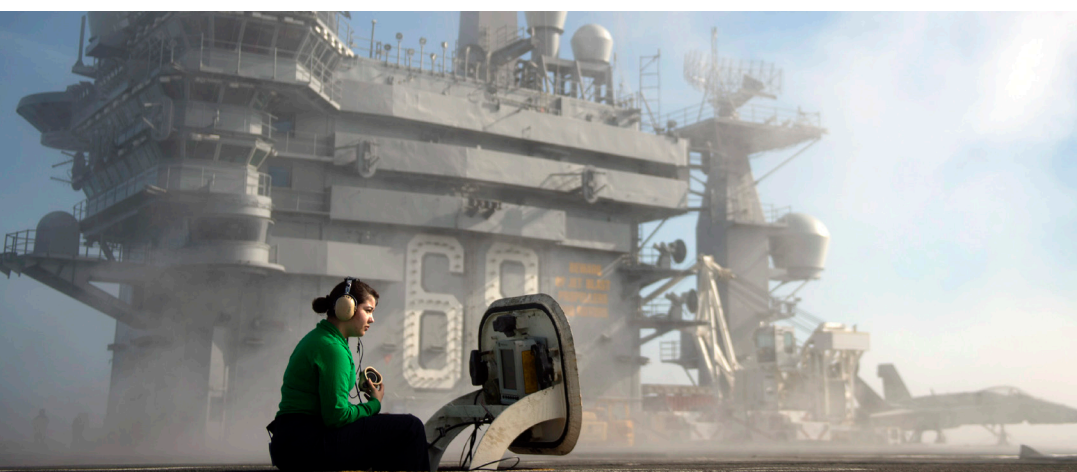




# REPI

11<sup>th</sup> Annual Report to Congress

## 2017 Readiness and Environmental Protection Integration Program



*Submitted on behalf of the Secretary of Defense by the Under Secretary of Defense for Acquisition, Technology and Logistics*

*DoD Use of 10 USC § 2684a Partnerships and the Readiness and Environmental Protection Integration (REPI) Program to Protect Military Readiness*

DoD Readiness and Environmental Protection Integration Program Use of Agreements to Limit Encroachment and Other Constraints on Military Training, Testing, and Operations as Authorized by Section 2684a of Title 10, United States Code

### SUSTAINING MISSION CAPABILITIES THROUGH PARTNERSHIPS

The Department of Defense's ability to conduct realistic live-fire training, weapons system testing, and essential operations is vital to preparing warfighters and their equipment for real-world combat and protecting the security of our country. There is a direct relationship between realistic training and success on the battlefield. Starting in the late 1990s, the Department became increasingly concerned about "encroachment"—pressures or factors affecting the military's use of training and testing lands. Specifically, military installations saw two main threats to their ability to test and train: nearby incompatible development and environmental restrictions to protect imperiled species and their habitats.

The Department's requirement to conduct realistic testing and training is, at times, at odds with neighboring land uses, especially in heavily developed areas. For example, lighting from commercial or residential development near military installations can reduce the effectiveness of night vision training, while military activities can result in noise, dust, and vibrations that disturb civilian communities.

Urban sprawl leading to loss of habitat outside the boundaries of our installations and ranges, combined with the Department's good stewardship of its natural resources, often results in remnant populations of imperiled species on DoD's undeveloped land. This leaves the military with significant management and recovery responsibilities for threatened, endangered, and other at-risk species. The management actions required to support these species can diminish the Department's discretion to use its lands optimally to test, train, and operate.

To prevent and mitigate increasing encroachment pressures, in 2002 Congress enacted Section 2684a of Title 10, United States Code (U.S.C.), hereafter referred to as "the 2684a authority." This provision authorizes the Department to engage in a long-term and cooperative strategy to ensure military mission sustainability by limiting incompatible development in the vicinity of our installations and ranges. Pursuant to this authority, the Department funds cost-sharing agreements with state and local governments and conservation organizations to promote compatible land uses and preserve habitats near or ecologically related to military installations and ranges. These efforts are implemented through the Readiness and Environmental Protection Integration (REPI) program, which has proven effective in sustaining our nation's military mission through cooperative land use planning and integrated land protection.

Protecting these lands using the REPI program is a more cost-effective approach to sustain military readiness for the Department and the taxpayer than settling for suboptimal test and training alternatives or workarounds; replacing compromised assets with new range construction; or relocating missions. This cooperative land protection also provides direct



benefits to our partners and neighboring communities through the preservation of limited resources shared by the installation and its neighbors. These efforts contribute to the longevity of working farms, forests, and ranchlands; increase recreational and open space opportunities for nearby residents and military families; and protect against mission relocations that can affect local economies. Through REPI program partnerships, the military installations strengthen ties to local communities that help to foster an increased level of communication and cooperation, which enables installation commanders to accomplish their vital test, training, and operational missions.

### OVER A DECADE OF LEVERAGING PARTNER RESOURCES FOR MILITARY READINESS, COMMUNITY ENHANCEMENT, AND ENVIRONMENTAL STEWARDSHIP

This eleventh annual report on the 2684a authority describes the REPI program's partnership activities and accomplishments across all projects through Fiscal Year (FY) 2016. Table 1 summarizes accomplishments by Military Service for the 89 locations in 30 states

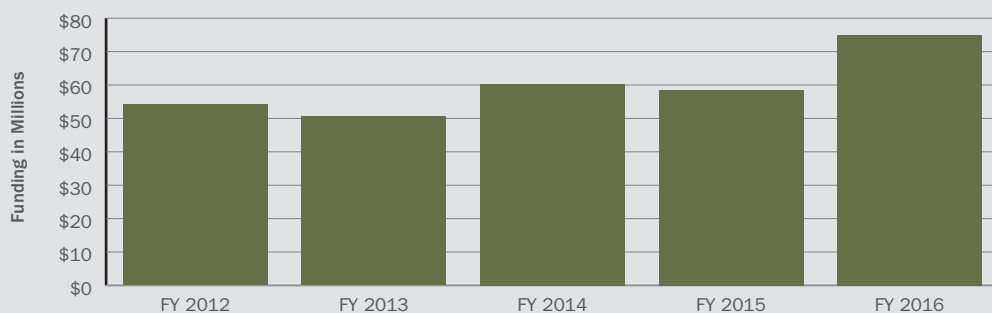
**Table 1:** Accomplishments by Service through FY 2016 (Funding in Millions)

(In Millions)	Transactions	Acres Protected	REPI	Service	Partner	Combined Total
Army	740	315,214	\$208.82	\$242.52	\$411.43	<b>\$862.78</b>
Navy	320	46,628	\$72.80	\$18.70	\$91.49	<b>\$182.99</b>
Marine Corps	69	59,841	\$64.27	\$18.74	\$89.68	<b>\$172.69</b>
Air Force	325	42,984	\$39.82	\$2.22	\$55.60	<b>\$97.63</b>
<b>Total</b>	<b>1,454</b>	<b>464,668</b>	<b>\$385.72</b>	<b>\$282.18</b>	<b>\$648.20</b>	<b>\$1,316.09</b>

*(Select Service totals reported in Table 1 on page 2 may vary slightly from Service totals reported in Tables 2 through 5 because of consolidation due to Joint Basing.)*



**Figure 1: REPI Fiscal Year Funding**



Appropriation	\$54.15	\$50.56	\$60.41	\$58.57	\$75.00
Less DoD-wide Priorities	\$5.97	\$10.39	\$5.41	\$9.47	\$7.65
Less Program Management	\$4.57	\$3.16	\$3.61	\$4.04	\$4.19
Less Landscape Management	\$0.50	\$0.05	\$0.95	\$0.50	\$0.50
Additional OSD Funding	*\$4.30	\$3.87	*\$37.71	*\$6.95	*\$2.81
Allocation to Services	\$47.42	\$40.83	\$88.15	\$51.51	\$66.60
Locations	33	29	43	32	45

\* \$35.65 million of the total “Additional OSD Funding” from FY12-FY16 represents direct funding from OSD Readiness to the Military Services in support of range sustainment through REPI projects.

where REPI partnerships have been developed. Detailed information by individual project is provided in Tables 2 through 5 and full project summaries are available on [www.repi.mil](http://www.repi.mil).

Figure 1 shows Congressional appropriations for REPI over the past five fiscal years. The cost for program management averages six percent, which is comparable to the overhead costs for similar Federal land protection programs. Through FY 2016, REPI program funds have been combined with \$648 million in non-Department partner contributions to protect 464,668 acres of land, safeguarding vital test and training assets and capabilities, and preserving important natural resources.

The REPI program provides a framework for the allocation of funds to the Military Service for site-specific agreements that meet the requirements and objectives of the 2684a authority. This framework provides management, oversight, and coordination of funding decisions and their implementation, but still allows the Services freedom to tailor programs to meet their specific mission needs. The Department annually evaluates and prioritizes projects for funding based on the encroachment threat to the military mission and the potential to prevent or mitigate impacts; project innovation that increases benefits, leverages additional funds, or creates new tools to accelerate

“This is a win-win for both the Atlantic Test Ranges at NAS Patuxent River and the surrounding environment. Designating the Nanticoke Corridor as a Sentinel Landscape maintains our unique flight test and evaluation capabilities at the Atlantic Test Ranges while protecting important habitats for imperiled wildlife species and preserving agricultural land in the area.”

— **Capt. Heidi Fleming**, Commanding Officer at NAS Patuxent River

results and readiness outcomes; and the ability of the partnership to complete transactions in a timely manner. The Department also values and prioritizes projects that engage in holistic community planning efforts and combat encroachment on a landscape level. This includes projects that demonstrate significant participation in local and regional planning efforts (e.g., Joint Land Use Studies); show clear benefits to, and investments from, partner organizations and the community; and that advance the goals of designated Sentinel Landscapes.



Sentinel Landscapes, anchored by a military installation(s) or range(s), are defined areas that represent overlapping priorities for military mission protection, working lands preservation, and natural resource conservation. These key landscapes are jointly identified by an interagency partnership that includes the Departments of Defense, Agriculture and the Interior. The Sentinel Landscapes Partnership unites the shared land protection interests of these federal agencies and numerous state, local, and private partner organizations to support compatible land uses such as ranching, farming, forestry, and conservation. This coordinated focus seeks to maintain landscapes, anchored by installations or ranges, critical to sustaining this military readiness.

A Sentinel Landscapes designation leads to improved recognition at the local, state, and national level for the encroachment mitigation efforts that benefit the anchor installations and ranges. A designation can also improve communication and coordination between partner organizations and local communities, which can lead to greater landowner participation in existing voluntary conservation and other compatible land use programs. Additionally, the opportunity to address national security, conservation, and working land interests within a defined landscape broadens the spectrum of willing landowners with whom participating entities are able to engage. The increase in coordination across different resource priorities within a Sentinel Landscape also encourages participating partners to develop new technical and financial assistance options tailored for local needs.

REPI program investments in Sentinel Landscapes enable the Department to enhance mission sustainment efforts and support the national security

mission. In 2014 and 2015, three Sentinel Landscapes were designated: Fort Huachuca, Arizona; Joint Base Lewis-McChord, Washington; and Naval Air Station Patuxent River and the Atlantic Test Ranges, Maryland. Through 2016, federal, state, local, and private partners have invested a total of \$85,780,247 million in these three Sentinel Landscapes. In 2016, an additional three Sentinel Landscapes were established: Avon Park Air Force Range, Florida; Camp Ripley, Minnesota; and in Eastern North Carolina. The investments made in these Sentinel Landscapes help ensure readiness and protect operational flexibility at the anchor installations and ranges.

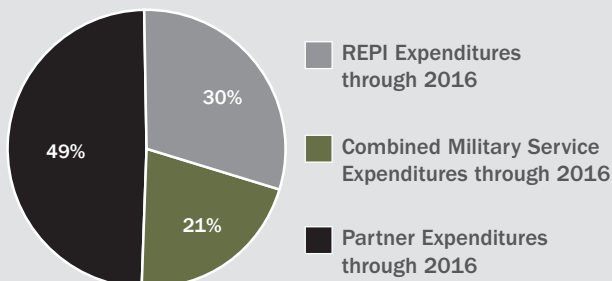
### **EXPLORING NEW TOOLS, INNOVATIVE STRATEGIES, AND UNCOMMON PARTNERS TO MAXIMIZE TAXPAYER DOLLARS AND SUPPORT THE WARFIGHTER**

The REPI program's long-term, multi-agency initiatives protect the Department's unique test and training capabilities; spur innovative land conservation practices; and ensure that REPI program investments maximize taxpayer dollars and leverage partner resources to the greatest extent possible. The investments that our partners make in REPI projects, including the six Sentinel Landscapes, illustrate the value of these partnerships to the federal, state, and local governments and conservation organizations with whom the Department works.

In 2016, the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) awarded \$22.4 million in Regional Conservation Partnership Program (RCPP) to projects for important land conservation activities that directly support and enhance on-going REPI partnership efforts at five installations and ranges. 2016 RCPP awards were made to projects associated with Avon Park Air Force Range, Florida; Fort Hood, Texas; Fort Huachuca, Arizona; Fort Stewart, Georgia; and Naval Shipyard Portsmouth's Survival, Evasion, Resistance and Escape (SERE) School, Maine. RCPP was created by NRCS to encourage and provide technical assistance to support farmers' and landowners' efforts to conduct natural resource protection, restoration, and management activities. In most cases, agriculture is one of the best neighbors an installation can have. From a military perspective, many of the typical encroachment issues that may impede



**Figure 2:** Cost-Share through FY 2016



readiness, such as safety concerns, noise complaints, light pollution, and electromagnetic spectrum saturation, are absent from agricultural lands.

Through REPI partnerships and the cost-share invested by federal, state, local, and NGO partners through RCPP and other programs, the Department is able to leverage existing and on-going land conservation efforts to sustain its critical military capabilities. As shown in Figure 2, non-Department partner contributions have accounted for nearly half of the total investment made in REPI partnerships over the life of the program.

As the REPI program has grown and evolved to more effectively mitigate encroachment challenges and increase the scale and scope of land protection, new and innovative tools and approaches have been developed. In particular, species and habitat management requirements necessitate the strong partnerships and innovative approaches that the REPI program fosters, such as off-installation management and restoration activities, identification and prioritization

of key habitats, and close coordination with the U.S. Fish and Wildlife Service (USFWS) to develop habitat and species crediting agreements to prevent, mitigate, or relieve regulatory restrictions.

For military installations that host threatened and endangered species listed under the Endangered Species Act (ESA), management requirements can delay vital test, training, and operational activities and necessitate costly workarounds. In addition to proactive management and partnership-based activities implemented through the installation's Integrated Natural Resources Management Plans, DoD can work through the REPI program to engage partners to promote off-base species conservation measures that could preclude the need to list candidate species under the ESA. DoD's pilot initiative, the Gopher Tortoise Conservation and Crediting Strategy, is proactively addressing one such candidate species, the gopher tortoise, found in the longleaf pine ecosystem and on dozens of military installations across the southeastern United States. The strategy is a collaborative conservation effort among the Department; the USFWS; and the states of Alabama, Georgia, Florida, and South Carolina to address conservation needs at a species-range level across multiple states and installations. The strategy will provide participating installations a substantial degree of regulatory predictability in the event the gopher tortoise becomes listed under the ESA. The pilot is expected to provide a model that can be employed to proactively address other at-risk species at military installations around the United States whose listing could impact mission flexibility.





Once complete, the Strategy could benefit multiple missions across the gopher tortoise’s eastern range, including aircraft testing at Eglin Air Force Base, Florida; live-fire training at Fort Stewart, Georgia; aviation ordinance training at Townsend Bombing Range, Georgia; and aircraft carrier landing training at Outlying Landing Field Whitehouse, Florida.

## WAY AHEAD

As encroachment pressures around our installations and ranges grow, and test, training, and operational requirements inside our boundaries increase, the Department continues to engage and educate key stakeholders, such as the National Conference of State Legislatures, about military mission requirements and the effects of encroachment. The REPI program’s outreach efforts, in conjunction with the Department’s Office of Economic Adjustment’s community planning programs, offer cost-effective tools that enable partner organizations and communities to identify and adopt beneficial land-use policies and practices that support military needs. Engaging in local planning forums; educating the community on the military’s operational footprint; formalizing notification to the military of local community development actions; transfer and purchase of development rights to guide compatible community development; and the purchase of conservation easements to restore and preserve open space all increase opportunities to coordinate and ensure that regional development is compatible with military readiness requirements.

The REPI program also continues to explore innovative ways to use the 2684a authority to leverage limited resources. The Department has a critical need to mitigate new and expanding encroachment. Changes in force structure; reductions in funding for operations and maintenance, military construction, and acquisition programs; and a shortfall in available airspace and land resources means protecting existing installation and range assets and capabilities is more important than ever. As such, for the fifth year in a row, the REPI program held the annual REPI Challenge, a competition with a dedicated funding set-aside to accelerate results and readiness outcomes. REPI Challenge projects protect important military missions and conserve land at a greater scale by accessing unconventional sources of funding, such as market-based strategies, and private sector innovations. REPI Challenge proponents are encouraged to look beyond traditional conservation tools and to take into account approaches and strategies for increasing compatible land uses that encourage new partner engagement and previously untapped sources of funding. In 2016, \$7.2 million in REPI Challenge funding was combined with over \$23 million in partner investments to fund projects at Fort Hood, Texas; Fort Huachuca, Arizona; Naval Air Station Patuxent River, Maryland; and Townsend Bombing Range, Georgia. Once completed, these projects will protect over 19,500 acres of land at a 67 percent partner cost-share. Since 2012, 10 REPI Challenge projects have been funded by the Department and account for the protection of over 92,000 acres at a 72 percent partner cost-share.

“The REPI Program is an invaluable tool for installation commanders as it helps to not only protect important test, training, and operational missions, but also build meaningful relationships with the surrounding community. The benefits from the strong community relationships formed through REPI extend far beyond REPI-related activities, improving all aspects of an installation’s operation on a daily basis.”

— **MG Neal Loidolt**, Deputy Adjutant General,  
Minnesota National Guard

The REPI program also continues to participate in the National Fish and Wildlife Foundation's Longleaf Stewardship Fund, which aggregates public and private funds to protect and restore longleaf pine and relieve test and training restrictions for multiple installations in the Southeast. In 2016, the Stewardship Fund leveraged Department funds six to one to protect the missions of five military installations through off-base habitat preservation and restoration.

Lastly, in 2015 Congress expanded the Department's authorities under Section 103A of the Sikes Act, 16 U.S.C. §670c-1, to provide for the maintenance or improvement of natural resources beyond installation boundaries. This authority allows the Department to support natural resource management without necessitating an investment in land acquisition when doing so benefits the military mission. Several installations are modifying or creating new agreements to implement this natural resources management authority as a way of reducing the burdens on test and training lands to support threatened and endangered species. To date no funds have been expended under the expanded authority of the Sikes Act.

While the REPI program's primary interest in land protection is to protect the military's ability to carry out its mission, the program depends on strong and genuine collaboration that also meets our partner organizations' goals and objectives. As important as it is to protect natural areas around our installations, the relationships and goodwill fostered by these partnerships that enable our commanders to continue operating with the flexibility they require are equally as important. The ability to leverage the REPI program through flexible and innovative agreements, supported by forward-thinking legislation and program policy, serves to enhance the Nation's defense capabilities and maximize taxpayer benefits.

**Table 2: Army Projects through FY 2016**

Project	State	Number of Parcels / Transactions Through FY 2016	Total Acres Protected Through FY 2016	Total Cost Through FY 2016
99th Armed Forces Reserve Center	CT	1	54	\$1,749,000
Aberdeen Proving Ground	MD	7	296	\$3,083,016
Camp Blanding	FL	15	21,706	\$64,816,436
Camp Rilea	OR	1	109	\$1,459,700
Camp Ripley	MN	184	37,864	\$91,789,654
Camp Roberts	CA	8	3,976	\$18,127,023
Camp San Luis Obispo	CA	7	2,099	\$5,181,323
Camp Shelby	MS	12	3,236	\$8,740,322
Camp Swift	TX	3	417	\$2,504,068
Camp Williams	UT	3	624	\$8,697,100
Fort A.P. Hill	VA	19	11,713	\$35,884,527
Fort Benning	GA	40	34,302	\$72,680,414
Fort Bliss	TX	2	5,169	\$1,352,259
Fort Bragg	NC	72	20,774	\$68,405,110
Fort Bragg USASOC	NC	12	2,896	\$12,267,532
Fort Campbell	KY	44	10,918	\$35,344,608
Fort Carson	CO	18	25,661	\$41,675,904
Fort Custer	MI	1	326	\$2,092,100
Fort Drum	NY	24	6,913	\$11,322,938
Fort Gordon	GA	1	114	\$183,000
Fort Harrison, Limestone Hills	MT	2	556	\$2,291,209
Fort Hood	TX	8	1,745	\$5,684,170
Fort Huachuca	AZ	12	11,272	\$25,427,124
Fort Indiantown Gap	PA	2	4,011	\$6,248,916
Fort Knox	KY	3	462	\$1,045,711
Fort Pickett	VA	48	10,085	\$23,400,697
Fort Polk	LA	5	1,555	\$5,009,299
Fort Riley	KS	23	13,915	\$12,007,604
Fort Sill	OK	37	3,595	\$13,478,282
Fort Stewart	GA	52	33,565	\$73,070,313
Fort Wainwright	AK	16	369	\$3,118,909
Joint Base Lewis-McChord	WA	16	2,026	\$29,033,839
Joint Base San Antonio (Camp Bullis)	TX	6	7,687	\$33,830,506
MAJIC	SC	33	15,069	\$21,960,515
Southeast Regional Army Project	GA	1	6,990	\$15,869,905
U.S. Army Garrison Hawaii	HI	7	13,157	\$108,796,164
<b>Army Totals</b>		<b>745</b>	<b>315,224</b>	<b>\$867,629,193</b>

**Table 3: Navy Projects through FY 2016**

Project	State	Number of Parcels / Transactions Through FY 2016	Total Acres Protected Through FY 2016	Total Cost Through FY 2016
Atlantic Test Ranges	MD	16	4,386	\$13,801,653
*El Centro Range Complex	CA	0	0	\$0
*Joint Base Pearl Harbor-Hickam	HI	0	0	\$0
NAS Fallon	NV	64	6,602	\$18,333,951
NAS JRB New Orleans	LA	1	202	\$7,322,419
NAS Lemoore	CA	1	57	\$907,000
*NAS Meridian	MS	0	0	\$0
NAS Oceana	VA	26	2,448	\$32,469,607
NAS Patuxent River	MD	5	703	\$6,080,898
NAS Pensacola	FL	1	48	\$1,300,000
NAS Whidbey Island	WA	1	18	\$2,200,000
NAS Whiting Field	FL	44	4,128	\$16,647,917
*NAVMAG Indian Island	WA	0	0	\$0
NAWS China Lake	CA	22	8,565	\$6,556,302
NB Coronado ATWTC	CA	21	2,367	\$8,696,199
NB Kitsap	WA	77	9,052	\$23,439,703
NB Ventura County	CA	1	13	\$431,223
*NCBC Gulfport	MS	0	0	\$0
*NO Flagstaff	AZ	0	0	\$0
NS Mayport	FL	0	0	\$26,450
NSA Hampton Roads	VA	2	682	\$3,910,000
*NSF Dahlgren	VA	0	0	\$0
NSF Indian Head	MD	2	294	\$1,053,500
*NSY Portsmouth	ME	0	0	\$0
*NWS Yorktown	VA	0	0	\$0
*NWSTF Boardman	OR	0	0	\$0
OLF Coupeville	WA	14	425	\$4,117,145
OLF Whitehouse	FL	11	2,939	\$20,676,884
<b>Navy Totals</b>		<b>309</b>	<b>42,930</b>	<b>\$167,970,850</b>

\*This project has an established and funded REPI partnership, but has not executed any real estate transactions through FY16.

Select Service totals reported in Table 1 may vary slightly from Service totals reported in Tables 2 through 5 because of consolidation due to Joint Basing.



**Table 4: Marine Corps Projects through FY 2016**

Project	State	Number of Parcels / Transactions Through FY 2016	Total Acres Protected Through FY 2016	Total Cost Through FY 2016
MCAGCC 29 Palms	CA	4	2,328	\$3,443,642
MCAS Beaufort	SC	19	3,718	\$56,045,689
MCAS Cherry Point Piney Island	NC	15	6,248	\$27,778,964
MCAS Miramar	CA	1	410	\$8,000,000
*MCAS New River	NC	0	0	\$0
MCB Camp Lejeune	NC	12	3,844	\$17,257,780
MCB Camp Pendleton	CA	7	1,701	\$6,529,453
MCB Quantico	VA	2	417	\$3,009,500
Townsend Bombing Range	GA	9	41,176	\$50,624,501
<b>Marine Corps Totals</b>		<b>69</b>	<b>59,841</b>	<b>\$172,689,529</b>

**Table 5: Air Force Projects through FY 2016**

Project	State	Number of Parcels / Transactions Through FY 2016	Total Acres Protected Through FY 2016	Total Cost Through FY 2016
Avon Park AFR	FL	3	1,926	\$3,688,741
Beale AFB	CA	3	3,730	\$7,438,711
Buckley AFB	CO	2	170	\$4,947,432
Cape Canaveral AFS	FL	11	190	\$3,693,258
Dare County Range	NC	3	5,991	\$2,174,453
Eglin AFB	FL	5	24,027	\$24,296,313
Ellsworth AFB	SD	42	2,488	\$5,682,272
Fairchild AFB	WA	1	150	\$600,000
*Joint Base Langley-Eustis	VA	0	0	\$0
Joint Base McGuire-Dix-Lakehurst	NJ	37	5,971	\$29,258,739
Robins AFB	GA	215	736	\$19,676,270
Tinker AFB	OK	1	16	\$139,328
Travis AFB	CA	1	147	\$539,000
*Tyndall AFB	FL	0	0	\$0
Vandenberg AFB	CA	2	951	\$5,221,000
Warren Grove Range	NJ	5	179	\$444,301
<b>Air Force Totals</b>		<b>331</b>	<b>46,673</b>	<b>\$107,799,817</b>

\*This project has an established and funded REPI partnership, but has not executed any real estate transactions through FY16.

Select Service totals reported in Table 1 may vary slightly from Service totals reported in Tables 2 through 5 because of consolidation due to Joint Basing.

## 2017 REPI Program Locations



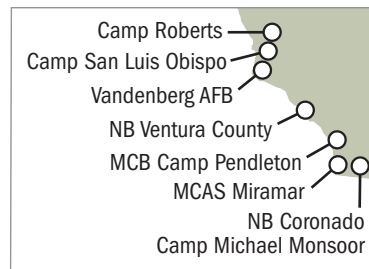
Alaska:



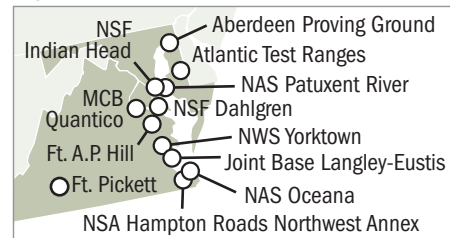
Hawaii:



California Inset:



Virginia and Maryland Inset:



Cover photo credits: (clockwise from top left)

U.S. Marine Corps photo by Lance Cpl. Devan K. Gowans/Released

U.S. Air Force photo by Tech. Sgt. Matthew Plew, Flickr

U.S. Army photo by Staff Sgt. Teddy Wade/Released

U.S. Air Force photo by Senior Airman John Linzmeier, Flickr

U.S. Navy photo by Mass Communication Specialist Seaman Cole Schroeder/Released

Interior photo credits:

page 2, U.S. Army photo by photo by T. Anthony Bell, Flickr

page 4, U.S. Air Force photo by Airman 1st Class Diana M. Cossaboom/Released

page 5, DoD photo by Tech. Sgt. Francisco V. Govea II, U.S. Air Force/Released

page 6, U.S. Navy photo by Intelligence Specialist 1st Class Daniel Penn/Released



**2017 Readiness and Environmental  
Protection Integration Program**