



Resource Use

Cooperation, balance, and management excellence will inform our decisions to ensure the Nation has access to energy; enjoys clean and sufficient water supplies; and maintains healthy forests.

Deputy Secretary P. Lynn Scarlett, March 9, 2005

Americans rely on predictable supplies of energy at reasonable costs to create jobs; sustain agriculture; heat and cool our homes, schools, and businesses; fuel our transportation systems; and provide medical and emergency services. Energy drives the economy, is critical to national security, and enhances the quality of life.

The supply disruptions associated with Hurricanes Katrina and Rita demonstrated the precarious nature of our energy supply and demand balance. As President Bush has frequently stated, and the hurricanes have emphasized, the Nation must diversify and increase its domestic energy production, while pursuing conservation and the development of alternative and renewable energy sources.

The Department of the Interior produces or provides access to 30 percent of America's current domestic energy supply, while protecting sensitive resources for future generations. Approximately one-third of domestic natural gas and oil; 43 percent of coal; one-half of geothermal; 17 percent of hydropower; and five percent of wind power are produced in Interior-managed areas. In addition to helping to meet the Nation's energy needs, Interior, through the Bureau of Reclamation, manages 472 dams and 348 reservoirs, providing drinking water to over 31 million people and irrigating approximately ten million acres.

Diversification of the Nation's energy supply is a top priority. Through a number of activities, the Department is broadening opportunities for production of energy from diverse sources. Working on new and adaptive approaches with other Federal agencies, State and local governments, Tribes, lo-

RESOURCE USE MISSION

Manage natural resources to promote responsible use and sustain a dynamic economy

cal communities and others, Interior is increasing domestic energy supplies, while addressing local concerns and protecting the environment.

In 2007, Interior will increase access to both renewable and nonrenewable energy production, enhance environmental protection measures, and further investigate promising new energy sources. The Department's resource use programs will also increase timber production, improve forest health, and maximize water availability through improved delivery and efficiency of water use.

The 2007 budget for Interior's resource use programs is \$1.5 billion. These investments will:

- Enhance the Nation's energy security and availability by implementing the Energy Policy Act of 2005 and continued advancement of the President's objectives in the National Energy Policy.
- Prioritize expeditious processing of applications for permits to drill, reducing the backlog and increasing revenue.
- Increase alternative sources of energy by providing for an assessment of oil shale deposits; funding a coordinated effort to assess, characterize, and develop gas hydrates as a commercially viable source

ENHANCING AMERICA'S ENERGY SUPPLY

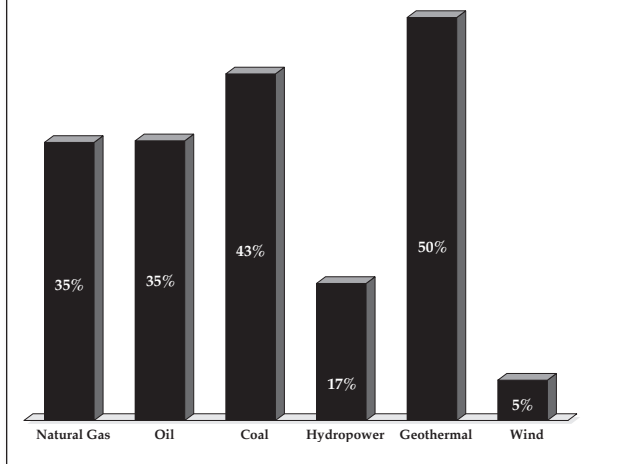
On August 8, 2005, President Bush signed the Energy Policy Act of 2005. The result of years of effort, the Energy Policy Act builds on the President's National Energy Policy to provide an energy strategy for the 21st century, promoting dependable, affordable, and environmentally sound production and distribution of energy for America's future. Implementation of the Act will help reduce our reliance on foreign sources of energy, protect the environment, promote conservation, and expand the use of new technologies and renewable energy sources.



Passage of the Energy Policy Act of 2005 provides important tools and authorities to help the Department of the Interior execute its responsibilities. Numerous sections within the Act involve both near and long-term actions that expand Interior's role in contributing to the Nation's economy and security. The Act makes practical reforms to the oil and gas permitting process to encourage new exploration in environmentally sensitive ways, and authorizes efforts to unlock vast amounts of energy now trapped in shale and tar sands.

To carry out the Energy Policy Act and to enhance the availability of affordable oil, gas, and alternative energy resources, the 2007 budget for Interior programs includes a \$43.2 million energy initiative.

DOMESTIC ENERGY PRODUCTION FROM INTERIOR MANAGED AREAS



of energy; and establishing a comprehensive program for regulatory oversight of alternative and renewable energy development on the Outer Continental Shelf.

- Increase the efficiency of existing water uses and future water supplies across the West through challenge grant programs, water optimization reviews, and improved desalination technology; increase delivery infrastructure and water availability by maintaining project funding for the Animas La Plata project implementation and completion; and legislate a formal rural water program.
- Support the goals of the Healthy Forests Initiative, National Fire Plan, and the commitments of the *American Forest Resource Council v. Clarke* settlement agreement to provide access for timber production in the Northwest.

Investments in resource use will be repaid to the U.S. Treasury many times over. Receipts from the Interior Department's oil and gas programs are projected to be \$13.0 billion in 2007.

This bill will strengthen our economy and it will improve our environment, and it's going to make this country more secure. The Energy Policy Act of 2005 is going to help every American who drives to work, every family that pays a power bill, and every small business owner hoping to expand.

President George W. Bush, August 8, 2005

In total, the budget includes \$467.5 million for the Department's energy programs. This amount includes funding for nondiscretionary fixed cost increases and is a net increase of \$43.5 million over 2006.

2007 ENERGY INITIATIVE (dollars in thousands)	
Bureau of Land Management.....	27,869
Minerals Management Service.....	9,245
U.S. Geological Survey	3,180
Fish and Wildlife Service	471
Bureau of Indian Affairs.....	2,000
Departmental Management Office of Hearings and Appeals.....	400
Total, Department of the Interior.....	43,165

MEETING THE DEMAND FOR OIL AND GAS

In 2007, the Bureau of Land Management, Minerals Management Service, and U.S. Geological Survey will continue to implement the goals of the President's National Energy Policy by using the tools provided by the Energy Policy Act. These efforts will develop these resources while ensuring environmental protection.

Onshore Oil and Gas—Subsurface areas managed by BLM in the lower 48 States contain significant oil and natural gas resources. In 2003, the Department released an Energy Policy and Conservation Act mandated report identifying five basins in Montana, Wyoming, Utah, Colorado, and New Mexico as containing the largest onshore reserves of natural gas in the country and the second largest resource base after the Outer Continental Shelf. These onshore basins contain an estimated 139 trillion cubic feet of natural gas — enough to heat 55 million homes for almost 30 years. More than half of these lands are under Federal management. These resources offer the single best opportunity to augment domestic energy supplies in the short term.

Before any leasing or actual oil and gas production can occur on public land, BLM must have a land-use plan that makes lands available for energy activities in an area. Beginning in 2001, with the support of Congress, BLM initiated the largest effort in its history to revise or amend all of its 162 resource management plans to ensure the sustained health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Within areas designated in land-use plans as appropriate for mineral development, BLM has made a concerted effort to help bring additional oil and gas supplies to the market. In fiscal year 2002, 2.1 Tcf of natural gas were produced from Federal, non-Indian lands. In fiscal years 2003 and 2004, 2.2 Tcf and 3.1 Tcf, respectively, were produced from these lands.

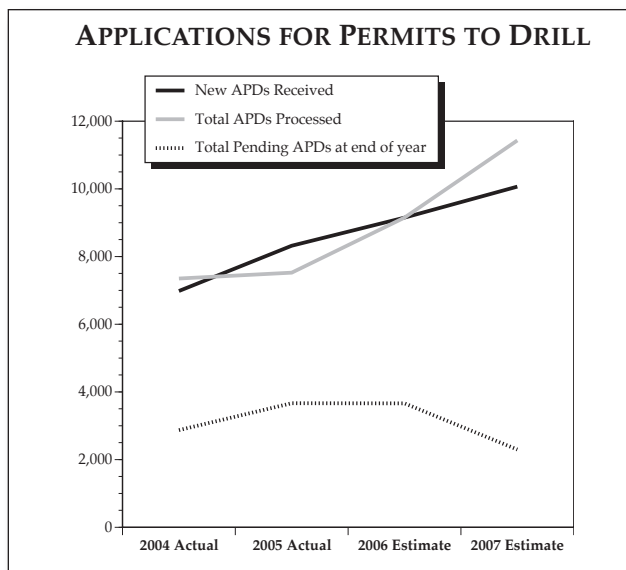
The BLM is experiencing a steady increase in demand for natural gas drilling permits, especially in the Powder River, San Juan and Uinta-Piceance Basins. Recent discoveries in the Greater Green River Basin will result in additional demand for drilling permits. In 2000, BLM received 3,977 applications for permits to drill. In 2005, BLM received 8,351 APDs. The bureau estimates that the number of applications it receives will exceed 9,000 in 2006, more than double the number just five years ago.

To address this demand, BLM has taken numerous administrative steps to ensure that drilling permit applications are processed promptly, while at the same time assuring that environmental protections are fully addressed in the review process. These include standard operating practice agreements; use of geographic area development plans and National Environmental Policy Act analyses; encouraging submission of permit packages with master development plans; use of standardized stipulations that incorporate best management practices; and establishment of quality assurance teams.

These measures, together with increased funding, have allowed BLM to make significant progress in acting on permit applications. In 2005, BLM processed 7,736 drilling permit applications, nearly 4,000 more than it was able to process in 2000.

The Energy Policy Act makes practical reforms to the oil and gas permitting process to encourage new exploration in environmentally sensitive ways.

President George W. Bush, August 8, 2005



Section 365 of the Energy Policy Act established a pilot program at seven BLM field offices that currently handle 70 percent of the drilling permit application workload. The pilot program is testing new management strategies designed to further improve the efficiency of processing permit applications. These strategies include placing employees of other Federal agencies in the pilot offices to improve and expedite coordination in the consideration of applications. Coordinated permit processing arrangements with States are also authorized. The Energy Policy Act provides enhanced funding for the pilot offices from oil and gas rental receipts to process drilling permit applications and conduct follow-on inspections and

monitoring. With more efficient processes and the authorities and funding provided through Section 365, BLM currently anticipates processing 10,160 permits in 2006. The efforts of BLM have already produced significant results. Almost 4,700 new onshore wells were started in 2005. This level of activity is 56 percent higher than in 2002.

For 2007, the budget proposes an increase of \$9.2 million to focus on the oil and gas workload in BLM's non-pilot offices, which are also experiencing a sharp and sustained demand for APDs. This increase will provide \$4.3 million for drilling permit application processing and \$2.8 million for inspection and enforcement activities. It will also provide \$2.1 million for energy monitoring activities. The increased funding for inspection, enforcement, and monitoring will strengthen BLM's ability to safeguard the environment while accommodating increased access to energy resources.

In addition, the 2007 budget includes \$471,000 for the Fish and Wildlife Service to increase consultation work with the non-pilot offices. The increase will facilitate sustainable development and delivery of energy resources, while ensuring development consistent with maintaining protections of threatened and endangered species.

The budget assumes continuation in 2007 of the enhanced funding for pilot offices from oil and gas rental receipts. The budget proposes, however, that the oil and gas program transition from this funding source to funding from drilling permit processing fees, effective September 30, 2007.

COST RECOVERY LEGISLATION

Funding for pilot offices from oil and gas rental receipts was added to the Energy Policy Act in the final conference committee on the legislation. The provision redirected an existing receipt stream that had been going to the U.S. Treasury. It also prohibited the Administration from implementing new fees for oil and gas permit processing.

The budget proposes to redirect rental receipts back to the U.S. Treasury and to allow the Administration to proceed with a cost recovery rulemaking. This proposal supports the Administration's efforts to charge for government services where the direct beneficiary can be identified. It will shift these costs from taxpayers and facilitate BLM's ability to timely process permit applications as demand increases. The proposed reliance on cost recoveries is consistent with the findings of Inspector General reports and the 2005 Program Assessment Rating Tool review of the oil and gas program.

To ensure that transition to cost recovery is seamless, the budget proposes that the cost recovery rulemaking take effect on September 30, 2007. The rulemaking will phase in full cost recovery for APDs, beginning with a fee amount that will generate an estimated \$20.0 million in 2008, fully replacing the amount provided by rental receipts.

Collectively, BLM pilot and non-pilot offices will be capable of processing 11,984 APDs and conducting 26,188 inspections in 2007.

Alaska North Slope— The most promising area for significant long-term oil discoveries and dramatic gains in domestic production in the United States is the Alaska North Slope, including the National Petroleum Reserve-Alaska and the Arctic National Wildlife Refuge. The U.S. Geological Survey estimates a 95 percent probability that at least 5.7 billion barrels of technically recoverable undiscovered oil are in the ANWR coastal plain and a five percent probability of at least 16 billion barrels. They estimate that the mean or expected value is 10.36 billion barrels of technically recoverable undiscovered oil. At \$55 a barrel, more than 90 percent of the assessed technically recoverable resource estimate is estimated to be economically viable. At peak production, ANWR could produce more oil than any U.S. State, including Texas and Louisiana.

The 2007 budget assumes that Congress will enact legislation in 2006 to open ANWR to energy exploration and development, with a first lease sale held in 2008 and a second in 2010. The budget estimates that these two lease sales will generate a combined \$8.0 billion in bonus revenues, including \$7.0 billion from the 2008 lease sale.

The 2007 BLM budget includes an increase of \$12.4 million for Alaska North Slope energy activities to support the preparation and implementation of an ANWR leasing program; enable BLM to effectively manage the anticipated increased energy develop-

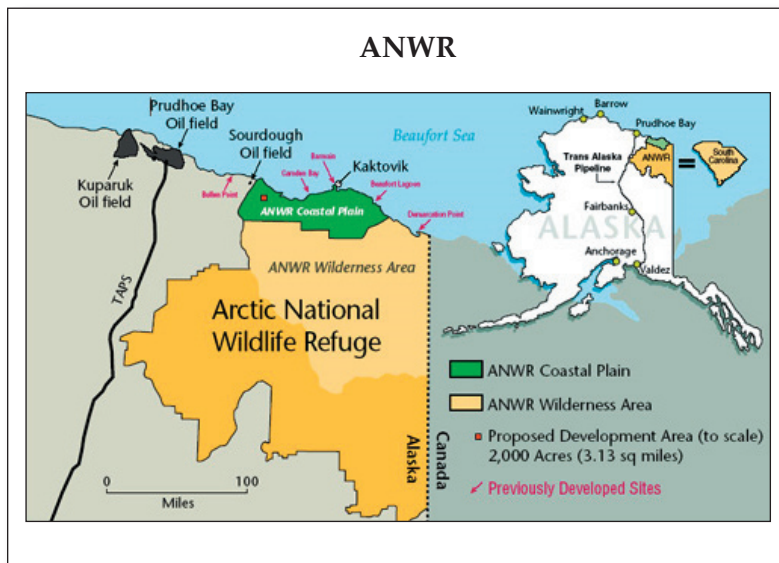
ment activities in the NPR-A; and allow BLM to remediate old, abandoned energy-related infrastructure that poses a threat to the Arctic environment.

For ANWR, the additional funds will support such requirements as preparation of an environmental impact statement, data acquisition, and lease administration. For the NPR-A, the workload for leasing, development, and exploration activities will increase with the recent completion and ap-



proval of a resource management plan amendment for the northeast corner. The amendment will guide leasing, exploration, and development in the northeast portion of the National Petroleum Reserve for the next 10 to 20 years using lease stipulations and required operating procedures similar to those adopted in 2004 for the adjacent northwest area of the petroleum reserve. The BLM will also continue coordinating with the State of Alaska and the Canadian government on development of a North Slope natural gas pipeline.

The Administration is committed to ensuring that North Slope energy development is conducted in an environmentally sound manner. Given the unique and valuable natural resources of the North Slope, BLM will look for opportunities to strengthen and leverage its capabilities for effective environmental protection. In 2007, BLM will continue to support the North Slope Science Initiative. The NSSI, authorized in Section 348 of the Energy Policy Act, will guide inventory, monitoring, and research efforts at the Federal, State, and local levels



I'm confident that one day, Americans will look back on the Energy Policy Act as a vital step toward a more secure and more prosperous Nation that is less dependent on foreign sources of energy.

President George W. Bush, August 8, 2005

to support resource management on the North Slope. The initiative will enhance the quality and quantity of the scientific data available for aquatic, terrestrial, and marine environments on the North Slope, providing information to decisionmakers, agencies, industry, and the public. The initiative will facilitate a coordinated approach to information gathering and analysis.

The members of NSSI include BLM, MMS, USGS, FWS, National Park Service, National Marine Fisheries Service, Alaska Department of Natural Resources, Alaska Department of Fish and Game, Arctic Slope Regional Corporation, and the North Slope Borough. The NSSI research and monitoring projects will enhance the ability of these agencies to manage North Slope development in ways that protect the region's ecology and wildlife.

With the increased funds requested for the North Slope, BLM will continue to respond to the potential environmental damage associated with government legacy wells in the NPR-A. The BLM began addressing this problem in 2004. In response to the emergency situation created by accelerated coastal erosion in the vicinity of the J.W. Dalton well, in 2005 the Department transferred \$7.5 million using the Secretary's emergency transfer authority, combining it with \$1.5 million in deferred maintenance funding, to plug the Dalton well and dispose of its reserve pits.

The BLM also began assessments and characterizations of other sites at risk of inundation in the area and is developing a plan to direct the monitoring, maintenance, and response needs of the other legacy wells and infrastructure sites in the NPR-A threatened by river, lake, and ocean shoreline erosion. The studies and long-term plan will be completed in 2006. Potential work in 2007 includes completing the appropriate disposal of the Dalton reserve pit contents, plugging abandoned wells

at two other locations, and properly disposing of landfill and reserve pit contents in the area.

Offshore Oil and Gas — Deepwater areas of the Gulf of Mexico currently account for 17 percent of domestic oil and six percent of domestic gas production. However, over the next decade, oil production in the Gulf is expected to increase by 43 percent and natural gas by 13 percent. The increase will come from deepwater and greater depths below the ocean floor. Deepwater exploration will likely continue at historically high levels as the private sector strives to meet America's energy requirements. Hurricanes Katrina and Rita confirmed

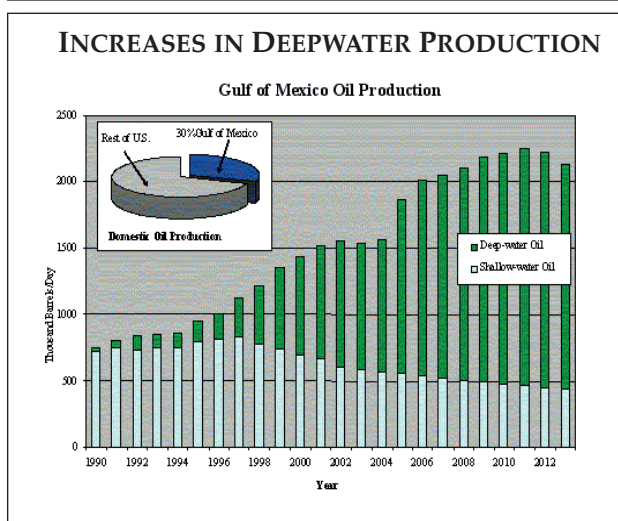


that the offshore oil and gas industry produces environmentally safe energy. Even in the face of back-to-back hurricanes, all subsurface safety valves held on the OCS, resulting in no significant spill from production wells.

The OCS program provides for safe and environmentally sound energy and mineral development

Despite such intense winds and powerful waves offshore during Hurricanes Katrina and Rita, we experienced no loss of life or significant spills from any offshore well on the Outer Continental Shelf. Personal and environmental safety are two of the major goals of the Department of the Interior and our Minerals Management Service.

Secretary Gale A. Norton, October 4, 2005



on the OCS, while ensuring that the public receives fair market value for these resources. The 2007 budget includes an increase of \$2.1 million for OCS development, to allow MMS to keep pace with the surge in exploration and development in the deep-water areas of the Gulf of Mexico. In 2005, MMS completed over 22,000 compliance inspections of offshore oil and gas facilities via helicopter, ensuring compliance with MMS regulations. A funding increase is needed to cover the cost of the new, five-year aviation contract, due to the increasing number of inspections and rising fuel costs. Flight charges are expected to increase by ten percent in 2007. With industry continuing to march into new frontiers and deploying new technologies, enhancing MMS's expertise is imperative to continuing effective regulatory oversight for safety and environmentally sound operations.

As stewards of OCS mineral resources, MMS currently manages over 8,200 leases covering approximately 43 million acres underlying Federal offshore lands. The bureau reviews and processes thousands of transactions each year to ensure proper documentation of lessee and operator responsibilities and as part of its on-going technical review. In the first half of 2005, transfers of record title actions increased 66 percent over the same period in 2004. These transaction volumes are likely to continue to rise through 2009 as an increasing number of leases approach their termination dates, and as the more than 100 operator companies seek approval to drill wells. The MMS anticipates processing nearly 10,000 plans, permits, and applications each year.

Royalty-In-Kind — The RIK program has demonstrated that, under certain circumstances, tak-

ing royalties in-kind has many advantages over taking them in-value. These advantages include revenue enhancement and earlier receipt of royalty revenues, as well as reduced regulatory costs and reporting requirements, thus shortening compliance cycles, improving overall business efficiencies, and avoiding conflict and administrative costs.

Beginning in 2006, MMS has permanent authority to fund transportation and administrative costs for the RIK program through RIK revenue receipts. As MMS has further optimized RIK volumes and increased U.S. Treasury revenues, it has examined its business practices and basic organizational structure. The 2007 MMS budget includes a reduction of \$3.1 million related to the indirect costs that can be recovered through RIK receipts collected in 2007.

ROYALTY-IN-KIND

Sales of royalty oil and gas through the MMS RIK program generated \$18.1 million in additional revenue for the U.S. Treasury in 2004. In the first three quarters of 2005, the RIK program increased receipts by \$16.3 million. In addition, administration of offshore RIK costs 26 to 36 percent less than RIV administration per barrel of oil equivalent, or per lease, respectively.

DEVELOPING ALTERNATIVE ENERGY SUPPLIES

The Energy Policy Act provides new authorities and a wide range of expanded responsibilities related to alternative energy resources, such as wind, solar, biomass, geothermal, and ocean energy resources, including tidal, wave, current, and thermal energy. By stimulating assessment and development of creative energy resources in the coming years, these new authorities will help MMS, BLM, and USGS to take appropriate steps to respond to America's growing energy needs.

The 2007 budget includes \$6.5 million for MMS to establish a comprehensive program for regulatory oversight of new and innovative renewable energy projects on the OCS, including four alternative

The Energy Policy Act authorizes research into the prospects of unlocking vast amounts of energy now trapped in shale and tar sands.

President George W. Bush, August 8, 2005

energy projects for which permit applications were previously under review by the U.S. Army Corps of Engineers. This transition will require consultation with Federal and coastal State agencies, industry, and other parties; environmental studies and impact statements; and the creation of the permitting and regulatory systems for alternative energy installations, including the promulgation of regulations to ensure environmental protection; the design and implementation of leasing procedures; fee, rental, and royalty regimes; compliance mechanisms; and the system modifications required for auditing and disbursement of revenues. The MMS anticipates being able to charge industry for certain applicant-specific assessment and processing activities.

FACILITATING DEVELOPMENT OF AMERICA'S ENERGY FRONTIER

The Energy Policy Act also provides new authorities and responsibilities for development of oil shale and gas hydrates. These new authorities will help BLM, MMS, and USGS respond to America's growing energy needs.

Oil Shale — Oil shale resources represent an abundant energy resource that could contribute significantly to the Nation's domestic energy supply. Oil shale underlying a total area of 16,000 square miles in Colorado, Utah, and Wyoming represents the largest known concentration of oil shale in the world. This area may contain in place the equivalent of 1.2 trillion barrels of oil.

The BLM is using \$1.0 million provided in 2006 to continue a research, development, and demonstration leasing program and begin work on the

programmatic environmental impact statement that is a precursor to a commercial oil shale leasing program. Recognizing the significant potential benefits of oil shale to the Nation, and the level of industry interest expressed thus far, the 2007 budget proposes to accelerate implementation of an oil shale development program leading to a commercial leasing program by the end of 2008. The budget proposes a \$3.3 million increase, for a total program budget of \$4.3 million, to enable BLM to meet this milestone.

This level of funding will support a programmatic EIS and a dedicated program management and oversight office commensurate with the technological challenges involved in developing oil shale and the high level of environmental protection the Department wishes to ensure during exploration and production. The 2007 budget also includes a \$500,000 increase for USGS to determine the size, quality, and quantity of oil shale deposits in the U.S.

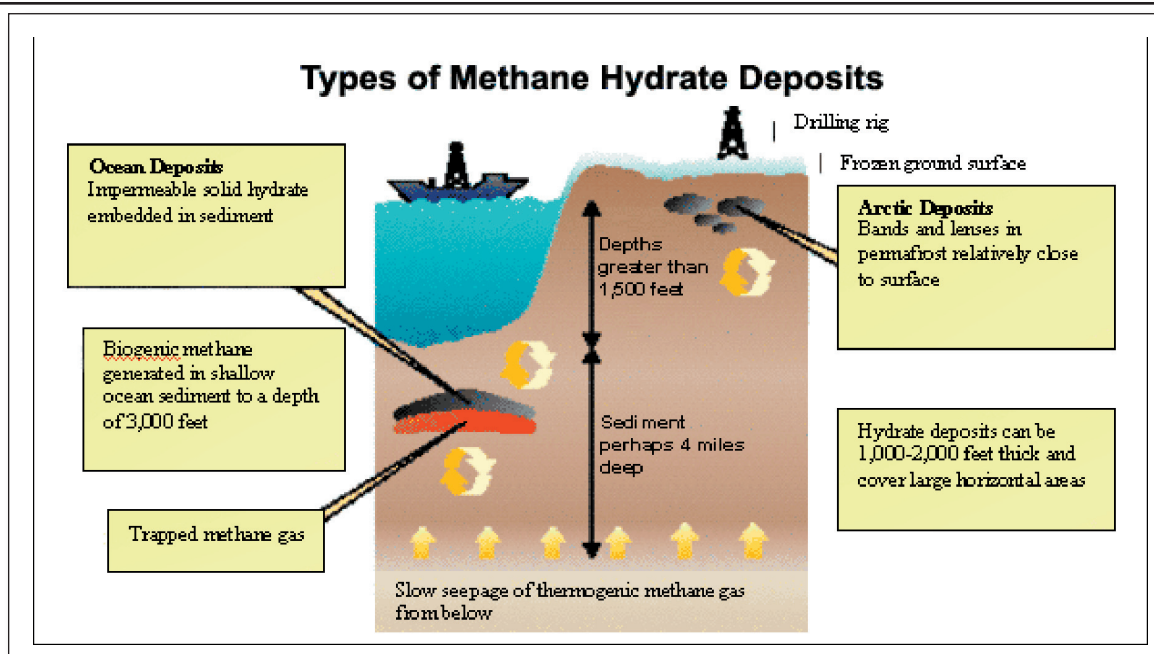
The BLM estimates that funding provided in 2007 for the programmatic EIS and regulations will lead to commercial leases covering up to 20,000 acres by late 2008. New leases utilizing the results of the research and development leasing program could lead to new production, but these leases are not expected to be in production for at least five years.

Gas Hydrates — Over the last 20 years, scientists have changed their view of how natural gas occurs within the Earth. Gas hydrates, found in some of the world's most remote regions such as the Arctic and deepwater oceans, could dramatically alter both the global balance of world energy supply and our understanding of the way the Earth's crust, oceans, atmosphere, and climate interact.

Gas hydrates occur abundantly in nature, both in Arctic regions where hydrates form beneath the permafrost, and in marine sediments at water

The Energy Policy Act facilitates Interior's important mission in providing energy for Americans. It enhances production of renewable energy by harnessing the power of wind, waves, and currents in Federal offshore waters; modernizes our coal leasing practices; and includes a number of provisions relating to non-conventional energy sources such as oil shale and methane hydrates.

Secretary Gale A. Norton, August 8, 2005



depths greater than 500 meters. A crystalline solid, gas hydrates consist of gas molecules, usually methane—the chief element of natural gas—surrounded by a cage of water molecules. When either warmed or depressurized, methane hydrate reverts back to natural gas. When brought to the Earth’s surface, one cubic meter of gas hydrate becomes approximately 164 cubic meters of natural gas.

The estimated volume of natural gas occurring in hydrate form is immense, possibly exceeding the combined value of all other fossil fuels. On the North Slope of Alaska alone, there are potentially 562 Tcf of gas hydrate, with 100 Tcf falling within just two areas of known infrastructure—the Eileen and Tarn accumulations. In comparison, in 2004 the natural gas consumption of the United States was 22.4 Tcf.

The realization of production from natural gas hydrates could provide an opportunity to develop a very large fuel resource that can be produced and used with relatively low environmental impacts. However, the ability of gas hydrate resources to contribute to world energy needs will depend on the availability, production capability, and cost of extracting methane from its gas hydrate phase. The Interior Department is working with the private sector, academia, and other government agencies to ensure a long-term supply of natural gas by developing the knowledge and technology to allow commercial production of natural gas from domestic gas hydrate deposits.

The 2007 budget includes an increase of \$500,000 for USGS, \$1.0 million for MMS, and \$425,000 for BLM for a coordinated effort in the Gulf of Mexico and the North Slope of Alaska to accelerate research, resource modeling, assessment, and characterization of hydrates as a commercially viable source of energy. The work of these bureaus will be guided by a consolidated plan approved by Interior’s Research and Development Council.

GAS HYDRATES RESEARCH

An international research consortium, the Mallik 2002 Partnership Group, involving USGS as scientific co-lead, has reported that it is technically feasible to produce gas from gas hydrates. Results from the Mallik 2002 production research project are being used in various USGS collaborative studies with MMS, Chevron, the Department of Energy Joint Industry project, and academia to develop geologic models that would be used to predict the occurrence of gas hydrates in the Gulf of Mexico. Results of the effort are also being used in a collaborative study between USGS, BLM, and the State of Alaska to assess the recoverable resource potential of onshore natural gas hydrate and associated free-gas accumulations on both State and Federal managed lands in northern Alaska.

TRIBAL ENERGY

Under the Energy Policy Act, Tribes maintain authority over their energy resources, within certain requirements. The Bureau of Indian Affairs budget includes \$2.0 million for Indian energy resource development, including energy inventories, feasibility studies, technical training, and start-up technical assistance, with emphasis on development of resource agreements.

GEOLOGICAL AND GEOPHYSICAL DATA PRESERVATION

The Energy Policy Act calls for an archive system to provide for the storage, preservation, and archiving of subsurface, surface, geological, geophysical, and engineering data and samples. An implementation plan for this program is due in 2007. The budget includes an increase of \$1.0 million for USGS to finalize a plan and put an archiving system in place to preserve these data. This system will ultimately preserve data, cores, offshore seismic reflection records, and other geophysical information collected by major oil and mineral companies. The data are at risk because these companies no longer want to maintain the data, which are invaluable to the geologic community.

SEISMIC REFLECTION SURVEYS

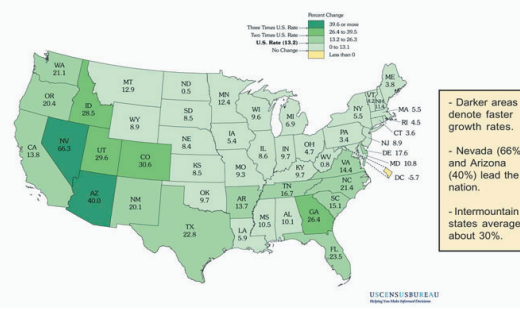
Chevron and several other major oil companies have collected vast holdings of seismic reflection surveys off the west coast of the United States from Alaska to Mexico over the past several decades. Until recently, these have been proprietary information, and the geologic community at large has not been able to use them to better understand offshore geology. The companies no longer want to maintain these data that cost billions of dollars to collect, and are transferring their holdings to USGS. The USGS Coastal and Marine Geology program is putting all of these data on the internet and thus accessible to the public.

RESOLVING WATER CONFLICTS IN THE WEST

The Bureau of Reclamation's core mission is to deliver water to customers, within the constraints of Federal and State water law. The amount of water available depends on the naturally occurring yearly water supply, water management practices, and variable weather patterns. Overall benefits from available water can be optimized through effective management and operations that ensure effective water delivery systems. Watershed modeling, precipitation forecasting, enhancements to delivery systems, and other technological improvements can enhance the efficiency and productivity of water resource projects.

DEMOGRAPHIC CHANGES: Population has grown fastest in the West, particularly in the "Public Land States"

Percent Change in Resident Population for the 48 States
and the District of Columbia: 1990 to 2000



Water is one of the scarcest resources in some of the fastest growing areas of the Nation. It is the lifeblood and foundation of the American West. Yet existing water supplies are, or may become, inadequate to meet the demands for water for people, cities, farms, and the environment, as currently managed, even under normal water supply conditions. These supply and management challenges are coupled with the fact that parts of the West are currently experiencing the worst drought on record. This combination of factors is generating major conflicts among those competing for water.

Interior has a long history of constructing water projects in the American West, where water resources are managed within a tightly woven quilt of Federal and State water law. In some places in the West, improved efficiencies alone will not address

Western States are facing some hard realities. Explosive population growth, chronic water shortages—particularly during this time of drought—environmental needs, over-allocated watersheds, and aging water facilities—all combine to create opportunities for crisis and conflict.

Secretary Gale A. Norton, May 5, 2005

projected shortages or resolve current demands for water. Therefore, Reclamation also continues to improve water management through construction projects that utilize the latest in technology to increase water supply.

make available more water supplies for farms, cities, people, and the environment. The \$14.5 million in 2007 will fund three program components: challenge grants, water system optimization analysis, and research to improve water purification technology.

WATER 2025

As water supply-demand challenges increase in the West, the Bureau of Reclamation is well positioned over the long term to help prevent crises and conflict. Water 2025 affirms this long-term goal by focusing resources on increasing certainty and flexibility in water supplies, diversifying water supplies, and preventing crises through added environmental benefits in many watersheds, rivers, and streams.

The 2007 budget includes \$14.5 million for Water 2025, an increase of \$9.6 million. Water 2025 will use the most effective, low-cost options for increasing water supplies, including: on-the-ground improvements to existing irrigation facilities and installation of water management tools such as computerized water measurement and canal control devices; increasing water marketing opportunities; and making water purification more affordable. Increasing the efficiency of existing water delivery systems across the West is one tool that will help prevent crises and conflicts and help

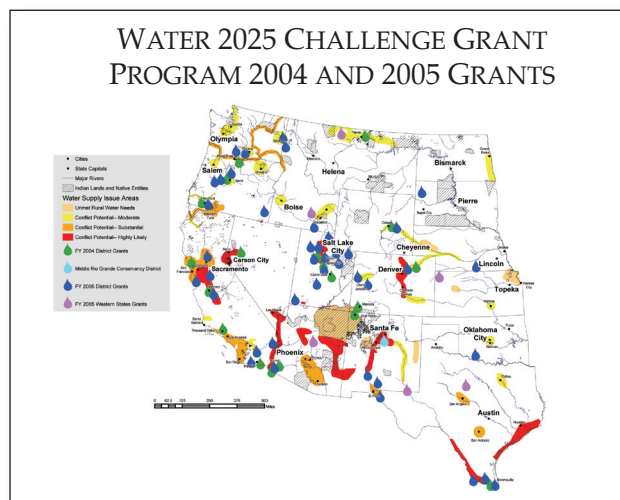
WATER PURIFICATION RESEARCH GOALS

- Produce a 10:1 return on the program's R&D
- Increase partnership cost share
- Increase technology transfer

ANIMAS LA PLATA

The Colorado Ute Settlement Act Amendments of 2000 provide for the implementation and completion of the Animas La Plata project. The 2007 budget proposes to increase funding by \$2.0 million to \$57.4 million, which provides for initiation of construction of Ridges Basin inlet conduit and for continued construction of two of the project's other major features, the Ridges Basin Dam and Durango Pumping Plant. The increase also helps mitigate recent effects of increased inflation, primarily associated with steel, cement, fuel, and related supplies.

WATER 2025 CHALLENGE GRANT PROGRAM 2004 AND 2005 GRANTS



RURAL WATER

The 2007 budget includes \$68.7 million for rural water projects, which is \$14.4 million below 2006 enacted. Funding for this program is focused on projects under construction. The 2007 budget proposes to fund Mni Wiconi, Garrison Diversion Unit, Fort Peck Reservation-Dry Prairie, and Lewis and Clark rural water systems. The Mid-Dakota project will be completed with funding provided in 2006.



The 2004 PART evaluation of Reclamation's rural water projects recommended that Reclamation develop a formal rural water program, to include management controls and project development criteria and guidelines. The Administration has been working with Congress on rural water legislation that has passed the Senate and awaits action by the House of Representatives.

CALIFORNIA BAY-DELTA RESTORATION: CALFED

Critical to California's economy, the Sacramento-San Joaquin Delta serves as the hub of the State's water management system. The Sacramento and San Joaquin Rivers, which flow into the San Francisco Bay, provide drinking water for two-thirds of California's homes and businesses, and irrigate more than seven million acres of farmland, on which 45 percent of the Nation's fruits and vegetables are grown. The Delta and its watersheds also provide habitat for 750 plant and animal species, some listed as threatened or endangered.

Established in May 1995, CALFED is a comprehensive, long-term program to address the complex and interrelated problems in the Bay-Delta, the watersheds that feed it, and the areas served by

waters diverted out of it. A consortium of Federal and State agencies fund and participate in the CALFED program, focusing on the health of the ecosystem and improving water management and supplies. In addition, CALFED addresses the issues of water supply reliability, aging levees, and threatened water quality.

After preparation of environmental documentation, the CALFED parties, including Interior, signed a record of decision formally approving a long-term programmatic plan for restoring ecosystem values and improving water management in the area. Approximately \$105.0 million was provided to Reclamation in 2001 through 2006 within various authorized programs of the Central Valley Project for activities that support the goals of the CALFED program. Beyond these funds, the Bureau of Reclamation and other Federal agencies participating in the CALFED program fund numerous other programs and activities closely aligned with the CALFED program.

On October 25, 2004, the President signed into law the CALFED Bay-Delta Authorization Act. The legislation provides a six-year Federal authorization to implement the CALFED program. In 2005, the Governor of California ordered a review of the governance, finances, and priorities of the California Bay-Delta Authority and the CALFED program. The review produced the "10 Year Action Plan" for CALFED, which narrows the programmatic focus, realigns program management, and recommends a finance plan to carry the program forward.

The 2007 budget includes \$38.6 million for Reclamation to implement CALFED activities. The 2007 budget requests funding for the following program areas:

Environmental Water Account — The request includes \$10.9 million for the continued reduction in conflict between fisheries and water project operations in the Delta. This program provides additional protection to the fish of the Bay-Delta estuary through environmentally beneficial changes

The Department recognizes that addressing future water needs in the West requires a mix of different strategies. These include vigilance in the efficient operation and maintenance of existing facilities, particularly the array of storage projects installed over the last century. We also look for additional storage opportunities that are justified from economic and environmental perspectives. The Department is collaborating with the western States to address western water needs.

Deputy Secretary P. Lynn Scarlett, March 9, 2005

in the operations of the State Water Project and the CVP, at no cost to water users.

Storage Program — The request includes \$11.4 million to continue feasibility investigations and environmental documentation on four proposed CALFED storage projects: Shasta enlargement; Upper San Joaquin River Basin storage; north of Delta off-stream storage (Sites Reservoir); and Los Vaqueros. Planning studies will focus on formulation of alternatives and cost-benefit analysis. Based on expected funding levels, plan formulation reports for Shasta and Los Vaqueros enlargement will be completed in 2006 and Upper San Joaquin and Sites Reservoir enlargement will be completed in 2007.

Conveyance — The budget includes \$5.2 million for activities consistent with the Delta improvement program, including increased capacity of the intertie between the CVP Delta Mendota Canal and the State Water Project's aqueduct; and projects to improve water quality in the Delta and reduce salinity and improve dissolved oxygen in the San Joaquin River.

Water Use Efficiency — The 2007 request includes \$247,000 to continue implementation of projects via grants or cooperative agreements, which are anticipated to be awarded in 2006. Projects are expected to help meet the water conservation objectives contained in the CALFED water use efficiency program, which includes implementation of best management practices and focuses on water districts with a Federal nexus. Grants would be awarded that encourage cost-shared projects proposed by water districts, irrigation districts, resource conservation districts, and urban water agencies located in the CALFED solution area.

Ecosystem Restoration — The budget request includes \$2.0 million to continue implementing projects that improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta ecosystem to support sustainable populations of diverse and valuable plant and animal species. Projects include habitat enhancement, fish screen improvements, control of invasive species, and water quality improvement projects.

Water Quality — The 2007 budget request includes \$3.0 million to implement activities that advance water quality standards and objectives. These activities include San Joaquin Valley drainage management actions (including those that are consistent with the Westside Regional Drainage Plan), water quality monitoring, and other actions identified in the program to meet water quality standards and objectives for which the CVP has responsibility.



Science — The 2007 budget includes \$3.0 million to continue the interagency ecological program and the CALFED science program investigation of causes for the recent declines in the Delta of pelagic organisms. Also included in this request are expert evaluations and scientific assessments of the vari-

ous CALFED program elements and for assisting the CALFED agencies with the establishment of performance measures, and monitoring and evaluating the performance of all program areas.

Program Oversight — The 2007 budget also requests \$3.0 million for program tracking of schedules, finances, and performance; coordination of public outreach and multi-agency oversight; and coordination of program activities to ensure program balance and integration.

NORTHWEST FOREST PLAN

The Interior Department works in conjunction with the U.S. Forest Service and States to manage timber tracts on public lands and meet the goals of the Northwest Forest Plan and forest management plans. The 2007 BLM budget will generate increased timber production with a \$3.0 million increase in the Oregon and California Forest Management program that supports the commitments of the settlement agreement in the lawsuit *American Forest Resource Council v. Clarke*. The additional funding will focus on implementing the Northwest Forest Plan under the commitments of the settlement agreement, which directs BLM to produce the allowable sale quantity of 203 million board feet and an additional 100 MMBF by thinning late-succession reserves. The increase will enable BLM to ramp up to meet the commitment level of 303 MMBF by 2009. It will fund the one to three-year sale preparation process, resulting in an additional 20 MMBF offered in 2008 and 2009, bringing the total timber offered to 263 MMBF in those years. This additional timber sale volume will yield an estimated additional \$6.5 million in Federal revenues.

