employee-identification entry system was implemented to restrict access to the NEIC facility. Visitors must now schedule visits in advance and be escorted into and out of the building. Additionally, the master earth station—a large satellite dish that receives incoming seismic waveform data from sensors across the United States—was fenced off to protect it from vandalism. No additional funds have been provided for this purpose.

The U.S. Geological Survey (USGS) EROS Data Center (EDC) in Sioux Falls, South Dakota, is the largest USGS-owned facility. The Data Center employs about 600 persons, both Federal employees and contractors and has over 20,000 visitors each year. The archives at EDC hold the world's largest collection of civilian remotely sensed data covering the Earth's landmasses, housing millions of satellite images and aerial photographs. Scientists, managers, and technical users from around the world use data from the archive for a variety of data applications and research programs, including those necessary for defense, intelligence, and disasters, natural and man-made (i.e. Nisqually earthquake, Houston floods, Desert Storm and acts of terrorism). Since the events of September 11, the Data Center has increased the number of security guards and added X-Ray equipment for mail and package handling in an effort to improve site security.

There are no additional funds in the fiscal year 2003 Budget request to make other facility security upgrades.

2.) Questions on Homeland Security

2a) Question: What is the Department of the Interior's involvement in Homeland Security?

Answer: Principally, DOI's work in Homeland Security covers five areas: 1) security of the Bureau of Reclamation's dams, power generation and transmission facilities, and water conveyance structures; 2) security of nationally significant historic, natural, archival and cultural sites and lands like the Washington Monument, Statue of Liberty, Mt. Rushmore, Yosemite and thousands of others; 3) physical protection of our 65,000 employees located in all fifty states and beyond; 4) coordination with major border protection agencies to ensure protection of our homeland from potential terrorists crossing into the United States over international borders—DOI lands adjacent to Canada and Mexico account for nearly half (including Alaska) of all borderlands; 5) coordination with homeland security authorities for appropriate dissemination of scientific information and analysis of relevant homeland security information and analysis of biologic events. DOI also has the third largest number of federal law enforcement officers, nearly 4,300 in the federal government (National Park Service, Bureau of Indian Affairs, Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation). Homeland security is not these officers' mission, but they can coordinate with and provide support for anti-terrorism efforts when called upon.

2b) Question: Can you briefly describe what efforts are underway within the Department in support of Homeland Security?

Answer: The Department of the Interior has worked closely with the Office of Homeland Security and the Defense, Intelligence, Law Enforcement and Civilian communities as a result of September 11th, and has contributed a great deal of information and expertise in direct support of homeland security. Also, DOI has greatly increased the physical security of nationally significant sites and lands as well as emphasizing further security measures for employees. It has done this through screening or limiting access to certain locations, addition of barriers, changes of operating hours and methods, addition of security staff or providing the means to cover more area with existing staff, and numerous other enhancements. If called upon, Interior law enforcement near international borders will coordinate with and provide support to the primary border security agencies.

2c) Question: How are these efforts being funded? What other agencies are involved?

Answer: Most of the physical security improvements have occurred as a result of receiving emergency supplemental appropriations funding during this fiscal year. Many others are the result of a reprioritization of projects in response to meeting the current national emergency. In some cases, funding has come from existing resources to date. Again, our partners have come from the Defense, Intelligence, Law Enforcement and Civilian communities, as well as State and local government.

2d) Question: It is our understanding that the U. S. Geological Survey is involved in working with DOD to provide up-to-date mapping over the Nation's 120 most populous cities that have been identified as potential targets for terrorists.

Can you comment on the roles of these two Departments related to this work?

Answer: Current and accurate mapping and imagery is essential for informing decisions on topics ranging from natural resources and urban planning to security and emergency issues.

Many state and local jurisdictions already collect geographic information in urban areas. USGS and the Federal Geographic Data Committee can promote cooperative investments in this type of mapping and geographic information, and ensure that the data is standardized, accessible, and capable of being shared across Federal, State, and local jurisdictions.

The DOD has an international mapping mission.

Questions: What is the status of this effort? Cost of the effort? Timeframe for completion?

Did the Department receive supplemental funding for this work? Or is DOD funding the effort? If not, please explain how the work is being funded? Are additional funds needed to complete this effort?

Answer: No, the administration has not requested or received supplemental funding for these activities. They are fully supported by resources that have been appropriated to date and are included in the fiscal year 2003 request. The USGS will concentrate on building cooperative partnerships with state and local government to guarantee that accurate, accessible and timely mapping and geographic information exists for urban areas.

2e) Question: Is the Department working with the President's newly established Office of Homeland Security? Is the project on the largest 120 U.S. cities being coordinated with the Office of Homeland Security?

Answer: The Department of the Interior has met with senior managers of the Office of Homeland Security to discuss urban mapping and the key role of geospatial information establishing and maintaining homeland security. Our Deputy Secretary and Admiral Abbott, Deputy Director, Office of Homeland Security have discussed that mapping and imagery information that are timely, easily accessible, and capable of being shared across federal, state, and local political jurisdictions, are fundamental to the decision making capability of all first responders and threat assessors. The Deputy Secretary has further informed Admiral Abbott that in the immediate aftermath of the September 11 tragedies, the USGS supported first responders with over 115,000 maps, satellite imagery, aerial photographs, and other technical assistance.

2f) Question: Are these other areas of expertise within the Geological Survey that can be utilized in the area of homeland security?

Answer: While the U.S. Geological Survey is not a federal agency that would lead specific efforts to detect, mitigate or respond to terrorist threats, the USGS has a large cadre of experienced scientists with skills that could provide support on homeland security matters depending on the type of action or threat. For example, USGS has the ability to accomplish detailed spectrographic analyses of suspect materials, and is capable to complete detailed analyses of water samples. Other USGS skills include seismology, engineering geology (for a variety of ground response needs), surface and ground water resources and wildlife health.

2g.) Question: Given the importance of having current accurate high-resolution geographic data and information to allow planning and rapid response to protect our cities and infrastructure, does your budget include any funding to purchase commercial imagery for homeland defense? What is the plan within the Survey to address such imagery needs? Can you assure me that the USGS can sufficiently respond to any homeland security issues that would need to be addressed by your agency?

Answer: There is not funding in the USGS budget for the purchase of commercial imagery specifically for homeland defense. A role of the USGS is to develop the National Spatial Data infrastructure by establishing partnerships to co-invest in geographic information and make data easier to use. Many state and local governments and the private sector, already collect geographic data for cities and infrastructure. The best strategy to guarantee that high quality data exists for homeland security is to coordinate federal acquisitions of data with that of state and locals, based upon common data standards. A strong partnership between Federal, State and local governments, the private sector, and universities is essential to guarantee that current data of high quality is available, while making an effort to avoid duplication and the resulting inefficient use of government resources at all levels. However, to conduct this effort using USGS existing resources alone, the timeframe for completion will expand to a decade or more. Leveraging investments with state and local government for geographic information in urban areas is a faster and more efficient means to guaranteeing current quality information for supporting policy decisions, which can include homeland security.

3) Question: An Interior Department appeals officer recently halted a seismic exploration operation northeast of Arches National Park in Utah, saying letting the project proceed could cause irreparable harm. A recent news article stated that a "geophysical project outside Arches National Park in Utah was stopped recently because of environmental concerns by the U.S. Geological Survey." Among the concerns raised by the USGS biologist is that the traffic associated with the seismic survey could destroy a thin crust of bacteria that forms over the desert soil and prevents erosion and weed growth and could take up to 300 years for that crust to regenerate. Actually, the seismic survey would be conducted by "vibroiseis", a very non-invasive (no-drilling and no blasting), environmentally sound method of sub-surface exploration.

3a.) Question: Was USGS formally consulted during the preparation of the environmental review by BLM? Do you know the total acres that may be disturbed by the operation?

Answer: Prior to approving the proposed seismic exploration project, BLM prepared an environmental assessment (EA) on the project pursuant to the National Environmental Policy Act (NEPA). In this process, BLM: (1) prepared a draft EA that it made available for review and comment by federal and state agencies and members of the public; (2) prepared a final EA that took into account and responded to comments received on the draft EA; and (3) based on the analysis of the project in the final EA, issued a decision approving the project. BLM did not formally consult with USGS during this process. However, USGS comments on the draft EA, and BLM's incorporation of the information in the final EA were fully consistent with the role of federal agencies in the NEPA process. BLM considered comments submitted by USGS on the draft EA in BLM's preparation of the final EA and its decision to approve the proposed project. Based on its environmental review, BLM concluded that about 16.7 linear miles, or 35 acres of the approximately 23,000 acres in the project area would be disturbed by the seismic exploration operation.

USGS does not disagree with BLM's conclusion about the acreage that would be disturbed by the project. However, as a matter of clarification, USGS is concerned that the above description of vibroseis as a non-invasive, environmentally sound method of subsurface exploration is not an accurate portrayal. This is because vibroseis causes surface impacts, including impacts to soils and biological crusts and other vegetative cover where present.

3b.) Question: In your opinion is the impact significant considering that the area is also open to oil and gas leasing, in fact much of the area is already leased, as well as grazing, off road vehicle use, etc.?

Answer: USGS's intent in submitting comments on the draft EA (referred to in answer 3a) was to point out text that needed clarification, make BLM aware of the most up-to-date studies on the disturbance and recovery of soils and biological crusts, and correct certain information presented in the document. For example, the draft EA indicated that soils and vegetation distributed by the project area would recover in one to three years. This conclusion differed from information in the Department's Technical Reference 1730-2 (2001), entitled "Biological Soil Crusts: Ecology and Management", which summarizes current research on human-caused impacts to soils and biological crusts and the rates of recovery from such disturbance. According to the Technical Reference, there are two general categories of recovery: visual and biological. Visual recovery can occur relatively quickly. On the other hand, biological recovery (recovery to pre-disturbance species composition, density, and physiological functioning) is highly site-specific, and more difficult to predict. This is because biological recovery is highly dependant on the pre-disturbance successional stage of the crust, with early successional stages generally recovering more quickly than late successional stages, the intensity of the disturbance, with crusts that are compressed or crushed generally recovering more quickly than crusts that are scalped, and climate during and after disturbance. The Technical Reference also indicates that the rate of recovery of a disturbed site can be estimated by observing the site and the recovery that has taken place within a period of time. This observation-based estimation technique is described as linear extrapolation or linear assumption, and is commonly used when there are no fully recovered disturbances available for study. However, because linear extrapolations are based on limited data, estimated recovery rates by use of linear extrapolations may be over or under estimates. USGS's comments on the draft EA referred BLM to the Technical Reference and indicated that, for the Moab area, recovery of soil crusts after severe surface disturbance ranges from 50 to 300 years. In the final EA, BLM acknowledged USGS's comments and the information on recovery rates in the Technical Reference, and revised the text of the document accordingly. The USGS comments on the draft EA, its referring BLM to current research on soils and biological crusts, and BLM's incorporation of the information in the final EA were fully consistent with the role of federal agencies in the NEPA process.

In its environment review, BLM concluded that when viewed in light of the past and present impacts to the project area from various uses, and the relationship between the impacted acreage and the overall project area, the project's impacts would not be significant, as that term is used in NEPA. USGS believes that the project will degrade soils and biological crusts and other vegetative cover.

It is important to emphasize that USGS's comments on the draft EA were technical in nature and not intended to opine on whether or not project impacts would be significant as that term is used in the NEPA process.

4) Question: \$500,000 has been budgeted to update the geothermal energy assessment that was last updated in 1979. When do you expect the assessment to be com-

pleted? Will you be working with the land management agencies, BLM and USFS, to prioritize assessed areas to assure that they have the necessary information to incorporate into their "time sensitive land use plans"?

Answer: The updated geothermal resource assessment of the Great Basin will be completed in three years assuming continuing funding for the activity. The USGS has excellent working relations with BLM and USFS and will continue to coordinate with them to provide timely, necessary information for their land-use planning.

5) Question: In your testimony, you state "Partnership remains an essential component of how we do business, to ensure cost-effective operations." Yet, I see that you propose a reduction of almost \$6 million in the National Cooperative Geologic Mapping Program, a partnership with the state geological surveys and, as you know, a product of this subcommittee's work beginning when Rep. Rahall chaired the panel in 1990 and continuing thru my tenure.

5a.) Question: Isn't geologic mapping a vital component to our energy future, as well as all the benefits that detailed geologic mapping can provide for environmental considerations, such as geologic hazards, land use planning, etc.?

Answer: The National Cooperative Geologic Mapping Program (NCGMP) does indeed play a significant role in a number of energy-related projects. Geologic maps and three-dimensional databases of the subsurface are a foundation for much geologic research including energy.

In addition, a large percentage of the NCGMP budget supports geologic mapping projects engaged in discovering and protecting our Nation's water resources. A sand and gravel deposit that provides materials for road construction in one community may very well be the aquifer providing water for a neighboring community. Geologic maps are a very useful tool that allows land-use planners and local decision makers to use resources wisely and avoid unnecessary conflict.

5b) Question: What is the rationale for this significant reduction in the geologic mapping partnership program with the states?

Answer: The President's budget preserves a number of significant program increases received in recent years that provide science to support Interior land and resource management bureaus and other high priorities, including funding to enhance USGS support for the Administration's efforts to facilitate and stimulate domestic energy production. Because of these and other priorities, the increase that Congress provided to the National Cooperative Geologic Mapping Program in 2002 is not being requested in 2003. The USGS continues to recognize the growing need for geologic mapping across the Nation, and agrees that partnerships are a good mechanism to fund this work.

6) Question: The USGS has been criticized in the past for not meeting the needs of her sister agencies in providing scientific data in a timely manner for land management plans, inventories, regional assessments, etc. What is USGS doing to improve or streamline process to assure that the agencies have the information necessary to make informed decisions?

Answer: The USGS has the principal responsibility to provide the scientific information, research, and understanding needed by DOI Bureaus and others to manage and use optimally the Nation's biological, water, energy, and mineral resources.

We recognize the criticism of the past and are working diligently at improving our service and timeliness for our sister agencies. This focus on knowing and meeting partners needs, establishing a goal for partner satisfaction and measuring performance toward reaching that goal has improved the quality and timeliness of USGS products and services. Recent customer surveys estimate that DOI customers are satisfied or are very satisfied with 97% of our biology products delivered to land or resource managers (65% very satisfied, 32% satisfied, 2% satisfied, 1% very dissatisfied). That survey provides important feedback to our programs, including very helpful specific suggestions for improvement.

USGS is working closely with parks selected by NPS to develop long-term prototype ecological monitoring programs in those parks and has stationed scientists at those parks to work closely with NPS staff. Work is underway to improve monitoring methods and techniques to meet resource management needs identified by the parks.

In fiscal year 2001 Congress provided \$3,400,000 to the USGS for mission critical science support needs solely identified by the U.S. Fish and Wildlife Service (FWS). In fiscal year 2002, the USGS' Species at Risk program funds were added bringing the total funding to \$4,100,000. The FWS is particularly pleased with the Science Support Program (SSP) because it narrowly focused to address their specific management needs for science information. The FWS has the responsibility for identifying what science needs will be addressed, they can suggest to USGS which investigators they would like to conduct the work, and they are invited to provide input to the study plan developed by the USGS. The SSP program is particularly

attractive to the FWS because it provides an immediate funding source to address unanticipated or emerging science needs of a tactical, applied nature, and the program is designed to provide this information in a relatively short period of time.

Questions from Ranking Member Kind

1) Question: fiscal year 2003 funding for the National Cooperative Geologic Mapping Program would be reduced by almost \$6 million. This reduction will decrease the number of cooperative grants for geologic mapping programs to State Geological Surveys by (30%) and universities (20%), (States match these grants). What will be the effect of these cuts if they are maintained?

Answer: The decrease of almost \$6 million would return funds to the fiscal year 2000 level. This will result in two changes in work focus for the program. First, in accordance with the National Geologic Mapping Act (P.P. 106-148), half of the reduction would reduce funding available for the Cooperative grants to partners in State geological surveys and universities. Secondly, half of the reduction would reduce funding for the FEDMAP project.

2.) Question: The USGS 2003 budget request proposes an increase of \$2.7 million for USGS to step up its efforts in support of the National Energy Policy and the overall goal of increasing domestic energy production. Of the \$2.7 million, \$1.2 million would be used by USGS to continue its efforts under section 604 of the Energy Act of 2000, which requires USGS to conduct estimates of undiscovered oil and natural gas resources on Federal lands in the continental United States. What exactly would this increase be spent on?

Answer: The USGS role in Section 604 of the Energy Act of 2000 is to provide estimates of undiscovered oil and gas resources under Federal Lands in the U.S. The work involves analysis that is beyond the scope of our present funding. The increase in funding will be used for:

- 1) Partial payment of commercial oil and gas well and field databases,
- 2) Hiring of contract GIS specialists, graphics specialists,
- 3) Hiring of contract geologic specialists.

These three items account for about 95% of the additional funding. The remainder is for travel, publication costs, and the purchase of data sets related to Federal lands.

3.) Question: The USGS budget proposal supports alternative, non-fossil fuel energy development with \$500,000 for USGS to begin the process of updating geothermal energy assessments. The USGS will initiate this effort in the Great Basin region. Is this assessment going to be nationwide and regardless of land ownership? How much can you expect to accomplish with this amount in 2003?

Answer: The USGS will begin its geothermal resource assessment efforts in the Great Basin of the western United States. Funding and staffing levels mandate that the assessment effort be conducted serially, that is, one area at a time rather than all areas with significant geothermal power generation potential at once. When the Great Basin assessment is complete, in approximately three years, the next area of significant geothermal resource potential will be chosen for assessment. Thus the assessment activity will be nationwide in the sense that assessments will be conducted in areas of the U.S. with significant geothermal power generation potential, assuming funding for the activity continues. USGS assessments are geologically based and thus cross-land ownership boundaries. Upon request, and in collaboration with the land managing agencies, USGS may allocate resource estimates on a Federal land basis.

4.) Question: Also on the subject of geothermal assessments, BLM is proposing a similar appropriation (\$500K) to assess geothermal resources on public lands. What steps will you take to assure that USGS and BLM do not duplicate efforts?

Answer: The USGS has excellent working relations with the BLM and will continue to coordinate with BLM and the USFS to provide timely, necessary information for their land-use plans. USGS is responsible for assessing the remaining geothermal power generating potential of the Nation. BLM is the primary land managing agency in DOI and is responsible for facilitating multiple-use of the public lands. Also, in response to industry comments during the Secretary's Renewable Energy Summit, USGS and BLM have joined in a National Geothermal Collaborative, to insure coordination and eliminate duplication. USGS and BLM have had discussions about the nature of the geothermal assessment and the early thought is to follow the model of the EPCA study, where USGS will assess the resource potential of Federal lands and BLM will assess land use restrictions that may impede development of the resource. These data sets will be combined to produce an estimate of geothermal power generation potential of public lands in the U.S.

5.) Question: In fiscal year 03, the President proposes to eliminate funding—\$500,000—for the Central Great Lakes Mapping Coalition. This project is a multi

year, bi-national effort to map the depth and shape of the lake bottom and to classify lakebeds materials. There is significant Congressional support for this program. What will not be accomplished if this cut is maintained?

Answer: The 2003 budget assures continued emphasis on the USGS science programs that support the Department's role in the National Energy Strategy, land management, species management and the management of our national parks, refuges and public lands. At the same time, the budget continues funding to perform science functions that are inherent to the historical responsibilities of the USGS. The 2003 budget achieves these goals at the request level through a strategy that included reductions for certain lower priority programs, and also by scaling back funding for base programs that received increases in 2001 and 2002. This strategy also assumes an increase in reliance on cost sharing by USGS partners and beneficiaries of USGS programs. The decrease of \$500,000 will discontinue the Central Great Lakes Geologic Coalition, a partnership that initiated in fiscal year 2000 with an unrequested funding increase between the USGS and the State geological surveys of Illinois, Indiana, Michigan and Ohio. The primary purpose of the coalition is to make three-dimensional geological maps of the complex glacial material that characterize the surface deposits and shallow aquifers of this region. Geologic mapping activities by the geological surveys of the States of the Coalition would be curtailed.

6.) Question: USGS is proposing cuts in the Mineral Resources Program of approximately \$4 million in fiscal year 2003 from the fiscal year 2002 level. This program provides and communicates current, impartial information on the occurrence, quality, quantity, and availability of mineral resources. This program produces useful publications and data including: Mineral Commodity Summaries; Mineral Industry Surveys; Minerals Yearbook; and Commodity Statistics and Information. Please explain exactly what effect the proposed cuts would have on the USGS minerals programs and what work will not be done as a result of the cuts.

Answer: The budget for 2003 includes reductions for certain one time increases, lower priority programs, and also by scaling back some 2002 increases not requested by the Administration or proposing alternative sources of funding, such as cost recovery from customers or transferring responsibilities to other organizations. Within the Minerals Resources Program, the 2003 President's budget includes three major reductions.

A decrease of \$1.3 million will discontinue three regional projects on aggregate materials. Among the study elements included in the projects to be discontinued is a study evaluating the suitability of alluvial fan deposits for use as high quality aggregate and development of a methodology for assessing the aggregate potential of individual alluvial fan deposits. A second study that will be discontinued is a study to examine the geology, geography and economics of megaquarries. The third regional project that will be discontinued is a study to use geophysical methods to characterize aggregate resources. Additionally, the continued implementation of mapping techniques and geographic information systems to estimate sand and gravel resources in glaciofluvial systems and adaptation of detailed local methods to general large scale regional scale maps will also be discontinued.

A \$1.5 million decrease will discontinue USGS funding for the Alaska Minerals Information Project. The President's Budget proposes that state and/or energy partners in the project fund any further work on this project.

The President's Budget proposes a \$750,000 decrease in the Minerals Resources Program Minerals Information Team. This reduction will be focused on reducing the number of reports on the production, use, reuse and disposal of mineral commodities. The USGS can consult with the Department of Commerce, the Department of Defense, and other users of this information to gauge current demand and whether these users want to share in the costs of the program to maintain it at its current level.

7.) Question: The President's budget proposes a reduction of \$2.1 million for the National Streamflow Information Program (NSIP). This would result in the loss of 129 stream-gauges across the United States, creating more gaps in the nation's gauging network and continuing a trend that seriously threatens the nation's information base for water management decisions and emergency warning systems. A 1999 report to Congress requested by the House Interior Appropriations Committee expressed concern about the decline of the stream-gauging network, stating that "we have increasing demands for information and yet the infrastructure to supply the information is declining." Why is funding being reduced for the NSIP?

Answer: The rationale of the 2003 budget is to ensure continued emphasis on USGS science programs that support the Department's role in the national energy strategy, land management, wildlife refuges, and public lands. At the same time, the budget continues funding to perform science functions that are inherent to the

historical responsibilities of USGS. The 2003 USGS budget reflects a scaling back of recent base program funding increases that exceeded the President's budget request for these programs. For example, the 2003 budget retains \$6.2 million of the \$8.3 million base program increase received in 2001 for stream-gauges.

8.) Question: What will the consequences be of losing 129 stream gauges across the country?

Answer: Operations at those stream-gauges will cease, and no further streamflow data will be collected at those sites. Historical streamflow information from these stream-gauges will continue to be available through the USGS National Water Information System (NWIS), which is accessible to everyone, free of charge, over the Internet. For those 90 stream-gauges (out of the total 129) that supply data for the National Weather Service's flood forecasting system, no new data will be available.

9.) Question: Does the Administration support an adequate infrastructure to collect the information needed to make high quality and reliable water management systems? If so, then why are these funding reductions being proposed?

Answer: The Administration remains committed to ensuring that there is adequate information to make good decisions about water management. However, the 2003 budget ensures continued emphasis on USGS science programs that support the Department's role in the National Energy Strategy, land management, wildlife refuges, and public lands. At the same time, the budget continues funding to perform science functions that are inherent to the historical responsibilities of the USGS. The 2003 USGS budget achieves these goals at the request level through a strategy that includes reductions for certain lower priority programs and also by scaling back funding for base programs that received increases in 2001 and 2002. This strategy also assumes an increase in reliance on cost-sharing with beneficiaries of the USGS programs.

In the case of the National Water Quality Assessment Program, the budget assumed that less than ten percent of the total NAWQA budget can be offset from program partners and beneficiaries who gain significant benefit from the program. Again, in the case of the stream-gauging program, it is assumed that operations at 129 stream-gauges will be halted unless Federal or non-federal partners provide additional funding support to keep these stream-gauges operational.

In the case of the toxics program, the budget reflects the Administration's goals of realigning the Federal government's investment in research and development to give greater support and emphasis to competitive, peer-reviewed research.

In the case of the Water Resources Research Act Program, the State Water Research Institutes who receive grant funds through this program have been highly successful in leveraging their USGS grants with other federal funding. It is anticipated that most of the 54 institutes will be able to continue their work.

10.) Question: The President's budget proposes a reduction of \$5.8 million for the National Water-Quality Assessment (NAWQA) in fiscal 2003, a 9 percent reduction from the fiscal 2002 level. All 42 water-quality assessment study units would be affected by these cuts, with an estimated 6 units eliminated from the program. NAWQA would be unable to initiate microbial sampling designed to identify possible bacteria and viruses in surface-water and ground water resources. In addition, the program would be forced to reduce its national focus on understanding the causative factors that affect water quality.

11.) Question: Why is a funding reduction being proposed for this important program?

Answer: USGS conducts many scientific investigations that primarily benefit other Federal agencies, States, and local governments. These entities rely on USGS to provide information to help them fulfill their own mission-critical responsibilities. This is particularly the case with the NAWQA Program, which provides extensive data and information to State and Federal regulatory agencies such as the Environmental Protection Agency. The 2003 budget presents an opportunity for these environmental agencies to increase their partnership with USGS on this program. The Department and USGS will consult with the program's stakeholders in 2002 to develop increased reimbursable funding, so that most NAWQA activities can continue in fiscal year 2003.

12.) Question: What will be the consequences of eliminating 6 water quality assessment study units from the program?

Answer: In developing the NAWQA Program, USGS identified 59 study units to address the most important areas of the Nation's surface water and ground water resources. In aggregate, the 59 areas account for about 65 percent of the Nation's water use for municipal supply and irrigated agriculture. Further, NAWQA was designed to provide broad geographic coverage, with each State having a portion of a study unit within its boundary. In recent years, program funding has remained relatively flat; thus, to keep the level of scientific investigation high within the

remaining study areas during its second decade of operation (Cycle II), USGS recently undertook a geographic redesign of NAWQA from 59 to 42 study areas. The approach to redesign was complex and resulted in a collection of study areas that still represent more than half the population served by municipal supply and irrigated agriculture.

Reducing the program from 42 to 36 study units would require changes in planned activity unless cost sharing on the part of the beneficiaries becomes available.

13.) Question: Does the Administration not support funding the NAWQA at a level adequate to support microbial sampling to identify bacteria and viruses in surface and ground water?

Answer: The testing for bacterial and viral contamination carried out by the NAWQA program is one of a very few nationwide monitoring programs for microbial contamination conducted by a single agency using nationally consistent techniques.

However, even the current level of this type of sampling is not adequate for complete coverage of public drinking water supplies across the Nation. Such national coverage would require significantly more resources than the Department of the Interior has available. USGS can provide limited assistance to States, localities, and public drinking water utilities for developing standard data collection and laboratory analysis techniques.

14.) Question: If surface and ground water cannot be adequately tested for bacterial and virus contamination, what will be the impact to homeland security?

Answer: Testing for public drinking water supplies is a responsibility of State and local governments and the public utilities who provide these drinking water supplies to the public. The USGS is not in a position to discuss the impact to homeland security.

15.) Question: Is Homeland Security Director Tom Ridge aware of these proposed funding reductions? If not, are there plans to brief him on these reductions and possible impacts to homeland security?

Answer: The Office of the Secretary has discussed the Department's role in homeland security with the Office of Homeland Security; however, the specifics of the funding reductions proposed for USGS were not addressed during this discussion.

16.) Question: The State Water Resources Research Institutes Program was authorized in the Water Resources Research Act of 1984 to promote State, regional, and national coordination of water resources research and training through a network of Institutes at the nation's land grant universities. There are 54 Water Resources Research Institutes, one in each State, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. The President's budget proposes to eliminate \$6 million in USGS grant funding. Under this proposal, all 54 State Water Resources Research Institutes would lose their base Federal grants. Why is a funding reduction being proposed to this important cooperative program?

Answer: Due to the constraints of funding limitations and high priority objectives, the Administration had to choose among many excellent and beneficial programs to fund the objectives that are the most important. In the case of the USGS, the 2003 budget maintains funding for the highest priority programs through a strategy that included reductions for certain one-time increases and lower priority programs, and scaling back some 2002 increases not requested by the Administration, and an increased reliance on cost-sharing by partners and beneficiaries of the USGS programs. Because the State Water Research Institutes who receive grant funds through this program have been highly successful in leveraging their Federal grants with non-Federal funding, it is anticipated that most of the 54 Institutes will be able to continue their work, using other funding sources.

17.) Question: Does the Administration not think it is important to continue the federal commitment to this program?

Answer: The 2003 President's Budget proposes to discontinue USGS funding support for the Water Resources Research Institutes Program, not all Federal funding.

In the Past, the Institutes have been very successful in leveraging their Federal grant shares with non-Federal funds; according to a 2001 report of the National Institutes for Water Resources, in fiscal year 2000, the Institutes collectively generated over \$14 in support for each dollar they received through the USGS grant program, with \$5 coming from other Federal funds and \$9 from non-Federal sources. The Department believes that this is an indication that most of the Institutes will continue to be able to attract funding for their research, even without the grant monies they receive from the USGS under the Water Resources Research Act.

18.) Question: What will be the impact to the 54 State Water Resources Research Institutes if they lose their federal funding?

Answer: Elimination of all Federal support for the State Water Resources Research Institutes is not proposed in the President's 2003 budget request.

According to a survey conducted by the National Institutes for Water Resources, whose members consist of the 54 Institutes receiving support under the Water Resources Research Act, 20 of the 54 institutes expect to be either closed or folded into another institute or department if they lose funding from the USGS program.

19.) Question: The President's budget proposes to eliminate funding in the amount of \$13.9 million for the Toxic Substances Hydrology Program and to transfer the program's mission responsibilities to the National Science Foundation (NSF). What is the rationale for transferring this program's responsibilities to the NSF?

Answer: The transfer of the Toxic Substances Hydrology Program to the National Science Foundation reflects the Administration's goal of aligning the Federal government's investment in research and development to give greater support and emphasis to competitive, peer-reviewed research.

20.) Question: Have there been problems with how the program has been administered by the USGS?

Answer: USGS administration of the program has resulted in no problems.

21.) Question: Is it realistic to assume that the academic research community to which most NSF grants are given will attend adequately to the applied research questions that the Toxics program currently addresses?

Answer: The scientific and educational community funded by the proposed new water quality competitive grant program at NSF would be expected to work in close collaboration with numerous State and local governments, and non-governmental entities. Scientists and educators with a broad range of expertise in hydrology, ecology, geology, geochemistry, biology, and information technology would participate in these activities.

22.) Question: If the program is transferred to the NSF how will the past databases and institutional memory of the program be maintained?

Answer: Information from the Toxics Program that is currently available in the form of paper publications will continue to be available in this form until the supply of those publications has been exhausted. Otherwise, some publications will be available on our website. The USGS will work with NSF to determine maintenance of databases.

