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Statement of

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Military Construction, Veteran Affairs, and Related Agencies

of the

Senate Appropriations Committee

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Introduction

Chairman Johnson, Ranking Member Kirk and distinguished members of the subcommittee: Thank you for the opportunity to present the President's Fiscal Year (FY) 2015 budget request for the Department of Defense programs supporting installations, facilities energy and the environment.

First, let me thank you for your support for our installation mission. The DoD operates an enormous real property portfolio encompassing over 562,000 buildings and structures on 523 bases, posts, camps, stations, yards and centers. The replacement cost of the Department's installations is \$850 Billion, excluding the cost of the 27 million acres of land that our installations occupy. Our installations remain critical components of our ability to fight and win wars. Our warfighters cannot do their job without bases from which to fight, on which to train, or in which to live when they are not deployed. The bottom line is that installations support our military readiness.

In addition, I would like to express my thanks to Congress for an FY 2014 budget that allowed us to avoid a catastrophic budget year. The funding levels for the facilities accounts and the relative timeliness of the budget compared to FY 2013 allowed us to recover from the disproportionate burden that facilities sustainment and base operations bore last year. While this will still be a challenging budget year, the funding levels and the certainty achieved by striking a budget deal and taking sequestration off the table for the year will allow us to manage our resources and conduct our operations more effectively.

Still, the FY 2015 budget request reflects the assumption that Budget Control Act funding levels are likely to continue. The recent budget deal provided more assistance to FY 2014 than FY 2015, and in order to meet the overall budget numbers, we had to scale back programs across the Department, to include military construction. As such, the FY 2015 request for military construction and family housing is \$6.6 billion, a 40.4% decrease from the FY 2014 request. Because infrastructure, generally, has a long useful life, and its associated degradation is not as immediate, the DoD Components are taking more risk in the military construction program in order to decrease risk in other operational and training budgets. In addition, reducing military construction reduces investment risk as we contemplate the uncertain allocation of force structure cuts and the possibility of a new round of Base Realignment and Closure (BRAC).

Tighter budgets have driven the Services to take more risk in their Facilities Sustainment accounts. While continuing to assume risk in these accounts over time will result in increased repair requirements and decreased energy efficiency, we are accepting near term risk in facility maintenance while the Department adjusts to the new funding profile.

To address this and other shortfalls driven by the funding caps, the President's Budget includes the Opportunity, Growth and Security Initiative. This initiative would provide an additional \$26 billion for the Defense Department in FY 2015, including substantial investments in military construction and facilities sustainment.

Finally, we persist in our request for another BRAC round, though given Congress' rejection of our previous request in 2015 and the time it takes to execute the BRAC process, we are now asking for a round in 2017. We maintain that the Department has well documented excess

capacity and is on a path for even more as we reduce our force structure. As Secretary Hagel indicated, we cannot afford to spend money on infrastructure we don't need while we continue to take risk in military readiness accounts.

My testimony will outline the FY 2015 budget request and highlight a handful of top priority issues—namely, the Administration's request for BRAC authority, our progress on the European Infrastructure Consolidation analysis, new developments on the Pacific realignment, an overview of our facility energy programs, and a discussion of the steps DoD is taking to mitigate the risk posed by climate change.

Fiscal Year 2015 Budget Request - Military Construction and Family Housing

The President's FY 2015 budget requests \$6.6 billion for the Military Construction (MilCon) and Family Housing Appropriation—a decrease of approximately \$4.5 billion from the FY 2014 budget request. This decrease primarily reflects the declining budget environment resulting from the Budget Control Act and the recent budget agreement. In light of the sharp reductions in the construction budget, the DoD Components focused principally on sustaining warfighting and readiness postures. As I noted in the introduction, infrastructure degradation is not immediate, so DoD Components are taking more risk in the MilCon program in order to decrease risk in other operational and training budgets.

This funding will still enable the Department to respond to warfighter requirements and mission readiness. However, the reduced budget will have an impact on routine operations and quality of life as projects to improve aging workplaces are deferred. In addition to new construction needed to bed-down forces returning from overseas bases, this funding will be used to restore and modernize enduring facilities, acquire new facilities where needed, and eliminate those that are excess or obsolete. The FY 2015 MilCon request (\$4.9 billion) includes projects in support of the strategic shift to the Asia-Pacific, projects needed to support the realignment of forces, a few projects to improve and update facilities used by the Guard and Reserves forces, and although at a reduced level, it includes some projects to take care of our people and their families, such as unaccompanied personnel housing, medical treatment facilities, and schools.

Table 1. MilCon and Family Housing Budget Request, FY 2014 versus FY 2015

| | | | Change from FY 2014 | | |
|----------------------------------|-------------------------------------|-------------------------------------|------------------------|---------|--|
| Category | FY 2014 Request (\$ Millions) | FY 2015 Request (\$ Millions) | Funding (\$ Millions) | Percent | |
| Military Construction | 8,656 | 4,859 | (3,797) | (43.9%) | |
| Base Realignment and Closure | 451 | 270 | (181) | (40.1%) | |
| Family Housing | 1,544 | 1,191 | (353) | (22.9%) | |
| Chemical Demilitarization | 123 | 39 | (84) | (68.3%) | |
| NATO Security Investment Program | 240 | 200 | (40) | (16.7%) | |
| TOTAL | 11,014 | 6,559 | (4,455) | (40.4%) | |

Military Construction

We are requesting \$5.1 billion for "pure" military construction — *i.e.*, exclusive of BRAC and Family Housing---, the lowest amount in ten years. This request addresses routine requirements for construction at enduring installations stateside and overseas, and for specific programs such as the NATO Security Investment Program and the Energy Conservation Investment Program. In addition, we are targeting MilCon funds in three key areas:

First and foremost, our MilCon request supports the Department's operational missions. MilCon is key to implementing initiatives such as the Asia-Pacific rebalance, the Army's Brigade Combat Team reorganization, maritime homeland defense, and cyber mission effectiveness. Our FY 2015 budget request includes \$84 million for the final increment of the Kitsap Explosives Handling Wharf- II, \$120 million for a cyber warfare training facility, \$255 million for KC-46A mission facilities; and, \$51 million for Guam relocation support facilities. The budget request also includes \$180 million for the fourth increment of the U.S. Strategic Command Headquarters Replacement facility at Offutt Air Force Base, Nebraska; \$166 million for the second increment of the U.S. Cyber Command Joint Operations Facility at Fort Meade, Maryland; \$92.2 million for the first phase of a Joint Intelligence Analysis Complex Consolidation at RAF Croughton, United Kingdom; and \$411 million to address Special Forces Operations requirements.

Second, our FY 2015 budget request includes \$394 million to replace or modernize seven DoD Education Activity (DoDEA) schools that are in poor or failing physical condition. These projects, six of which are at enduring locations overseas, support the Department's plan to replace or recapitalize more than half of DoDEA's schools over the next several years, but at a slower pace to improve execution. The recapitalized or renovated facilities, intended to be models of sustainability, will provide a modern teaching environment for the children of our military members.

Third, the FY 2015 budget request includes \$486 million for five projects to upgrade our medical treatment and research facilities, including \$260 million for the fourth increment of funding to replace the Landstuhl Regional Medical Center at the Rhine Ordnance Barracks in Germany. Recapitalizing this facility is critical because it not only supports our wounded warriors but also serves as the primary DoD European referral center for high acuity specialty and surgical care. It is also our only theater level medical asset providing comprehensive services to the extraordinary large Kaiserslautern military community. Our budget focuses on medical infrastructure projects that are crucial to ensure that we can deliver the quality healthcare our service members and their families deserve, especially during overseas deployments.

Family and Unaccompanied Housing

A principal priority of the Department is to support military personnel and their families and improve their quality of life by ensuring access to suitable, affordable housing. Service members are engaged in the front lines of protecting our national security and they deserve the best possible living and working conditions. Sustaining the quality of life of our people is crucial to recruitment, retention, readiness and morale.

Our FY 2015 budget request includes \$1.2 billion for construction, operation, and maintenance of government-owned and leased family housing worldwide, oversight of privatized housing, and services to assist military members in renting or buying private sector housing. Most government-owned family housing is on bases in foreign countries, since the Department has privatized almost all of its family housing in the United States. The requested funding will ensure that U.S. military personnel and their families continue to have suitable housing choices.

Table 2. Family Housing Budget Request, FY 2014 versus FY 2015

| | | | Change from FY 2014 | | |
|--|-------------------------------------|-------------------------------------|--------------------------|---------|--|
| Category | FY 2014 Request (\$ Millions) | FY 2015 Request (\$ Millions) | Funding (\$ Millions) | Percent | |
| Family Housing Construction/Improvements | 194 | 95 | (99) | (51.0%) | |
| Family Housing Operations & Maintenance | 1,347 | 1,094 | (253) | (18.8%) | |
| Family Housing Improvement Fund | 2 | 2 | 0 | 0 | |
| TOTAL | 1,543 | 1,191 | (352) | (22.8%) | |

DoD also continues to encourage the modernization of Unaccompanied Personnel Housing (UPH) to improve privacy and provide greater amenities. In recent years, we have heavily invested in UPH to support initiatives such as BRAC, global restationing, force structure modernization and Homeport Ashore—a Navy program to move Sailors from their ships to shore-based housing when they are at their homeport. The FY 2015 MilCon budget request includes \$150 million for five construction and renovation projects that will improve living conditions for trainees and unaccompanied personnel.

The Military Services completed the initial Military Housing Privatization Initiative (MHPI) award phase before the end of FY 2013. The Air Force awarded the final three projects to complete its program, bringing the total privatized inventory to about 205,000 homes. The new challenge will be to manage the government's interests in these privatized projects to ensure they continue to provide quality housing for fifty years.

Facilities Sustainment and Recapitalization

In addition to new construction, the Department invests significant funds in maintenance and repair of our existing facilities. Sustainment represents the Department's single most important investment in the condition of its facilities. It includes regularly scheduled maintenance and repair or replacement of facility components—the periodic, predictable investments an owner should make across the service life of a facility to slow its deterioration, optimize the owner's investment and save resources over the long term. Proper sustainment retards deterioration, maintains safety, and preserves performance over the life of a facility, and helps improve the productivity and quality of life of our personnel.

The accounts that fund these activities have taken significant cuts in recent years. In FY 2013, DoD budget request included \$8.5 billion of Operations and Maintenance (O&M) funding for sustainment of our real property. This amount represents 82% of the requirement based on the Facilities Sustainment Model (FSM). Due to sequestration reductions, by the end of FY 2013, the Department had only obligated \$6.7 billion for sustainment, which equates to 65% of the modeled requirement. The Department's FY 2014 budget request for sustainment included just \$7.9 billion of O&M funds (78% of the modeled requirement) and Congress appropriated only \$7.3 billion, or 74% of the modeled requirement, for this purpose.

Table 3. Sustainment and Recapitalization Budget Request, FY 2014 versus FY 2015

| | | | Change from FY 2014 | | |
|------------------------|-------------------------------------|-------------------------------------|--------------------------|---------|--|
| Category | FY 2014 Request (\$ Millions) | FY 2015 Request (\$ Millions) | Funding (\$ Millions) | Percent | |
| Sustainment (O&M) | 7,867 | 6,429 | (1,438) | (18.3) | |
| Recapitalization (O&M) | 2,666 | 1,617 | (1,049) | (39.3) | |
| TOTAL | 10,533 | 8,046 | (2,487) | (23.6) | |

For FY 2015, the Department's budget request includes \$6.4 billion for sustainment and \$1.6 billion for recapitalization. The combined level of sustainment and recapitalization funding (\$8 billion) reflects a 23.6% decrease from the FY 2014 President's Budget (PB) request (\$10.5 billion). While the Department's goal is to fund sustainment at 90 percent of modeled requirements, the funding level noted above supports an average DoD-wide sustainment funding level of 65% of the FSM requirement. Due to budget challenges, the Military Services have taken risk in maintaining and recapitalizing existing facilities. The Services have budgeted facility sustainment between 63 and 77 percent of the DoD-modeled requirement, with the Marine Corps taking the least risk by budgeting sustainment at 77% and the Army assuming the greatest risk by budgeting sustainment at 63%. Continued decreases in sustainment coupled with inadequate investment in recapitalization of existing facilities will present the Department with larger bills in the out-years to restore or replace facilities that deteriorate prematurely due to underfunding their sustainment.

Facility Investment Policy Initiatives

<u>Military Construction Premium</u>: Last year, the Department completed a study to quantify elements of the MilCon process that increases construction costs compared to similar construction efforts in the private sector. We are now conducting additional analysis in two areas where military cost premiums were high.

First, we are taking a close look at anti-terrorism standards for construction. With current policy that prescribes significant minimum anti-terrorism construction standards, many construction projects must absorb excessive and disproportionate requirements, which in turn drive up costs. On December 7, 2012, the Deputy Secretary of Defense issued policy for DoD to adopt the Federal Interagency Security Committee (ISC) security standards for off-base DoD leased space

consistent with other Federal agencies. In addition, the Department is evaluating revisions to DoD requirements for building antiterrorism protection on our installations, which currently calls for the same minimum standards for nearly all on-base buildings. We are working to establish a process whereby risk and appropriate antiterrorism mitigation would be determined for each new project, similar to the policy we adopted for off-base leased facilities. For example, this risk assessment would take into account whether a building was well within a secure perimeter.

Second, we are undertaking a study to better understand the life-cycle cost impacts of our design practices in each of seven major building systems by comparing facilities designed for an extended service life (forty years or more) to those designed for the typical commercial practice of twenty to twenty-five years. We intend this study to inform decisions on design-life requirements in our technical standards. We believe our existing standards reduce life-cycle costs even where there appears to be an increase of initial costs; however, it is important to review them for improvement and/or validation.

<u>Facility Condition Standards</u>: We have been working for some time to develop a policy that relates the condition of facilities to requirements for recapitalization. While straightforward on its surface, it has turned out to be far more complex than originally thought, requiring underlying policy adjustments to enable the implementation of a policy on facility investment related to facility condition standards.

For example, each of the Military Services uses slightly different processes to measure the Facility Condition Index (FCI), a functional indicator used across the Federal Government to assess facility condition, expressed in terms of the relationship between what it would cost to repair a facility to a like-new condition and what it would cost to replace that facility (e.g., an FCI of 90% means that the cost to restore a facility is 10% of the cost to replace it). In order to increase the reliability of DoD's FCI data and to ensure the figures for each Service were comparable, the Department issued policy and implementation guidelines in September 2013 that reinvigorate and standardize our facility condition assessment and reporting processes, to include using a common inspection tool and ensuring qualified professionals conduct the inspections.

With standardized and reliable FCI data, we will be in a better position to develop a facility investment strategy based on the condition of the Department's real property portfolio, either as an aggregate portfolio or by looking at individual assets. Generally, we would like to maintain an average portfolio FCI of Fair (80%, formerly referred to as Q2), and we are seeking to replace, repair, excess or demolish buildings that are in such bad shape that they are rated as Failing (FCI less than 60%, formerly the Q4 designation). Today, our average FCI for all DoD facilities is 86%, and we have more than 17,000 buildings that are rated as Failing across the enterprise. Taking risk by underfunding sustainment will drive these figures in the wrong direction, and we will need a strategy to improve the condition of our real property inventory in the coming years.

<u>Payment in Kind Projects</u>: In 2013, the Senate Armed Service Committee released a report that focused on host nation funded construction in Germany, South Korea, and Japan. The report raised several concerns regarding the selection and prioritization of DoD construction projects using host nation funds, particularly those funds provided to the Department as in-kind contributions. As a result, the FY 2014 National Defense Authorization Act requires that the Department obtain advance authorization for construction projects funded through payment-in-

kind from host nations. While we disagree with the provision because it is overly restrictive, we understand Congressional concerns and will work with you to ensure we not only comply with this restriction but keep you better informed about all projects funded with host nation contributions.

Fiscal Year 2015 Budget Request - Environmental Programs

The Department has long made it a priority to protect the environment on our installations, not only to preserve irreplaceable resources for future generations, but to ensure that we have the land, water and airspace we need to sustain military readiness. To achieve this objective, the Department has made a commitment to continuous improvement, pursuit of greater efficiency and adoption of new technology. In the President's FY15 budget, we are requesting \$3.5 billion to continue the legacy of excellence in our environmental programs.

The table below outlines the entirety of the DoD's environmental program, but I would like to highlight a few key elements where we are demonstrating significant progress – specifically, our environmental restoration program, our efforts to leverage technology to reduce the cost of cleanup, and the Readiness and Environmental Protection Integration (REPI) program.

Table 4: Environmental Program Budget Request, FY 2015 versus. FY 2014

| | | | Change from FY 2014 | |
|----------------------------|----------------------------------|-------------------------------------|--------------------------|---------|
| Program | FY 2014 Request (\$ Millions) | FY 2015 Request (\$ Millions) | Funding (\$ Millions) | Percent |
| Environmental Restoration | 1,303 | 1,105 | (198) | (15.2%) |
| Environmental Compliance | 1,460 | 1,458 | (2) | (0.1%) |
| Environmental Conservation | 363 | 381 | 18 | 5.0% |
| Pollution Prevention | 106 | 119 | 13 | 12.3% |
| Environmental Technology | 214 | 172 | (42) | (19.6%) |
| BRAC Environmental | 379 | 264 | (115) | (30.3%) |
| TOTAL | 3,825 | 3,499 | (326) | (8.5%) |

Environmental Restoration

We are requesting \$1.4 billion to continue cleanup efforts at remaining Installation Restoration Program (IRP – focused on cleanup of hazardous substances, pollutants, and contaminants) and Military Munitions Response Program (MMRP – focused on the removal of unexploded

ordinance and discarded munitions) sites. This includes \$1.1 billion for "Environmental Restoration," which encompasses active installations and Formerly Used Defense Sites (FUDS) locations and \$264 million for "BRAC Environmental." DoD is making steady progress, moving sites through the cleanup process towards achieving program goals. The FY 2015 cleanup request is reduced by 21.1%. The reduction for the Environmental Restoration request is primarily due to budgetary reductions for the Army, who will still meet our restoration goals despite the lower funding. The reductions in the BRAC funding request will be augmented with unobligated balances from the consolidated BRAC account.

Table 5: Progress Toward Cleanup Goals

| Goal: Achieve Response Complete at 90% and 95% of Active and BRAC IRP and MMRP sites, | | | | |
|---|--|-------------------|-------------------|--|
| and F | and FUDS IRP sites, by FY2018 and FY2021, respectively | | | |
| | Status as of the end of Projected Status at Projected Status | | | |
| | FY2013 | the end of FY2018 | the end of FY2021 | |
| Army | 89% | 97% | 98% | |
| Navy | 75% | 88% | 95% | |
| Air Force | 70% | 89% | 94% | |
| DLA | 88% | 91% | 97% | |
| FUDS | 78% | 90% | 95% | |
| Total | 79% | 92% | 96% | |

By the end of 2013, the Department, in cooperation with state agencies and the Environmental Protection Agency, completed cleanup activities at 79 percent of Active and BRAC IRP and MMRP sites, and FUDS IRP sites, and is now monitoring the results. During FY 2013 alone, the Department completed cleanup at over 800 sites. Of the more than 38,000 restoration sites, almost 30,000 are now in monitoring status or cleanup completed. We are currently on track to exceed our program goals – anticipating complete cleanup at 96% of Active and BRAC IRP and MMRP sites, and FUDS IRP sites, by the end of 2021.

Our focus remains on continuous improvement in the restoration program: minimizing overhead; adopting new technologies to reduce cost and accelerate cleanup; and refining and standardizing our cost estimating. All of these initiatives help ensure that we make the best use of our available resources to complete cleanup.

Note in particular that we are cleaning up sites on our active installations in parallel with those on bases closed in previous BRAC rounds – cleanup is not something that DoD pursues only when a base is closed. In fact, the significant progress we have made over the last 20 years cleaning up contaminated sites on active DoD installations is expected to reduce the residual environmental liability in the disposition of our property made excess through BRAC or other reasons.

Environmental Technology

A key part of DoD's approach to meeting its environmental obligations and improving its performance is its pursuit of advances in science and technology. The Department has a long record of success when it comes to developing innovative environmental technologies and getting them transferred out of the laboratory and into actual use on our remediation sites,

installations, ranges, depots and other industrial facilities. These same technologies are also now widely used at non-Defense sites helping the nation as a whole.

While the FY 2015 budget request for Environmental Technology overall is \$172 million, our core efforts are conducted and coordinated through two key programs—the Strategic Environmental Research and Development Program (SERDP – focused on basic research) and the Environmental Security Technology Certification Program (ESTCP – which validates more mature technologies to transition them to widespread use). The FY 2015 budget request includes \$57.8 million for SERDP and \$26.5 million for ESTCP for environmental technology demonstrations. (The budget request for ESTCP includes an additional \$25.0 million for energy technology demonstrations.)

These programs have already achieved demonstrable results and have the potential to reduce the environmental liability and costs of the Department – developing new ways of treating groundwater contamination, reducing the life-cycle costs of multiple weapons systems, and improving natural resource management.

Most recently, SERDP and ESTCP have developed technology that allows us to discriminate between hazardous unexploded ordnance and harmless scrap metal without digging up an object. This technology promises to reduce the liability of the MMRP program by billions of dollars and accelerate the current cleanup timelines for munitions sites – without it; we experience a 99.99% false positive rate and are compelled to dig up hundreds of thousands of harmless objects on every MMRP site. The rigorous testing program for this technology has experienced some delays due to sequestration and is now expected to be complete in 2015. Even as the technical demonstrations are ongoing, the department has been pursuing an aggressive agenda to transition the technology to everyday use. We are proceeding deliberately and extremely successfully with a testing and outreach program designed to validate the technology while ensuring cleanup contractors, state and Federal regulators, and local communities are comfortable with the new approach. We are already beginning to use this new tool at a few locations, but hope to achieve more widespread use within the next few years.

Looking ahead, our environmental technology investments are focused on the Department's evolving requirements. We will work on the challenges of contaminated groundwater sites that will not meet department goals for completion because no good technical solutions exist; invest in technologies to address munitions in the underwater environment; develop the science and tools needed to meet the Department's obligations to assess and adapt to climate change; and continue the important work of reducing future liability and life-cycle costs by eliminating toxic and hazardous materials from our production and maintenance processes.

Environmental Conservation and Compatible Development

In order to maintain access to the land, water and airspace needed to support our mission needs, the Department continues to manage successfully the natural resources entrusted to us – including protection of the many threatened and endangered species found on our lands. DoD manages over 28 million acres containing some 420 federally listed threatened or endangered species, more than 520 species-at-risk, and many high-quality habitats. A surprising number of these species are found only on military lands – including more than ten listed species and at least 75 species-

at-risk. That is 9 times more species per acre than the Bureau of Land Management, 6 times more per acre than the United States Fish and Wildlife Service (USFWS), 4.5 times more per acre than Forest Service, and 3.5 times more per acre than the National Park Service.

The FY 2015 budget request for Conservation is \$381 million. The Department invests so much to manage not only its imperiled species but all its natural resources, in order to sustain the high quality lands our service personnel need to train and to maximize our flexibility when using those lands. Species endangerment and habitat degradations can have direct mission-restriction impacts. That is one reason we work hard to prevent species from becoming listed, or from impacting our ability to test and train if they do become listed.

As a result of multiple law suits, the USFWS has entered into court-approved agreements to make decisions on 250 species that are "candidates" for listing as threatened or endangered under the Endangered Species Act by 2016. The Department has already analyzed the 250 species and thirty-seven of them, if listed and critical habitat was designated on DoD lands, have the potential to impact military readiness at locations such as Yakima Training Center and Joint Base Lewis-McChord (JBLM). To minimize the potential impacts these installations have already begun to appropriately manage these species and to consult with USFWS. USFWS and DoD have long worked collaboratively to minimize any critical habitat designation on DoD lands and to ensure that listed species conservation is consistent with military readiness needs.

Our focus has been on getting ahead of any future listings. I have tasked the Military Departments to get management plans in place now to avoid critical habitat designations.

While we make investments across our enterprise focused on threatened or endangered species, wetland protection, or protection of other natural, cultural and historical resources, I wanted to highlight one particularly successful and innovative program – the Readiness and Environmental Protection Integration (REPI) Program. Included within the \$381 million for Conservation, \$43.6 million is directed to the REPI Program. The REPI Program is a cost-effective tool to protect the nation's existing training, testing, and operational capabilities at a time of decreasing resources. In eleven years of the program, REPI partnerships have protected more than 314,000 acres of land around 72 installations in 27 states. This land protection has resulted in tangible benefits to testing, training and operations, also made a significant contribution to biodiversity and endangered species recovery actions.

Under REPI, DoD partners with conservation organizations and state and local governments to preserve buffer land near installations and ranges. Preserving these areas allows DoD to avoid much more costly alternatives, such as workarounds, segmentation, or investments to replace existing test and training capability, while securing habitat off of our installations and taking pressure off of the base to restrict activities. REPI supports the warfighter and protects the taxpayer because it multiplies the Department's investments with its unique cost-sharing agreements. Even in these difficult economic times for states, local governments, and private land trusts, REPI partners continue to directly leverage the Department's investments one-to-one. In other words, we are securing these buffers around our installations for half-price.

In addition, DoD, along with the Departments of the Interior and Agriculture, announced the Sentinel Landscapes Partnership to protect critical DoD missions, working lands, and environmentally sensitive habitat. The Sentinel Landscapes Partnership further strengthens

interagency coordination, and provides taxpayers with the greatest leverage of their funds to advance the mutually-beneficial land protection goals of each agency. The pilot Sentinel Landscape project at Joint Base Lewis-McChord helped USFWS avoid listing a butterfly species in Washington, Oregon, and California, citing the "high level of protection against further losses of habitat or populations" from Joint Base Lewis-McChord's REPI investment on private prairie lands in the region. These actions allow significant maneuver areas to remain available and unconstrained for active and intense military use at JBLM.

Highlighted Issues

In addition to the budget request, there are several legislative requests and other initiatives that have received interest from Congress. In the sections that follow, I highlight five specific items of interest – 1) Base Realignment and Closure; 2) European Infrastructure Consolidation; 3) Relocation of Marines to Guam; 4) DoD Facilities Energy Programs; and 5) DoD's Response to Climate Change.

1. Base Realignment and Closure

For the third year in a row, the Administration is requesting BRAC authority from Congress. This year, we are requesting authority to conduct a BRAC round in 2017.

The Department is facing a serious problem created by the tension of declining budgets, reductions in force structure, and limited flexibility to adapt our infrastructure accordingly. We need to find a way to strike the right balance, so infrastructure does not drain resources from the warfighter. Our goal is therefore a BRAC focused on efficiency and savings, and it is a goal we believe is eminently achievable.

We believe the opportunity for greater efficiencies is clear, based on three basic facts:

- In 2004, DoD conducted a capacity assessment that indicated it had 24% aggregate excess capacity;
- In BRAC 2005, the Department reduced only 3.4% of its infrastructure, as measured in Plant Replacement Value far short of the aggregate excess indicated in the 2004 study;
- Force structure reductions particularly Army personnel (from 570,000 to 450,000 or lower), Marine Corps personnel (from 202,000 to 182,000 or lower) and Air Force force structure (reduced by 500 aircraft) subsequent to that analysis point to the presence of additional excess.

Historically, savings from BRAC have been substantial. The first four rounds of BRAC (1988, 1991, 1993 and 1995) are producing a total of about \$8 billion and BRAC 2005 is producing an additional \$4 billion in annual, recurring savings. This \$12 billion total represents the savings that the Department realizes each and every year as a result of the avoided costs for base operating support, personnel, and leasing costs that BRAC actions have made possible.

A considerable proportion of the opposition to a new BRAC round is the cost of BRAC 2005 – specifically, the \$35 billion it cost compared to the original projection (which was \$21 billion). The Government Accountability Office has validated the \$4 billion in recurring savings associated with the round, so its savings is not in question. When congressional members say the

last round did not save money, what they really mean is that it cost too much, the cost growth was unacceptable, and the payback was too slow.

Simply put, we cannot afford another \$35 billion BRAC round. However, it turns out the key factor that drove the cost of the last BRAC round was the willingness of the Department, the BRAC Commission, and Congress to accept recommendations that were not designed to save money.

To the casual observer, this makes no sense. BRAC has been sold as a method of efficiency – a tool to save money. That is true to an extent, but the law effectively prevents the Department from shifting its functions around from base to base without BRAC, and in the last round that is exactly what was done. The reality is that there were really two parallel BRAC rounds conducted in 2005: one focused on Transformation and one focused on Efficiency.

Last year, we conducted an analysis of the payback from BRAC 2005 recommendations. We found that nearly half of the recommendations from the last round were focused on taking advantage of transformational opportunities that were available only under BRAC - to move forces and functions where they made sense, even if doing so would not save much money. In BRAC 2005, 33 of the 222 recommendations had no recurring savings and 70 recommendations took over 7 years to pay back. They were pursued because the realignment itself was important, not the savings.

This "Transformation BRAC" cost just over \$29 billion and resulted in a small proportion of the savings from the last round, but it allowed the Department to redistribute its forces in ways that are otherwise extraordinarily difficult outside of a BRAC round. It was an opportunity that the Department seized and Congress supported while budgets were high. For example, in our consolidations of hospitals in the National Capital Region and San Antonio areas, we decided to make the hospitals world class in line with direction from Congress. This approach was the right approach because it was an approach focused on healing our wounded and taking care of our men and women according to the latest health care standards. We could have implemented the recommendations for a much lower cost by putting two people in a room and using standard designs, but we did not. Similarly, we chose to transform the Army's reserve and guard facilities by building new Armed Force Reserve Centers.

The remaining recommendations made under BRAC 2005 paid back in less than 7 years, even after experiencing cost growth. This "Efficiency BRAC" cost only \$6 billion (out of \$35 billion) with an annual payback of \$3 billion (out of \$4 billion). This part of BRAC 2005 paid for itself speedily and will rack up savings for the Department in perpetuity. It was very similar to previous BRAC rounds and very similar to what we envision for a future BRAC round. In today's environment, a \$6 billion investment that yields a \$3 billion annual payback would be extraordinarily welcome. In today's environment, we need an Efficiency BRAC.

In addition to being a proven process that yields significant savings, BRAC has other advantages. The BRAC process is comprehensive and thorough. Examining all installations and conducting thorough capacity and military value analyses using certified data enable rationalization of our infrastructure in alignment with the strategic imperatives detailed in the 20-year force structure plan. The merits of such an approach are twofold. First, a comprehensive analysis ensures that the Department considers a broad spectrum of approaches beyond the existing configuration to increase military value and align with our strategy. Second, the process is auditable and logical

which enables independent review by the Commission and affected communities. In its 2013 report GAO stated: - "We have reported that DoD's process for conducting its BRAC 2005 analysis was generally logical, reasoned and well documented and we continue to believe the process remains fundamentally sound."

Additionally, and of primary importance, is the BRAC requirement for an "All or None" review by the President and Congress, which prevents either from picking and choosing among the Commission's recommendations. Together with the provision for an independent commission, this all-or-none element is what insulates BRAC from politics, removing both partisan and parochial influence, and demonstrating that all installations were treated equally and fairly. It is worth noting that the process validates the importance of those bases that remain and are then deserving of continued investment of scarce taxpayer resources.

The Department's legal obligation to close and realign installations as recommended by the Commission by a date certain, ensures that all actions will be carried out instead of being endlessly reconsidered. That certainty also facilitates economic reuse planning by impacted communities.

Finally, after closure, the Department has a sophisticated and collaborative process to transition the property for reuse. The closure of a local installation can cause upheaval in the surrounding community. Therefore, it is important to note that there are advantages to communities under BRAC that are not provided under existing disposal authorities, to include involvement in the land disposal process, availability to acquire property for job creation purposes, environmental review concentrating on the community's planned uses to the extent practicable, and the availability of more extensive community redevelopment/reuse assistance from the Office of Economic Adjustment. Land disposal outside of BRAC is done on a parcel-by-parcel basis with no mechanism for taking local planned uses into account. Additionally, without BRAC conveyance authorities, there is no special property disposal preference for the local community—by law, the local community has to stand in line for the property behind other Federal agencies, the homeless, and potential public benefit recipients.

2. European Infrastructure Consolidation

The Department has been reducing its European footprint since the end of the Cold War. Generally, infrastructure reductions have been proportional to force structure reductions, but we haven't taken a holistic, joint review of our European infrastructure like we have with BRAC and our domestic bases. In response to our recent requests for BRAC, Congress made it clear that it wanted DoD to do so.

In January 2013, the Secretary of Defense directed the Department to conduct a comprehensive review of its European infrastructure in an effort to create long-term savings by eliminating excess infrastructure, recapitalizing astutely to create excess for elimination, and leveraging announced force reductions to close sites or consolidate operations. Under this comprehensive effort, dubbed the European Infrastructure Consolidation (EIC) process, we are analyzing infrastructure relative to the requirements of a defined force structure while emphasizing military value, joint utilization, and obligations to our allies.

The Department does not conduct this degree of comprehensive analyses of its infrastructure on a regular basis, so the learning curve has been steep. We initially hoped to complete our European infrastructure review and have recommendations by the end of 2013, but the learning curve, furloughs, and other resource constraints have caused delays. The Services did, however, identify and are in the process of implementing a number of "quick wins" in Europe – small scale, non-controversial closures and realignments that require no military construction funding, can be implemented quickly, and produce near term savings. We are also analyzing a variety of major actions to determine operational impacts and positive business case results. The analysis includes the three Military Departments and four joint work groups to look at the potential for cross service solutions. We expect to complete the analysis in the spring, and I would be happy to brief the committee in a classified forum on those scenarios we are analyzing. However, I wanted to highlight one opportunity that is mature enough to share today.

Scenario: Consolidate intelligence activities to RAF Croughton

One of the efforts that we consider the prototype of the EIC process is the consolidation of intelligence activities from RAF Alconbury and RAF Molesworth to RAF Croughton. This is a mature scenario with a good business case that the EIC Senior Steering Group reviewed and endorsed early in our analytical process. The consolidation's funding was programmed and the first project is part of the FY 2015 request, offering Congress an opportunity to signal support for consolidation in Europe in this year's bill.

Under this effort, the Department plans to construct a total of \$317 million in new facilities at RAF Croughton, consolidating the six intelligence organizations currently operating at RAF Molesworth and providing corresponding support facilities to accommodate the incoming personnel. The current facilities supporting U.S. and partner nation intelligence analysis, engagement, and training mission at RAF Molesworth are inadequate to support current analysis requirements and require substantial Sustainment, Restoration, and Modernization (SRM) funding. Support facilities (including schools, housing, fitness center, etc.) for RAF Molesworth are located 13 miles away at RAF Alconbury, approximately a 25 minute commute.

The existing mission facilities at RAF Molesworth include 21 widely dispersed and degraded buildings, providing only 60% of the space authorized by the Unified Facilities Criteria. Total intelligence personnel number approximately 1,250. The dispersed layout inhibits intelligence collaboration, while overcrowding contributes to safety concerns and unhealthy working environment. Short-term repairs and temporary facilities are used to keep intelligence work areas and systems functional. The Defense Intelligence Agency (DIA) has spent \$30 million in SRM and Under Secretary of Defense for Intelligence and DIA have spent \$60 million for leased modular facilities that require recapitalization every 7 years – this is not a cost effective situation.

The consolidation of intelligence missions at RAF Croughton creates an opportunity for annual recurring savings of \$75 million; a reduction in Restoration and Modernization funding required to alleviate \$191 million of SRM backlog; avoidance of \$65 million for a DODEA Europe project at RAF Alconbury; and, reduction of nearly 350 total personnel (military, civilian and local foreign nationals). These figures demonstrate a relatively rapid payback of our up-front investment.

The first phase of the construction is a \$92 million project in this year's funding request.

3. Rebasing of Marines from Okinawa to Guam

One of the most significant and contentious rebasing actions proposed in recent years is the movement of thousands of U.S. Marines from Okinawa to Guam. The establishment of an operational U.S. Marine Corps capability in Guam is an essential component of the rebalance to the Asia Pacific region. It is an important step in achieving our goal of a more geographically distributed, operationally resilient, and politically sustainable force posture in the region.

The original agreement established in the May 2006 U.S. - Japan Realignment "Roadmap" included the relocation of approximately 8,600 Marines and 9,000 dependents from Okinawa to Guam; construction of the "Futenma Replacement Facility" on Okinawa, and consolidation of the remaining forces there by 2014. Under this agreement, Japan agreed to a cost-sharing arrangement to fund up to \$6.1 billion (\$2.8 billion in cash contributions) of the estimated total cost of \$10.3 billion (FY 2008 dollars) - later revised to approximately \$19.0 billion. Construction was to occur over a 7 year period after the 2010 Record of Decision and the population was going to peak at approximately 79,000 in 2014. The plan received significant opposition in Congress, which raised reasonable questions about the affordability of this approach.

In 2012, the U.S. and Japan decided to adjust our longstanding agreement to station U.S. Marines on Guam from a garrison (~8,600) to a rotational force (~5,000 Marines/1,300 dependents) with less Marines relocating from Okinawa (~11,500 will remain). The revised agreement also delinks the movement of Marines to Guam from Japan's progress on the Futenma Replacement Facility (FRF). The preliminary estimate for the revised agreement totaled \$8.6 billion with Japan providing up to \$3.1 billion (FY 2012 dollars) in cash contributions. There is no longer a date certain for completion and construction is projected to take 13 years after the 2015 Record of Decision (contingent on affordability).

In order to implement this plan, the Department is pursuing a Supplemental Environmental Impact Statement (EIS) document that reflects these adjustments, and we expect a Record of Decision in Spring of 2015. That document will reflect the significantly reduced strain that will be imposed on Guam as a result of a much smaller – and much slower – transition. While the document has not been finalized, it is reasonable to expect a smaller requirement for mitigation as well.

The Department appreciates the FY 2014 authorization and appropriation of \$85 million for construction of an aircraft hangar for the Marine Corps at the North Ramp of Andersen Air Force Base and is requesting \$50.7 million for construction of Ground Support Equipment shops and Marine Wing Support Squadron Facilities at Andersen's North Ramp. Congress' continued support for cautious progress on this effort will be seen by Japan as an indication of our commitment to the realignment.

Although the U.S. and Japan separated the requirement of tangible progress on the construction of the FRF before the movement of Marines to Guam could commence it is important to note that on December 26, 2013, the Governor of Okinawa approved the landfill permit request to build the FRF at Camp Schwab-Henoko Bay.

Finally, the FY 2014 National Defense Authorization Act and the FY 2014 Consolidated Appropriations Act included \$106.4 million for the Guam civilian water and wastewater program and \$13 million for a Guam public health laboratory. DoD, in collaboration with numerous Federal agencies, validated the need for this funding and has begun the planning and design of specific projects. The President's FY15 budget requests an additional \$80.6 million to continue improving Guam's civilian water and wastewater infrastructure and remedy deficiencies that impact the public health of DoD personnel. These projects are beyond the financial capability of Guam to correct, and will provide safer sustainable water resources and capacity critical not only for the more than 16,000 DoD personnel currently based on Guam and for future DoD growth and the increased civilian population induced by the military realignment, as well as for current residents of the Territory.

4. Facilities Energy Programs

Congress has demonstrated significant interest in the Department's energy programs in recent years. My portfolio includes the Facilities Energy segment of the DoD energy portfolio – the electricity, natural gas, and other energy used to support our fixed installations. Operational Energy – predominantly fuel for conducting training and operations of aircraft, ships, ground vehicles, and even tactical generators – is overseen by the Assistant Secretary of Defense for Operational Energy Plans and Programs. The Department's facility energy costs represent approximately \$4 billion annually and comprise roughly half of the Base Operations accounts at our installations; while its operational energy costs are significantly more than \$15 billion annually.

Below, I discuss three key pillars of our Facilities Energy program – 1) Energy Efficiency and Demand Reduction; 2) Expand Energy Production; and 3) Leverage Advanced Technology.

Energy Efficiency and Demand Reduction

The Department's FY 2015 budget request includes approximately \$500 million for investments in conservation and energy efficiency, most of which will be directed to existing buildings. The majority (\$350 million) is in the Military Components' operations and maintenance accounts, to be used for sustainment and recapitalization projects. Such projects typically involve retrofits to incorporate improved lighting, high-efficiency HVAC systems, double-pane windows, energy management control systems, and new roofs. The remainder (\$150 million) is for the Energy Conservation Investment Program (ECIP), a flexible military construction account used to implement energy and water efficiency projects. In addition to Savings-to-Investment Ratio (SIR) and Simple Payback, ECIP projects are evaluated on several other criteria, the Department will revise its ECIP guidance for the FY 2016 program to ensure greater weighting of financial payback factors for ECIP project evaluation. In addition, we will limit projects to only those with a positive payback (i.e. SIR > 1.0) and ensure the overall program has an SIR greater than 2.0.

The Military Component investments include activities that would be considered regular maintenance and budgeted within the Facilities Sustainment, Restoration, and Maintenance accounts. The significant reductions in that account will not only result in fewer energy projects, but failing to perform proper maintenance on our buildings will without question have a negative impact on our energy usage. In plain terms, upgrades to air conditioning systems will not reduce energy usage as projected if the roof is leaking or the windows are broken. Sequestration and BCA budget cuts to the Department's facilities energy program have negatively impacted the

DoD's ability to meet mandated energy intensity reduction goals. The DoD projects the Department will catch up and begin meeting its energy intensity reduction goals in FY 2018.

To offset appropriated funding reductions, the Services have increased their focus on third-party financing tools, such as Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs), to improve the energy efficiency of their existing buildings. (With these tools private energy firms make upgrades to our buildings and are only paid back out of reduced utility costs.) While such performance-based contracts have long been part of the Department's energy strategy, within the last two years the Department has significantly increased our throughput in response to the President's Performance Contracting Challenge, issued in Dec 2011.

In addition to retrofitting existing buildings, we continue to drive efficiency in our new construction. We are implementing a new construction standard for high-performance, sustainable buildings issued by my office last year, which will govern all new construction, major renovations, and leased space acquisition. This new standard, which incorporates the most cost effective elements of commercial standards like ASHRAE 189.1, will accelerate DoD's move toward efficient, sustainable facilities that cost less to own and operate, leave a smaller environmental footprint, and improve employee productivity.

Collection of accurate, real-time facility energy information remains a priority. In April 2013, I issued an Advanced Utilities Metering policy which sets an aggressive goal for deploying advanced meters throughout the Department to automatically and accurately measure electricity, natural gas, water, and steam use. This policy requires advanced meters be installed to capture 60% of the Department's electricity and natural gas use (with a goal of 85%) by FY 2020. It also requires advanced meters installed on water-intensive facilities and facilities connected to district steam systems by FY 2020. This will provide data essential for effectively managing building energy use, identifying water and steam leaks, and analyzing energy savings opportunities. In addition, this policy requires meters to be connected to an advanced metering system to automatically collect, analyze, and distribute energy data. Further, my office continues to lead the development of an Enterprise Energy Information Management system (EEIM) that will collect facility energy and project data in a systematic and timely way, giving energy professionals at all levels of the Department the advanced analytical tools that will allow us to both improve existing operations and identify cost-effective investments.

Expand Energy Production on DoD Installations

DoD is actively developing projects to increase the supply of renewable and other distributed (on-site) sources of energy on our installations. Not only does on-site energy help to make our bases more energy resilient, but the projects we are pursuing will generally result in lower costs.

There are particular authorities for renewable energy – particularly the ability to sign power purchase agreements of up to 30 years – that not only provide incentive for private firms to fund the projects themselves, but also can provide a good enough business case that they are able to offer DoD lower energy rates than are being paid currently. In addition, both Congress and the President have established renewable energy goals that motivate us to pay closer attention to these opportunities.

As a result, the Military Services have stepped up their efforts to develop robust renewable energy programs with a goal to deploy a total of 3 gigawatts of renewable energy by 2025.

Within the last three years, the Department has more than doubled the number of renewable energy projects in operation with approximately 700 megawatts in place today. The Military Departments are planning for a number of renewable energy projects over the next six years that will provide an additional 900 megawatts of renewable energy, enough to power 200,000 American homes. The majority of these projects are solar projects. Army projects currently underway include Fort Drum, NY (28 MW Biomass), and Fort Detrick, MD (15 MW Solar PV); recent Navy projects include Naval Air Weapons Station China Lake, CA (13.8 MW Solar PV) and the Air Force recently completed a solar project at Davis-Monthan Air Force Base (16.4 MW Solar PV).

Within my portfolio, I also manage the DoD Siting Clearinghouse, which reviews energy projects under development on and in the vicinity of our installations to ensure there is no unacceptable risk to military mission that cannot be mitigated. From CY 2012 to 2013, the Department experienced a 17% increase in mission compatibility evaluations conducted on energy sources and electrical power transmission systems submitted under the provisions of Section 358 of the Ike Skelton National Defense Authorization Act for FY 2011. While 96% of these 2,084 project evaluations identified no adverse mission impact, the DoD Siting Clearinghouse is overseeing detailed mitigation discussions on a small number of projects that would otherwise have impacts. In these discussions, we attempt to identify solutions that allow projects to proceed without unacceptably impacting military operations, test, or readiness.

Leverage Advanced Technology

DoD's Installation Energy Test Bed Program consists of 76 active and 24 completed projects conducted to demonstrate new energy technologies in a real-world integrated building environment so as to reduce risk, overcome barriers to deployment, and facilitate widespread commercialization. DoD partners with the DOE and reaches out directly to the private sector to identify energy technologies that meet DoD's needs. The FY 2015 budget request includes \$21 million for the Test Bed under the Environmental Security Technology Certification Program (ESTCP).

The Test Bed operates in five broad areas: advanced microgrid and storage technologies; advanced component technologies to improve building energy efficiency, such as advanced lighting controls, high performance cooling systems and technologies for waste heat recovery; advanced building energy management and control technologies; tools and processes for design, assessment and decision-making on energy use and management; and on-site energy generation, including waste-to-energy and building integrated systems. The rigorous Installation Energy Test Bed Program provides an opportunity for domestic manufacturers to demonstrate the technical and economic feasibility of implementing their innovative products. These demonstrations provide the credible evidence needed by investors to commercialize emerging technologies to serve the DoD and broader markets. Several completed projects demonstrated energy savings of 20-70% for lighting and HVAC systems, cost-effective solar generation without tax subsidies, and the need to properly scale waste-to-energy systems.

5. Climate Change Adaptation

The issue of climate change has received increasing attention in recent months – especially given the release last year of the President's Climate Action Plan and Executive Order 13653, *Preparing the United States for the Impacts of Climate Change* – and I wanted to take a moment to discuss the Department's approach to addressing this issue.

It is important to understand that DoD looks at climate change impacts through the lens of its mission. Using that perspective and focusing on mission impacts, the changes to the global climate affect national security in two broad categories.

First, climate change shapes the operating environment and the missions that DOD must undertake: retreating Arctic ice creates new shipping lanes and an expansion of the Navy's operating area across the northern pole; increased storm intensity will lead to increased demands for humanitarian assistance or disaster response; and changes in availability of food and water will serve as an instability accelerant in regions that aren't sufficiently resilient to adapt to those changes.

In short, climate change will mean more demands on a military that is already stretched thin.

Second, climate change affects the execution of missions we have today. Sea-level rise results in degradation or loss of coastal areas and infrastructure, as well as more frequent flooding and expanding intrusion of storm surge across our coastal bases. Facilities and transportation infrastructure are already impacted by thawing permafrost around our Alaskan installations. The changing environment increases the threat to the 420 endangered species that live on our installations, leading to increased probability of training and operating restrictions. Increased high-heat days impose limitations on what training and testing activities our personnel can perform. Decreasing water supplies and increased numbers of wildfires in the Southwest may jeopardize future operations at critical ranges.

Our warfighters cannot do their jobs without bases from which to fight, on which to train, or in which to live when they are not deployed. When climate effects make our critical facilities unusable, that is an unacceptable impact.

As was made clear in my discussion of energy above, even those activities that reduce greenhouse gas emissions are justified by the benefits they bring to our mission capability. Increasing energy efficiency of our combat systems allows greater performance and lowers requirements for vulnerable supply lines. Our investments in facility energy efficiency help to reduce our \$4 billion annual facilities energy bill, or at least slow its increase. In the future, this on-base renewable energy generation promises the opportunity to increase energy security and insulate our operations from the vulnerable electric grid. The result will be fewer greenhouse gas emissions, but that is a co-benefit. We are focused on the mission benefits of managing our energy portfolio.

Even without knowing precisely how the climate will change, we can see that the forecast is for more sea level rise; more flooding and storm surge on the coasts; continuing Arctic ice melt and permafrost thaw; more drought and wildfire in the American Southwest; and more intense storms around the world. DOD is accustomed to preparing for contingencies and mitigating risk, and we can take prudent steps today to mitigate the risks associated with these forecasts. These range

from the strategic (DoD's new Arctic Strategy) to the mundane (ensuring backup power and computer servers are not in basements where facilities are facing increased flood risk). In 2013, DoD released the Climate Change Adaptation Roadmap, which highlights a wide range of climate impacts that affect DoD, and highlights our decision to incorporate consideration of climate change risks into our existing policies rather than to create climate change stovepipes within the Department.

Along these lines, we have updated policies on master planning our installations to minimize construction in low lying areas; emphasized smart planning in floodplains and water-scarce regions; and revised guidance on natural resources management to ensure we are accounting for climate shifts as we protect endangered species on our installations.

In addition, we are conducting studies of our coastal installations to assess their vulnerability to extreme weather events and other climate effects – an analysis that should be complete by July – and we will subsequently review the vulnerabilities of our inland bases. We are conducting research on the effects of thawing permafrost on our Alaskan infrastructure, where we've already seen significant damage to foundations and road infrastructure. In the southwest, we've seen initial studies that indicate critical installations could run out of water within two decades. Not only do we need to begin reducing this risk today, but we need to comprehensively review our installation footprint to identify similarly vulnerable installations.

In recent years, extreme weather events such as Hurricane Sandy and *derechos* have caused power outages, damage from floods, high winds, and storm surges. Climate change increases the likelihood of such events, and the DoD must be prepared for, and have the ability to recover from, utility interruptions that impact mission assurance on our installations, an ability we characterize as *power resilience*. In fact, the policy directing this already exists and we have embarked on an effort to review installation-level compliance with policies that require identifying critical loads, ensuring back-up power is in place, maintaining back-up generators, and storing an appropriate amount of emergency fuel.

The bottom line is that we are dealing with climate change by taking prudent and measured steps to reduce the risk to our ability to conduct missions. We consider climate change an important national security consideration and one that will affect the Department's ability to operate in the decades to come.

Conclusion

Thank you for the opportunity to present the President's FY 2015 budget request for DoD programs supporting installations, facilities energy, and the environment. As you can see, our budget constraints have required us to accept risk across the portfolio, but it is risk we are already managing and believe we can manage with this budget.

We appreciate Congress' continued support for our enterprise and look forward to working with you as you consider the FY 2015 budget.