Mr. Steve Scanlon  
Director  
Office of Regional Environmental and Government Affairs  
(Central Region)
"There’s something happening here.  What it is ain’t exactly clear..."

Buffalo Springfield 1967
A sustainable Army simultaneously
• meets current as well as future mission requirements worldwide
• safeguards human health
• improves quality of life, and
• enhances the natural environment.

“Triple bottom line” Plus –
Mission, Environment, Community + Economy
Sustainability Is Not

- Just an Army Issue
- Just about Military Forces
- Sustainment
- Compliance Mandated
- Something for DPWs
- Just about Installations / Base Camps
- Another Environmental Thing
- “A Bad Thing”
- A Quick Fix
- A Done then Over Operations
“Our countries Soldiers need sustainable air, water and land resources to enable tough, realistic training, and a healthy environment to ensure vibrant communities in which to live. Those needs can only be met if the Army collaborates with our neighbors north, south, east and west of our installations. We must work together to address land use and related environmental issues confronting all of us today to preserve this important legacy for future generations.”

Addison “Tad” Davis
Deputy Assistant Secretary of the Army
Environment, Safety and Occupational Health
Realistic training requires realistic training environments

Ability to field and use advanced military technology fundamental to U.S. warfare

Weapons and tactics require increasingly large battle spaces

Readiness is perishable – Must maintain skills through regular training

OPTEMPO, PERSTEMPO up; ready access to training essential

Use & Modification of Terrain central to land warfare

Live Fire Fundamental to Training

We must train as we fight; because we fight as we train
RANGE SPACE REQUIREMENTS

- Higher performance systems
- Stand-off & long-range weapons
- Increasingly sophisticated training

Smaller Force Doesn’t Mean Reduced Range/Airspace Need
Historical Context

- Changing battlefield geometry
  - Doctrine
  - Organizations
  - Training
  - Leader Development
  - Material
  - Soldiers

FCS BCT

Current BCT

18 km

75 km

18 km

75 km
An Expanding Doctrinal Footprint

Fort Hood, TX

The Brigade Battlefield

Increasing Doctrinal Land Requirements

Decreasing Land Assets – Encroachment!

and Increasing Internal/External Training Constraints

- 154,053 acres with training restrictions
- 77% of training land
- 45,488 acres of maneuver land without training restrictions
Camp Pendleton, CA
Established 1942
1940 - 1990

URBAN SPRAWL

**Land Classification**

- Urbanized Area (UA)*
- Indian Reservation
- Federal Protected Area

* As Defined by the U.S. Census Bureau

1990

Los Angeles (UA Pop. 11,402,948)
Camp Pendleton (U.S.M.C.)
Oceanside (Pop. 128,398)
San Diego (UA Pop. 2,348,417)
San Antonio Population
1970: 654,153
1980: 786,023
1990: 935,933
2000: 1,144,646
2010: 1,354,381
Encroachment Defined

Urban development surrounding military installations that affects the ability of the military to train realistically.

More than 40 percent of installations report encroachment issues.

http://www.sustainability.army.mil/tools/programtools_acub.cfm
Encroachment Pressures
Where DoD Started

Frequency Management
Cultural Sites
Air Space Congestion & Competition
Wilderness Designations

Urbanization and Development
Maritime Issues
Air Quality
Noise Abatement
UXO and Constituents
ESA and Wildlife Habitat

Ability to Test and Train
(It’s a two-way street)
Encroachment - Conflict Points

- Designation of Critical Habitat (Ft Bragg, Benning, Polk; Calif. Beaches)
- Noise (Aberdeen; Yuma)
- Public Safety (WSMR; Vieques)
- Public Access (SCI; Goldwater; Idaho)
- Hazardous Materials/Ground & Water Cleanup Activities (MMR; Vieques)
- Air Quality (SCI; Fort Carson)
- Perceptions of Environmental Stewardship
  - Land Management
  - ESA & Species Protection
  - Cultural/Historic Resource Issues
- Resource Contention
  - Airspace; Water Rights; Land
  - Other State & Federal Agency Missions
- Socioeconomics (Environmental Justice; Traffic/Schools/Crowding)
- State/Individual Rights
Encroachment Pressures
What’s Been Added

Ability to Test and Train

(It’s a two-way street)
The top bar shows how the electromagnetic spectrum is divided into various regions, and indicates that portion referred to as the Radio Spectrum. The lower bar illustrates the division of Federal, Non-Federal, and Shared bands for a critical part of the Radio Spectrum. Also shown are selected military uses that would be impacted by reallocating spectrum for competing commercial use.

**Selected Bands at Issue**

- **138 - 144 MHz**
  - Military Uses: Land Mobile Radio, Tactical Air/Ground/Air
  - Competing Uses: Little LEOs, Public Safety
  - Military Use: Tactical Comm

- **225 - 400 MHz**
  - Military Uses: Tactical Air/Ground/Air
  - Competing Uses: Little LEOs, Public Safety, Terrestrial DAB, CMRS
  - Military Use: Satellite Comm, Search & Rescue, Executive Comm, Tactical Comm

- **400.15 - 401 MHz**
  - Military Use: DMSP
  - Competing Uses: MSS

- **420 - 450 MHz**
  - Competing Uses: Auxiliary Broadcast, CMRS, Biomedical Telemetry, WLL

- **1215 - 1390 MHz**
  - Competing Uses: MSS, GPS, GWCS, Wind Profiler Radars

- **1435 - 1525 MHz**
  - Military Uses: Telemetry Supporting, Entire Aerospace Industry
  - Competing Uses: DAB, Satellite & Terrestrial

- **1755 - 1850 MHz**
  - Military Use: DoD Satellite TT&C
  - Competing Uses: PCS, MDS

- **2200 - 2290 MHz**
  - Military Use: DoD Satellite TT&C
  - Competing Uses: PCS, MDS, WLL

- **3100 - 3650 MHz**
  - Military Uses: High Power Mobile Radars, Shipboard ATC, Missile Links, Airborne Station Keeping
  - Competing Uses: MDS

- **4400 - 4900 MHz**
  - Military Uses: Fixed Wideband Comm, Mobile Wideband Comm, Command Links, Data Links
  - Competing Uses: GWCS, FSS, Public Safety

- **5925 - 6425 MHz**
  - Military Uses: Air Traffic Control, Ballistic Missile
Urban Growth Analysis Model
- University of Illinois at Urbana-Champaign
- National Center for Supercomputing Applications (NCSA)
- United States Army Corps of Engineers
- Private industry

Night sky glow from urban lights - Fort Riley, KS

Now . . . .10 – 30+ year forecast
Noise

- Number of complaints over Artillery training noise
Dust complaints from tracked vehicles
Wind Farms & Military Ops

Two Primary Issues

- Obstruction
- Radar Interference
Renewable Energy - Wind

Army Installations With Renewable Energy (Wind) Potential - *Notional*
External Issues

- Constituent awareness & authority
- Property / business rights
- No scheduled BRACs
- Inconsistent authorities
  - Lack of authority
- Culture (local government)
- Inconsistent proponents
Internal Issues

- Situational awareness
- No clear proponent – DC to installation
- Multiple programs; haphazard integration
- Inconsistent requirements
- Culture
- Inconsistent outreach
- Haphazard education / training
- Master planning capability
- Inconsistent enforcement
- Convenience
What We Have Now

- Master Planning to maximize available space; minimize impacts
- DOD Readiness and Environmental Protection Initiative (REPI) / Army Combatable Use Buffer (ACUB) Program
- Community coordination – Joint Land Use Study (JLUS)
- USN/USAF Air Installations Compatible Use Zones (AICUZ) program
- Army Operational Noise Management Program (ONMP)
- USN/USMC Range Air Installations Compatible Use Zones (RAICUZ) program
- Integrated Natural Resource Management Plan (INRMP)
- Base Realignment And Closure (BRAC)
COMMANDER’S GUIDE
BEST PRACTICES AND LESSONS LEARNED

WHITE SANDS MISSILE RANGE
KWAJALEIN MISSILE RANGE
YUMA PROVING GROUND
DUGWAY PROVING GROUND
ABERDEEN TEST CENTER
NATIONAL TRAINING CENTER
ELECTRONIC PROVING GROUND

NAVAL AIR WARFARE CENTER WEAPONS DIVISION
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
NAVAL UNDERSEA WARFARE CENTER DIVISION, NEWPORT
PACIFIC MISSILE RANGE FACILITY
NAVAL UNDERSEA WARFARE CENTER DIVISION, KEYPORT

30TH SPACE WING
45TH SPACE WING
AIR FORCE FLIGHT TEST CENTER
AIR FORCE AIR ARMAMENT CENTER
ARNOLD ENGINEERING DEVELOPMENT CENTER
BARRY M. GOLDWATER RANGE

NATIONAL NUCLEAR SECURITY ADMINISTRATION (NEVADA TEST SITE)

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE;
“...I recommend you direct more active involvement at the installation and Regional Environmental Coordinator level in all aspects of state and local planning that could impact readiness.”

- Philip W. Grone
Partners

- Council of State Governments (CSG)
- Environmental Council of The States (ECOS)
- International City / County Management Association
- Land Trust Alliance
- National Association of Counties (NACo)
- National Association of Energy Service Companies
- National Conference of State Legislatures (NCSL)
- National Governors Association (NGA)
- Southeast Regional Partnership for Planning and Sustainability (SERPPASS)
- Southwest Strategy
- The Nature Conservancy
- U.S. Natural Resource and Conservation Service
- Western Regional Partnership
More – “How To Guides”
Southeast Regional Partnership for Planning
Northwest Florida Greenway Project

Note: This is a conceptual map used only for preliminary planning purposes. Property owners are not required to participate and may request to have their property removed from consideration.
Anti-Encroachment Must Have’s

- Local authority to plan and zone property
- A GC or Dep GC trained in “how to work with state & local government”
- An installation inter-governmental liaison or community affairs person
- An installation Encroachment Management Team to review local land use/development proposals
- An installation strategic property inventory
- A periodic installation orientation for newly elected/appointed county and municipal officials
- An open house for the media, local property owners and other stakeholders (i.e., centers of influence) in the community
- Documentation of any encroachment impacts that have occurred
Peak-to-Prairie Project
Army Compatible Use Buffer (ACUB)

- Protecting important installations
- Respecting landowners
- Conserving our natural heritage
Legislative Options

- 39 states currently have some type of law
- Give local government authority to regulate development
- Comprehensive mandatory planning and coordination
- Establishment of State Areas of Interest
- Modifying existing planning and zoning legislation to include military consideration, e.g., notification
- Require military involvement in planning and zoning boards
- Require real estate disclosure
- Expand buffer funding
CONCLUSION

The Impacts

- **Reduced ability to provide the very best training for our nation's security.**
  To maintain a strong national defense, troops must have the best and most realistic training and preparation for the challenges of combat before they go to war.

- **Reduced readiness of military personnel.**
  If trainees receive restricted or inadequate training, they are more likely to misunderstand combat strategies and tactics, leading to poor skills and unsafe practices on the battlefield.

- **Increased risk of military installation realignment or closure.**
  If military installations are to remain active and contributing economic participants in their communities, the installations must have the space necessary to successfully accomplish their testing and training missions.
AR 210-7, para 2-2: US Army Corps of Engineers Divisions (USAED) commanders will –

- Appoint Liaison Representatives prescribed by DoDD 4165.61 to standard Federal Regions II, VII, and X.
- Set up and maintain an intergovernmental process.
- Ensure coordination of DoD Federal development programs within...the 50 states...with single points of contact
- Set up and maintain a process to insure that Army programs are consistent and compatible with those of other Federal agencies at local levels.

Para 2-4: Commanders of installations and US Army Engineer Districts. Commanders will –

- Name a point of contact for the intergovernmental coordination management process...

Communication / education opportunities

- Raise awareness; talk with your elected representatives, community leaders, business partners, families & friends
Central Region Environmental and Government Affairs POCs

- Steve Scanlon, Director – stephen.c.scanlon@us.army.mil
- Dave Snodgrass, Deputy Director and Acting Region 7 Coordinator – david.snodgrass@us.army.mil; 816.389.3449
- Stan Rasmussen, Regional Counsel – stanley.l.rasmussen@us.army.mil
- Mike Weaver, Region 6 Coordinator – micheal.r.weaver@us.army.mil
- Office Phone 816.389.3548