



REPI Readiness and Environmental Protection Integration Program

Using 10 U.S.C. §2684a and the Sikes Act (16 U.S.C. §670c-1) to Maintain or Improve Military Installation Resilience

Using 10 U.S.C. §2684a to Maintain or Improve Military Installation Resilience

10 U.S.C. §2684a provides authority for the Department of Defense (DoD) to enter into cooperative and other forms of agreements with state and local governments and conservation non-governmental organizations (NGO) (“eligible entities”) to protect DoD’s ability to test, train, and operate by addressing the use and condition of privately owned real estate through the acquisition from willing landowners of interests in such real estate.

Enacted in the Fiscal Year (FY) 2003 National Defense Authorization Act (NDAA), 10 U.S.C. §2684a provides DoD with the ability to address “outside the fence line” conditions on privately owned lands that could affect existing or possible future restrictions on military testing, training, and operations.

Prior to the enactment of 10 U.S.C. §2684a, the Army experienced significant training restrictions at Fort Bragg, NC, resulting from the legal mandate to avoid adversely affecting the red-cockaded woodpecker (RCW), a species listed as endangered under the Endangered Species Act (ESA). In response the Army, in what it termed the “Private Lands Initiative” (PLI), used the authority of the Sikes Act to work with conservation NGOs, private landowners, and others to take actions to acquire interests in real estate in order to protect habitat for the RCW outside of the boundaries of Fort Bragg. The basis for using the Sikes Act as the authority for the PLI was that such off installation actions directly benefited the “on installation” status of the RCW. 10 U.S.C. §2684a was enacted to both clarify and broaden the authority of DoD to enter into such agreements.

DoD funding for implementing such agreements was authorized to come from either or both of two sources:

1. The Operation & Maintenance (O&M) funds provided to the Office of the Secretary of Defense (OSD) specifically for the Readiness and Environmental Protection Integration (REPI) Program agreements (which OSD passes directly to the Services for execution).
2. Funds (either O&M or Research, Development, Test & Evaluation (RDT&E) and without a specific limitation as to the amount) that were provided to the Services for the operation of their installations.

The Services can use the O&M or RDT&E funds to provide funding for their agreements in addition to or instead of REPI funds provided by OSD.

Since its original enactment, 10 U.S.C. §2684a has been amended multiple times in response to lessons learned from the implementation of the authority, and to make that authority more effective in protecting military readiness.



As originally enacted, the authority under 10 U.S.C. §2684a could be used for two purposes:

1. Limiting the development or use of privately owned real property that would be incompatible with the mission of the installation; and/or
2. Preserving habitat on privately owned real property in order to “eliminate or relieve” current or anticipated statutory or regulatory restrictions that would adversely affect testing, training or operations. Actions for such purposes were limited to private lands “in the vicinity” of a military installation.

Significant amendments include:

- ▶ Broadening the geographic scope of where the authority could be used beyond just property “in the vicinity” of an installation to a much broader combined geographic and functional scope that includes property “in the vicinity of, or ecologically related to, a military installation ...or military airspace.”
- ▶ Adding the additional purpose of protecting Clear Zone areas.
- ▶ Authorizing agreements to “provide for the management of natural resources” on private lands in which DoD has acquired an interest or right in pursuant to a REPI agreement.
- ▶ Authorizing DoD to create, in effect, an endowment for funding such management into the future, allowing the REPI partner to invest funds provided for that purpose in an interest-bearing account, with any interest being used for such management. Notably, such authorized management actions include actions both to “preserve” habitat and to “restore” habitat, clarifying that the authorized “habitat” purpose of a REPI agreement includes actions beyond the mere protection of the existing condition of that habitat.
- ▶ Authorizing an eligible entity receiving funds under a REPI agreement (or a Sikes Act agreement) to use those funds to “satisfy any matching funds or cost-sharing requirement” of any conservation program administered by the Department of Agriculture (USDA) or the Department of the Interior (DOI).

As concerns grew over the impacts on DoD installations and readiness activities resulting from severe weather and other conditions exacerbated by the current or anticipated impacts of climate change, both DoD and Congress began taking actions to address those current or anticipated impacts. In the FY 2018, 2019, and 2020 NDAA, Congress enacted numerous legislative provisions and amendments to existing laws designed to strengthen the ability of DoD to take actions to lessen those current and anticipated impacts. (Note: additional legislative changes addressing DoD resilience to climate change, including several amendments to 10 U.S.C. §2684a, are now being considered by Congress as part of the pending FY 2021 NDAA).

Two of those enactments directly affect the ability of DoD to take action under 10 U.S.C. §2684a in response to the threat of climate change:

1. A statutory definition of “military installation resilience,” codified in 10 U.S.C. 101(e)(8), that addresses not only impacts of severe weather and climate change to a military installation as such, but also impacts to “essential transportation, logistical, or other necessary resources outside of the military installation that are necessary in order to maintain, improve, or rapidly reestablish installation mission assurance and mission-essential functions.”
2. The addition of an additional purpose of “preserving habitat” [on REPI-protected property] that... “maintains or improves military installation resilience.” Note that action regarding habitat under 10 U.S.C. §2684a for a resilience purpose

may, but is not statutorily required to, also lessen or avoid legal or regulatory restrictions on readiness activities.

Under this amended authority, 10 U.S.C. §2684a is a powerful—but limited—tool to address the current or anticipated impacts of climate change on DoD and National Guard (NG) installations and such impacts on key civilian resources outside such installations providing critical mission support, such as key electrical power substations, potable water and storm water facilities, etc.

The basic mechanism for addressing resilience using 10 U.S.C. §2684a is to work with REPI partners to preserve, manage, or restore so-called “green infrastructure” on lands where DoD has acquired an interest in private real estate pursuant to a REPI agreement. Such “green infrastructure” involves the use, management, and/or restoration of nature or nature-based features such as wetlands, dunes, oyster reefs, and other natural features (see below under the Sikes Act for more detail) to avoid or lessen the impacts of coastal or inland flooding, sea level rise, or storm surge.

It is important to note that in a number of states, private parties can acquire real estate interests in sea bottom within “state waters,” and hence such sea bottom becomes “private real estate” for the purposes of a REPI agreement with an eligible entity to preserve, maintain, or restore features on that “sea bottom real estate” (such as an oyster reef) to lessen the impacts of storm surge on a coastal installation.

Resilience to the threat of wildfires can be addressed under a REPI agreement by actions to manage the habitat on REPI-protected private property to reduce fuel loads (e.g., prescribed burning). In situations where the freshwater supply to an installation is threatened by drought conditions projected to worsen as a result of climate change, a REPI agreement can be used for the purpose of protecting upstream natural features on private lands such as forests that would assist in maintaining or improving in-stream flows for sources of freshwater for the installation.



The power of REPI agreements to “maintain or improve military installation resilience” stems from:

- ▶ The ability to leverage existing relationships throughout the country with “eligible entities” to enter into new or amended agreements or to use existing agreements for the additional purpose of maintaining or improving military installation resilience;
- ▶ The functional as opposed to strictly geographical scope of where 10 U.S.C. §2684a can be used;
- ▶ The ability to fund what are in effect endowments for the long-term protection, maintenance, and restoration of “green infrastructure,” very often the limiting factor in the ability to successfully use “green infrastructure” as a resilience method;
- ▶ The ability of REPI partners to use funds received from DoD under an agreement to meet the matching funds or cost-share requirements of the USDA and DOI conservation programs, since such conservation programs frequently also provide additional resilience to the impacts of extreme weather and climate change;
- ▶ And the flexible nature of the funding that can be used by DoD for REPI agreements, including both funds specifically provided by Congress to OSD for that purpose and unspecified levels of funds provided to the Services to operate military installations.

The limitations on the use of REPI agreements for a resilience purpose stem from:

- ▶ The requirement that REPI agreements address only the use and condition of privately-owned lands where the owner of such lands agrees to sell or donate an interest in such lands. Since effective action to maintain or improve resilience can require consistent approaches across a fairly large landscape that may include lands owned by a state or local government, a non-DoD federal agency, a

tribe, or private lands where an owner chooses not to be a “willing seller,” agreements under REPI for resilience purposes can leave significant “resilience gaps”;

- ▶ And the inability to use REPI agreements to fund resilience-related “grey infrastructure,” such as levees, breakwaters, improved culverts, and the like, since comprehensive resilience measures often require the use of both “grey” and “green” infrastructure.

Given the potential power of REPI agreements, they warrant an increasingly prominent role in maintaining and improving military installation resilience. But because of the limitations on the use of 10 U.S.C. §2684a alone for this purpose, a comprehensive approach to maintaining and improving military installation resilience should involve combining the use of 10 U.S.C. §2684a, the Sikes Act (16 U.S.C. §670c-1), and other relevant DoD authorities, including:

- ▶ The resilience-related authorities administered by the Office of Economic Adjustment under 10 U.S.C. §2391 (including the resilience aspects of Compatible Land Use Studies and resilience-related projects under the Defense Community Infrastructure Pilot Program);
- ▶ Inter-governmental support agreements with civilian authorities under 10 U.S.C. §2679;
- ▶ Climate resilience authorities related to roads and bridges under the Defense Access Road program under §23 U.S.C. 210;
- ▶ Other DoD authorities that may be relevant in particular circumstances;
- ▶ And full awareness and leveraging of the resilience programs of state and local governments and of other federal agencies, such as the Federal Emergency Management Agency, the National Oceanic and Atmospheric Administration, and the U.S. Army Corps of Engineers (USACE).

Using the Sikes Act (16 U.S.C. §670c-1) to Maintain or Improve Military Installation Resilience

The Sikes Act (16 U.S.C. §670 et seq.) is the primary legislative authority governing DoD’s management of natural resources. Added to the Sikes Act in 1989, section 103a (16 U.S.C. §670c-1) originally authorized the Secretary of Defense to enter into cooperative agreements only “to provide for the maintenance and improvement of natural resources *on...* Department of Defense installations.” [Emphasis added]

In 2008, a new paragraph (a)(2) was added to enlarge the scope of the authority to provide also for “[t]he maintenance and improvement of natural resources *located off of* a military installation or State-owned NG installation...to relieve or eliminate current or anticipated *challenges* that could restrict, impede, or otherwise interfere with, whether directly or indirectly, current or anticipated military activities.” [Emphasis added] Also in 2008, subsection (a) was amended to permit the use of “interagency agreements with the heads of other Federal departments and agencies” for these same purposes. In 2014, new paragraph (b)(2) was added to permit the Secretary of a Military Department to fund, from a single year’s

appropriation, what are, in effect, “management endowments” intended to cover the future costs of natural resources management or improvement activities to be provided under a subsection (a) cooperative agreement.

Undoubtedly, these amendments were enacted principally to give DoD installations greater authority to restore and manage habitat located “outside the fence line” for the purpose of relieving or eliminating current or anticipated ESA-related restrictions on the use of “inside the fence line” installation lands. That said, Section 103a is nonetheless clearly broad enough to permit agreements designed to address—through the maintenance and improvement of “natural infrastructure” both on and off installations—the observed and anticipated “challenges” associated with climate change.

Natural or “green” infrastructure solutions seek to enhance the benefits provided by natural systems: reduced erosion and flooding; attenuated wave energy and storm surge; floodwater retention; enhanced water quality and groundwater

recharge; and reduced runoff. Natural infrastructure solutions are often more cost effective than the installation of “grey” or built infrastructure.

Natural infrastructure solutions encompasses a wide range of possible actions:

- ▶ Restoring historical hydrology—e.g., wetlands and coastal marshes;
- ▶ Reestablishing oyster reefs and submerged aquatic vegetation;
- ▶ Restoring shoreline and dune vegetation;
- ▶ Removing vegetation that restricts rainwater infiltration;
- ▶ Enhancing riparian buffers;
- ▶ Restoring high value habitat;
- ▶ And using prescribed burns to reduce fuel for wildfires.

For more information on natural infrastructure solutions, please see the burgeoning literature focused on the effects and functionality of green infrastructure.

Section 103a should be seen as a potentially powerful tool to address the effects of climate change and reduce the risk of natural disasters. Installations may wish to initiate discussions with surrounding communities, USACE, and other interested parties to identify mutually beneficial natural infrastructure projects to address climate change effects and reduce the risks associated with natural disasters.

To be effective, many “natural infrastructure” projects will require the combined efforts of many landowners and encompass property owned by private parties, state agencies, and agencies of the federal government. As a consequence, a multi-party cooperative agreement and a parallel interagency agreement (for federal agency partners) may need to be implemented. To facilitate interagency



cooperation, the recipient of funds provided pursuant to an agreement authorized by this section of the Sikes Act may use such funds to satisfy any matching funds or cost-sharing requirement of any conservation program administered by the USDA or DOI. [See 10 U.S.C. §2684a(h)]

Funding for activities under agreements authorized by this section of the Sikes Act may come from funds appropriated for O&M of the Army, Navy, Marine Corps, Air Force, or Defense-wide activities, or, for installations devoted primarily to research and development, funds appropriated for RDT&E. Because ensuring long-term and reliable funding for “natural infrastructure” solutions can be a challenge, the use of the Sikes Act “endowment” authority could be important in “filling the gaps” for such efforts, and in attracting other federal, state, and private funding.

10 U.S.C. §2684a includes as a stated purpose the maintenance and improvement of “military installation resilience”; consequently, agreements to address climate change and promote military installation resilience ought, in most cases, to cite both of these mutually reinforcing authorities—i.e., 10 U.S.C. §2684a and 16 U.S.C. §670c-1—in order to be positioned to take advantage of opportunities as they arise. 10 U.S.C. §2864 was amended in 2019 to require installation master plans for all major military installations to address military installation resilience.

In accordance with paragraph (c)(6) of this section, the resilience component of these plans is required to discuss “(a)greements in effect or planned...for the purpose of maintaining or enhancing military installation resilience or resilience of the community infrastructure and resources” that are necessary to maintain mission capability and vulnerable to threats posed by extreme weather events and other changes in environmental conditions. Clearly, Congress intended this change to §2864 to prompt installations to identify and address present and future climate change-related threats to military installation resilience.

Just as clearly, Sikes Act cooperative and interagency agreements (and agreements under 10 U.S.C. §2684a) with a resilience purpose or effect are precisely the type of agreements Congress had in mind in enacting the requirement to include discussion of “agreements in effect or planned” in military installation resilience plans.

Helpful references:

- ▶ *Climate Adaptation for DoD Natural Resources Managers: A Guide for Incorporating Climate Considerations into Integrated Natural Resources Management Plans*, available from the National Wildlife Federation and soon to be on the Defense Environmental Network and Information Exchange.
- ▶ “*Climate Change Planning Handbook: Installation Adaptation and Resilience*,” Naval Facilities Engineering Command Jan 2017 (see, particularly, Appendix D).
- ▶ The USACE “Engineering with Nature” Initiative, Engineer Research and Development Center Environmental Laboratory, <https://ewn.el.ercd.dren.mil/>.