INRMP Implementation Summary Report 2017-2022

The US Army Yuma Proving Ground (YPG), Yuma Arizona is meeting Sikes Act requirements through implementation of the Integrated Natural Resource Management Plan (INRMP) and continued coordination with Arizona Fish and Game Department (AZGFD) and US Fish and Wildlife Service (USFWS). YPG has met annually with AZGFD, USFWS, BLM and other natural resource agencies each year to discuss implementation of the INRMP during our formal Sikes Act meeting. Additional coordination occurs throughout the year. YPG receives feedback each year from USFWS and AZGFD on implementation of the plan as well as technical guidance in addressing many natural resource issues. Furthermore, the agencies provide assistance in developing implementation projects that YPG can prioritize, seek funding, and execute through our cooperative agreements.

YPG's INRMP continues to be a strong guidance document for justification of natural resource actions and priorities for funding. Table 1 provides a list of INRMP projects that have been funded from 2012 to 2021. Some projects were funded through the DOD legacy program through partnerships with AZGFD. All projects funded by YPG were executed through cooperative agreements with AZGFD.

Table 1. Approximate Cost of Projects executed on YPG.

Projects Funded	YPG funded
FY12	
Desert tortoise, Mojave Fringe Toed Lizard , Bighorn Sheep, Mule Deer and Mesquite Bosque PLS Camera Trapping at Water Developments Wildlife Habitat Connectivity	Funded in 2011
FY13	0
Mojave Fringe Toed Lizard Inventory (Legacy Funded)	0
Sonoran Desert Coordinated Bird Monitoring (Multiple funding sources)	0
FY14	58,839
Desert Tortoise PLS	40,000
Golden Eagle PLS (Legacy funds also)	18,839
FY15	197,000
Tortoise PLS	45,000
Pronghorn Habitat Study	79,000
Impacts of solar on small animals (Legacy)	0
Restoration of HCA Wash	73,000
FY16 (Task Order (TO) 04)	182,500
Cooperative Agreement cost	7,000
Desert Tortoise PLS	40,600
Pronghorn Movement Monitoring	45,000
Bighorn Sheep Movement Monitoring (using Hunting funds)	29,000
WASH (TO 09)	60,900
Athel Tamarisk removal and Earth Day Planting	0

FY17 (TO 12)	148,910
Cooperative Agreement cost	8,000
Tortoise PLS	15,000
Pronghorn Movement Monitoring[3]	49,200
Bat Gates	45,711
Buffelgrass treatment	30,999
FY 18 (TO 14)	157,957
Cooperative Agreement Cost	8,000
Large Mammal Management	44,998
Desert Tortoise PLS	14,973
Long term wildlife trend PLS (reptile)	55,000
Thrasher Inventory	34,986
FY 19 (CESU W9126G-19-2-0023)	201,682
CESU Agreement Cost	19,500
Buffelgrass Control	16,254
Sonoran Pronghorn	44,121
Long Term Trend (reptile/Mesopredator)	57,324
Bat Roost monitoring	48,497
Tortoise Monitoring	15,986
Remote Water monitor[4]	Mission Fund
FY 20 (CESU W9126G-19-2-0023)	211,669
CESU Agreement Cost	10,000
Invasive Species Control and Native Vegetation Restoration	16,254
Sonoran Pronghorn	42,121
Long Term Wildlife Trend (Raptor/Small Mammal)	57,324
Desert Tortoise Long Term Monitoring Plots	36,000
NEPA Planning Inventory (North Cibola)	50,000
FY 20 (CESU W9126G-20-2-0004)[5]	75,000
CESU Agreement Cost	13,000
Bird Abatement for LAAF Sewage Lagoon	62,000
FY 21(CESU W9126G-19-2-0023)	336,776
CESU Agreement Cost	13,000
Invasive Species Control and Native Vegetation Restoration	16,254
Sonoran Pronghorn	44,121
Long Term Wildlife Trend (Small Mammal)	57,324
Bat Roost Monitoring	48,497
Bighorn Sheep Monitoring	29,059
Mojave Fringe Toed Lizard Habitat and Protection	37,577
Desert Tortoise Long Term Monitoring Plots	38,414
Desert horned lizard genetics study	52,530

[1] This list does not include maintenance of wildlife waters or routine wildlife monitoring.

[2] Projects were funded in 2011.

[3] $4,200 of this cost was covered by ATEC as mitigation for ERCA

[4] Water monitoring system installed by YPG meteorological team funded through YPG overhead.

[5] Funded by Public Works Operation & Maintenance

NATURAL RESOURCES CONSERVATION METRICS

Natural Resources Conservation metrics are used to assess the overall health and trends of each installation's natural resources program and to identify and correct potential funding and other resource shortfalls. The Sikes Act requires each installation with significant natural resources to report annually on the status of its INRMP implementation.

YPG uses Natural Resources Conservation metrics identified in DODI 4715.03 to assess INRMP implementation, measure conservation efforts, ensure no net loss of military testing and training lands across the various installations, understand the conservation program's installation mission support, and indicate the success of partnerships with the USFWS and AZGFD. Seven focus areas assess requirements, goals, and objectives of the Sikes Act annually:

A. INRMP project implementation.

B. Federally listed species and critical habitat.

C. Partnerships effectiveness.

D. Fish and wildlife management and public use.

E. Team adequacy.

F. Ecosystem integrity.

G. INRMP impact on the installation mission.

SUMMARY OF IMPLEMENTATION OF THE SEVEN FOCUS AREAS

A. <u>INRMP Project Implementation</u>

(1) Are INRMP projects, including follow-up inventorying and monitoring work, properly identified, developed, and submitted for funding?

Yes. A list of projects are provided every year for discussion at our annual Sikes Act meeting in February. These projects are then loaded into our Garrison Environmental Resourcing Build (GERB) to develop YPGs spend plan the following year.

(2) Has project funding been received, obligated, and expended?

Yes. Once our budget is determined, we prioritize all environmental projects including INRMP implementation actions and develop a spend plan. We then execute funds in accordance with the spend plan. Most of our project execution is through cooperative agreement with AZGFD. YPG

has been using the Cooperative Ecosystem Studies Unit (CESU) through the Army Corps of engineers to issue these awards. This streamlined process saves costs and enables rapid execution when funding is available. We have found this partnership valuable beyond traditional environmental projects. In 2020 we executed Operation and Maintenance funding to AZGFD for bird abatement on sewage lagoons at our airfield. This partnership saved YPG funds while benefiting from the knowledge and experience of AZGFD.

(3) Have projects been completed and do they meet expected objectives?

Yes. Most of our INRMP projects have been executed by Arizona Game and Fish Department. All contracts and cooperative agreements have provided the required deliverables in accordance with the standards and dates agreed upon. At YPG, we have technical expertise and equipment from several divisions that have also contributed to natural resource management efforts. The YPG meteorology and range management team continue to provide water level data from remote monitors. This data has allowed enhanced planning for water hauling as well as alerts for emergency water failure. YPG Flight services has provided helicopter access on short notice when flight time is available. Also YPG engineering and heavy equipment has supported projects for AZGFD and USFWS.

B. Listed Species and Critical Habitat (CH)

(1) Are conservation efforts effective?

Yes. Our INRMP has supported construction of temporary water sources and supplemental feed stations for the Sonoran Pronghorn recovery effort. We have been able to fund radio collars and aircraft time for AZGFD to track the progress or released animals. We have gone from 0 pronghorn in 2012 to nearly 150 individuals in 2022. We established a release pen for pronghorn on YPG's East Arm, and released pronghorn in 2019, 2020, 2021, and 2022.

(2) Does the INRMP provide conservation benefits necessary to preclude CH designation?

Yes. Management under our INRMP is inclusive to all agencies within our region. We are able to support conservation actions on a regional basis providing support to nearby agencies and offering range space for habitat improvement projects.

(3) Are SAR identified and are steps being undertaken to preclude listing?

Yes. We entered the Candidate Conservation Agreement for Sonoran Desert Tortoise and continue to provide funding for monitoring to support the 2015 USFWS decision not to list the species.

In 2020 we established long term demographic monitoring plots for tortoise to begin surveying using similar protocols with other areas state wide to further contribute management of the species as a whole.

Our INRMP supports management of several other species of special concern including California Leaf-nosed Bat and Mojave Fringe-toed Lizard.

C. Partnerships Effectiveness

(1) Has the INRMP review team (i.e., DoD, USFWS, NOAA Fisheries Service, and State fish and wildlife agencies) been effective in ensuring the INRMP's implementation?

Yes. Our partners in AZGFD and USFWS have been instrumental in implementation of our INRMP. AZGFD has provided support for planning level surveys through coop agreements. They have also provided support for conservation law enforcement through patrols and also aiding our CLEOs in enforcement actions. AZGFD and USFWS provide technical support to YPG for developing conservation projects as well as day to day issues that pop up on the installation.

(2) Are other partnerships needed to meet the INRMP goals?

Yes. Bureau of Land Management (BLM) provides assistance by managing wild horses and burros on the installation. They are also a valuable technical resource for natural resource planning efforts in the region. BLM law enforcement has also assisted with patrols on YPG and support for our CLEOs.

(3) Have other partnerships been effectively used to meet INRMP goals?

Yes. BLM has conducted several wild horse and burrow gathers in response to safety and natural resource damage concerns on YPG.

D. Fish and Wildlife Management and Public Use

(1) Are public recreational opportunities such as hunting, fishing, and wildlife viewing available to base residents and employees?

Yes. Hunting is available to the public within the designated hunting areas on YPG.

(2) Are public recreational opportunities such as hunting, fishing, and wildlife viewing available to the public?

Yes. Hunting is available to the public within the designated hunting areas on YPG. There are no fishing opportunities on YPG because there are no surface waters.

E. Team Adequacy

(1) Is the installation's natural resources team adequately resourced to fully implement the INRMP?

Yes. The YPG Environmental Sciences Division received adequate funding to implement critical projects.

(2) Is the installation's natural resources team adequately trained to fully implement the INRMP?

Yes. Yearly training opportunities are provided free of charge by IMCOM. Also, local training opportunities are offered by Yuma County, AZGFD, and USFWS for various environmental skills.

(3) Does the installation encourage retaining existing natural resources personnel to maintain corporate knowledge and manage resources with the most qualified professionals to support the military mission?

Yes. YPG offers a positive work environment with leadership that values environmental input to project planning. The workforce shows a genuine appreciation for natural resources and interest in the projects we undertake.

F. Ecosystem Integrity

(1) To what extent are the installation's native ecological systems currently intact?

Large expanses of our range are completely undeveloped with little to no ground access particularly in mountainous regions. Within our impact areas and drop zones, there is a degree of surface disturbance from munitions impact and roads, however major ecological functions continue and the areas are still used by a wide variety of wildlife with minimal fragmentation of habitat.

(2) In what ways are an installation's various habitats susceptible to change or damage from different stressors?

Our extreme desert environment makes preservation of vegetation and washes critical to conservation of natural resources. Loss of trees, bushes or cacti cannot be mitigated in any meaningful way because regeneration is extremely unpredictable and takes an extremely long time. Avoidance and minimization are our most powerful tools for conservation on the installation. The sparse nature of our vegetation makes avoidance possible for most of our activities. Most of our ranges have large expanses of gravel malpais with little to no vegetation.

(3) What stressors affect each habitat type?

Stressors include human activity that affects the active portions of the range by people driving on and off the roads, maintaining infrastructure and the various activities involved in testing. Noise generated from these activities can include heavy machinery, aircraft and explosions. These activities result in some wildlife avoiding active testing areas. In some cases larger mobile species will still use these areas during inactive periods.

The major cantonment areas on YPG are heavily developed with buildings, offices, homes, airfields, roads, water treatment facilities roads and security fences. As such, wildlife abundance and distribution is much different in the cantonment areas, more similar to urban wildlife. Security fencing is a substantial barrier to wildlife movement in and around the cantonment areas.

Aircraft can be seen and heard at times over all of YPG. It does not alter the availability or use of habitat for wildlife.

Wildfire is uncommon on YPG due to the lack of wildland fire fuel. Most range fires are less than one acre. However, in unusually wet years, increased vegetation can result in large fires.

G. INRMP Impact on the Installation Mission. To what degree (i.e., high, medium, or low) is the INRMP and its associated actions supporting the installation's ability to sustain the current and potential future military mission?

High. The INRMP does not preclude any activity or use of the ranges on YPG. Use of minimization and avoidance measures in early planning has allowed activities to occur with minimal impact to the natural desert environment. Implementation of the INRMP has provided valuable data to inform project planning and the NEPA process for numerous activities. It has also provided us opportunities to address safety concerns for animal strikes on our roads and nuisance wildlife.

Partnerships with AZGFD, USFWS, and BLM have improved security for the installation with law enforcement cooperation. Furthermore, these partnerships have provided cost savings for natural resource inventory for project planning. Specifically, it preserves the natural environment for testing in real world environments thus providing critical analysis of weapons/systems effectiveness, and it allows our range systems to function properly by reducing erosion, pollutants, and disruptions of testing schedules, thus maximizing the efficient use of testing resources.