Igniting Resilience:
Department of Defense Embraces The Cohesive Strategy

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AGENDA

• DoD Structure
  • Mission, Program Scale and Scope
• Current Operating Picture
• Recent Wildfire Events and Impacts
• Case Studies
  • US Army Garrison Fort Stewart, GA
  • Camp Pendleton Marine Corps Base, CA
  • Eglin Air Force Base, FL
  • Air Force Wildland Fire Branch
• DoD Initiatives
  • DoD Cohesive Strategy
  • Increased Collaboration and Opportunities
  • Science and Technology Transfer
MISSION: Military Services manage lands and environmental programs to support the military’s combat readiness mission by ensuring continued access to realistic training conditions, while simultaneously working to ensure the long-term sustainability of our nation’s priceless natural heritage.
PROGRAM OVERVIEW

• DOD manages nearly 27 million acres across the U.S.
  • Natural lands provide realistic training
  • Military mission drives land management goals and objectives
  • Home to over 500 Threatened & Endangered (T&E) species and 55 endemic species
  • Greater density of T&E species exist on DoD lands than any other federal agency

• Active military missions create challenges for proactive fuels mitigation, beneficial fire use, and are ignition sources for wildfires
DoD addresses environmental justice by ensuring safe, healthy, and vibrant communities for our neighbors and Service members (and their families).

- 294,000 acres of wildfires annually require response from wildland fire personnel (80% of ignitions result from mission activities).
- 650,000 acres of prescribed fire applied annually, promoting resilient landscapes.
- 500+ federally-listed species (threatened and endangered).
- 500+ species at-risk.
- 55 listed species and 74 species at-risk exist only on DoD lands.

Environmental Planning
Proposed action, public involvement, decision.

- 3,220 National Historic Landmarks assets.
- 2,306 National Register of Historic Places listed assets.
- 132,000+ archaeological sites.

The Legacy Resource Management Program provides financial assistance to DoD for installation-specific efforts to preserve our natural and cultural heritage.

The Native American Lands Environmental Mitigation Program manages DoD's legal and moral obligation to address environmental impacts from past military activity on Indian lands with maximum tribal participation, through government-to-government consultation.

Many military installations offer amenities for military families, veterans, and the public to enjoy such as hiking, swimming, boating, fishing, sailing, golf, equestrian, and horseback riding.

- 331 installations require Integrated Cultural Resources Management Plans.
- 3,400 DoD personnel are trained to initiate effective consultation with tribal governments.
• Changing climate conditions identified as a critical national security issue and top management challenge.

• Wildfire Identified as Primary Installation and Mission Risk
RECENT WILDFIRE IMPACTS

• Fort Hunter Liggett, CA – Dolan Fire 2020
  • Started off installation, 28k acres burned on installation (125k acres total)
  • Installation evacuations
  • Robust Rx fire history contributed to containment

• Fort Cavazos, TX – Crittenberger Fire 2022
  • Mission-caused, 19k acres
  • $5.6mil infrastructure loss, $2.1mil damage to targetry

• Pohakuloa Training Area, HI – Major Fire 2022
  • Mission caused, 20k acres
  • Impact to endangered species habitat

• Clear Space Force Base, AK – Anderson Complex 2023
  • Nearby fire: evacuations, smoke impacts
  • Temporary shut down of radar sites
PROGRAM HISTORY & CURRENT OPERATING PICTURE

- Fire management evolved organically, rising to unique land use challenges
- Robust fire history, created islands of biodiversity within landscapes that were significantly fire suppressed
- Approximately 19,000 DoD personnel have some responsibilities related to wildland fire
- Current standards for training, equipment, and operations vary across Military Services and installations
- No existing DoD issuance specifically guides wildland fire management
- Wildfire occurrence and severity increasing due to climate and vegetation conditions
DOD WILDLAND FIRE PROGRAMS

• DoD Manages roughly 1 million of wildland fire annually on its 27M acres:
  • 650,000 acres of Prescribed Fire
  • 350,000 acres of Wildfire
  • ~ 80% of ignitions on installations due to training and testing activities

• Program Focus – Prevention & Mitigation
  • Rx fires are frequently conducted around impact areas and ranges for wildfire mitigation
  • Rx fires support ecosystem restoration and management goals, while enhancing training lands

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<th>Military Service</th>
<th>Wildfire</th>
<th>Prescribed Fire</th>
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<td>Army</td>
<td>240,000 acres</td>
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<td>Air Force</td>
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<td>135,000 acres</td>
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<tr>
<td>Navy/USMC</td>
<td>18,240 acres</td>
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PRESCRIBED FIRE AT SCALE

Annual Rx Fire Acres

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% of Total Lands Treated with Rx Fire

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<tr>
<th>Agency</th>
<th>% of Total Lands Treated with Rx Fire</th>
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CASE STUDY- FORT STEWART, GA

• Home to the Army’s 3rd Infantry Division
  • One of the largest and most active heavy maneuver military installations East of the Mississippi
  • 284,000 acres, dominated by southern pine forests including longleaf pine

• Home to numerous threatened and endangered species

• Conducts ecosystem and fuels management for species recovery, wildfire mitigation, and mission support

• Wildland fire managed by the Forestry Branch
  • Robust fuels management program
  • Applies 115,000 acres of Rx fire annually
  • 132,736 acres of Rx fire applied in FY21
  • Only 24 wildfires (341 acres) in FY21
FT. STEWART

Landscape Management Results on Fort Stewart, GA (FY92- FY22)

- Prescribed Burn Acres
- Cumulative Timber Harvest Acres
- Total Wildfires
- RCW Potential Breeding Groups

Year:
- 1992
- 1993
- 1994
- 1995
- 1996
- 1997
- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022

Prescribed Burn and Timber Harvest Acres
- 0
- 20,000
- 40,000
- 60,000
- 80,000
- 100,000
- 120,000
- 140,000
- 160,000
- 180,000
- 200,000

Cumulative Timber Harvest Acres
- 0
- 20,000
- 40,000
- 60,000
- 80,000
- 100,000
- 120,000
- 140,000
- 160,000
- 180,000
- 200,000

Total Wildfires
- 0
- 20
- 40
- 60
- 80
- 100
- 120
- 140
- 160
- 180
- 200

RCW Potential Breeding Groups
- 0
- 50
- 100
- 150
- 200
- 250
- 300
- 350
- 400
- 450
- 500
- 550
- 600
- 650
- 700

* Growing Season Burns Started
* All Military Training Restrictions Lifted
FORT STEWART

- Georgia | Sentinel Landscapes
- Established in 2018
- Georgia Sentinel Landscape encompasses numerous DoD installations
  - 6,318,263 total acres
  - 615,290 acres of DoD lands
  - 199,939 protected acres (easements)
  - 551,371 acres enrolled in beneficial programs
- GA Sentinel Landscape (GSL) leverages DoD and other funds for longleaf pine management and fire benefits
- Army Compatible Use Buffer (ACUB)
  - Prevents incompatible development on the Fort Stewart boundary
CASE STUDY- CAMP PENDLETON, CA

- Located 38 miles north of San Diego, CA, and home to the I Marine Expeditionary Force and the 1st Marine Division
- Wildland fire program managed by Fire & Emergency Services in coordination with Natural Resources Program
- Fuels management operations include maintenance of approximately 165 miles of firebreaks
- Hosts annual regional fire school, providing live fire training scenarios for firefighters from DoD and partner agencies
  - Accounts for roughly 2,000 acres of Rx fire every year, and trains over 1,400 firefighters and 60 operators
  - Training maintains 60 miles of firebreaks on Camp Pendleton, and many other DoD installations
  - Interagency resources to support Rx fires, creating mutually beneficial training opportunities
CASE STUDY - EGLIN AIR FORCE BASE, FL

- 96th Test Wing tests and evaluates electronic combat systems and navigation/guidance systems. Hosts 40 tenant units representing virtually every major command.

- The largest and most active Air Force testing facility east of the Mississippi

- 464,000 acres of test and training ranges
  - 300k acres of longleaf pine ecosystems, numerous T&E

- Apply Rx Fire to 90,000 acres annually

- Strong Partnerships:
  - Florida Forest Service, Longleaf Alliance, The Nature Conservancy, Florida Fish & Wildlife Commission, National Interagency Prescribed Fire Training Center
EGLIN AIR FORCE BASE - PROGRAM TRANSITION 1998

- Prescribed Fire
  - Rx fire program lacked cohesive goals and planning
  - Funding was not consistent
  - Average Rx fire was 38,000 acres/yr.
  - Average fire return interval 11.4yrs

- Wildfire
  - 19,000 acres of wildfire
  - Many fires were high severity
  - Impacts to military mission and local communities
**Prescribed Fire**
- Implemented Burn Prioritization Tool
- Secured consistent funding and personnel / equipment
- Average Rx fire was 92,000 acres/yr.
- Average fire return interval 2-3 yrs.

**Wildfire**
- Significant decrease in wildfire occurrence, size, severity
- Reduced fuel loads aided in wildfire containment
CASE STUDY - U.S. AIR FORCE

- Air Force Wildland Fire Branch established in 2012 to meet increasing wildland fire challenges
- Utilize 16 interagency modules to apply prescribed fire and mechanical fuels treatments
  - Modules are based at hubs and cover a regional area, with overlapping support
  - Module composition and qualification is based on the needs of the region
  - Modules comprised of Air Force, USFWS, BLM, Colorado State University, and University of Montana personnel
- Air Force is the only Military Service to centralize the coordination and funding for fuels mitigation
- Air Force and Army/IMCOM partnered for the Joint Wildland Fire Training Academy in 2014
  - Provides NWCG training
  - 2,100 Personnel trained to date
DOD CURRENT INITIATIVES

- Office of the Secretary of Defense (OSD) Wildland Fire Program
- DoD Draft Cohesive Wildland Fire Management Strategy (CWFMS)
- Data Call and Draft DoD Issuance for Wildland Fire Management
- DoD engagements
  - DoD Wildland Fire Working Group (WFWG)
  - National Wildfire Coordinating Group (NWCG) member
  - Wildland Fire Leadership Council (WFLC) member
  - Wildfire Resilience Interagency Working Group (WRIWG)
  - Wildfire Mitigation and Management Committee Aviation Report coord
  - Eastern Innovation Landscape Network (EILN)
- DoD Wildland Fire Science Initiative (SERDP-ESTCP) and Legacy Resources Management
- Readiness and Environmental Protection Integration Program (REPI)
- Office of Local Defense Community Cooperation (OLDCC)
ALIGNING WITH THE NATIONAL COHESIVE STRATEGY

• Increasing DoD presence and contribution to national wildland fire management and interagency initiatives

• Cohesive Strategy Regional Engagement

• Applying tenets of the National Cohesive Wildland Fire Management Strategy for installation resilience:
  • Fire Adapted Communities
  • Safe, Effective Wildfire Response
  • Resilient Landscapes
  • Science-backed and informed
FIRE ADAPTED COMMUNITIES

- Define DoD’s Wildland Urban Interface (WUI)
- Identify unique resources-at-risk
- Wildfire risk assessments
  - Installation “inside the fenceline”
  - Local defense community
- Defensible space, facility hardening
SAFE AND EFFECTIVE WILDFIRE RESPONSE

- DoD Manages ~350,000 acres of wildfire annually
- Right Size, right capability, right place
- Clear mission, roles, and responsibilities
- Early detection, reporting and response
- Effective mutual aid agreements
RESILIENT LANDSCAPES

- DoD conducts approximately 650,000 acres of Rx fire annually
- Cross boundary partnerships
- Mechanical fuel reduction
- Invasive species management
- Post fire assessment
- Post fire recovery
ENHANCED INTEROPERABILITY

• Standardize qualifications for wildland fire personnel, equipment, and operations

• Increase collaboration across installation program areas, including
  • Natural Resources
  • Fire & Emergency Services
  • Range Operations

• Increase intra and inter-service collaboration
APPLIED SCIENCE & TECHNOLOGY

• Strategic Environmental Research Development Program and the Environmental Security Technology Certification Program (SERDP ESTCP), National Defense Center for Energy and Environment (NDCEE), Legacy Resource Management Program

• Increase interagency coordination on research

• Effective tech transfer and co-production

• Utilize models to improve decision making

• Use existing data to improve decision making
DOD RESOURCE OPPORTUNITIES

• Readiness and Environmental Protection Integration, (repi.mil)
  • The Readiness and Environmental Protection Integration (REPI) Program preserves military missions by supporting cost-sharing agreements between the Military Services, other federal agencies, state and local governments, and private conservation organizations to avoid land use conflicts near military installations, address environmental restrictions that limit military activities, and increase resilience to climate change

• Home | Office of Local Defense Community Cooperation (oldcc.gov)
  • The U.S. Department of Defense Office of Local Defense Community Cooperation assists states and local governments to maximize support of the military mission.

• Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP)