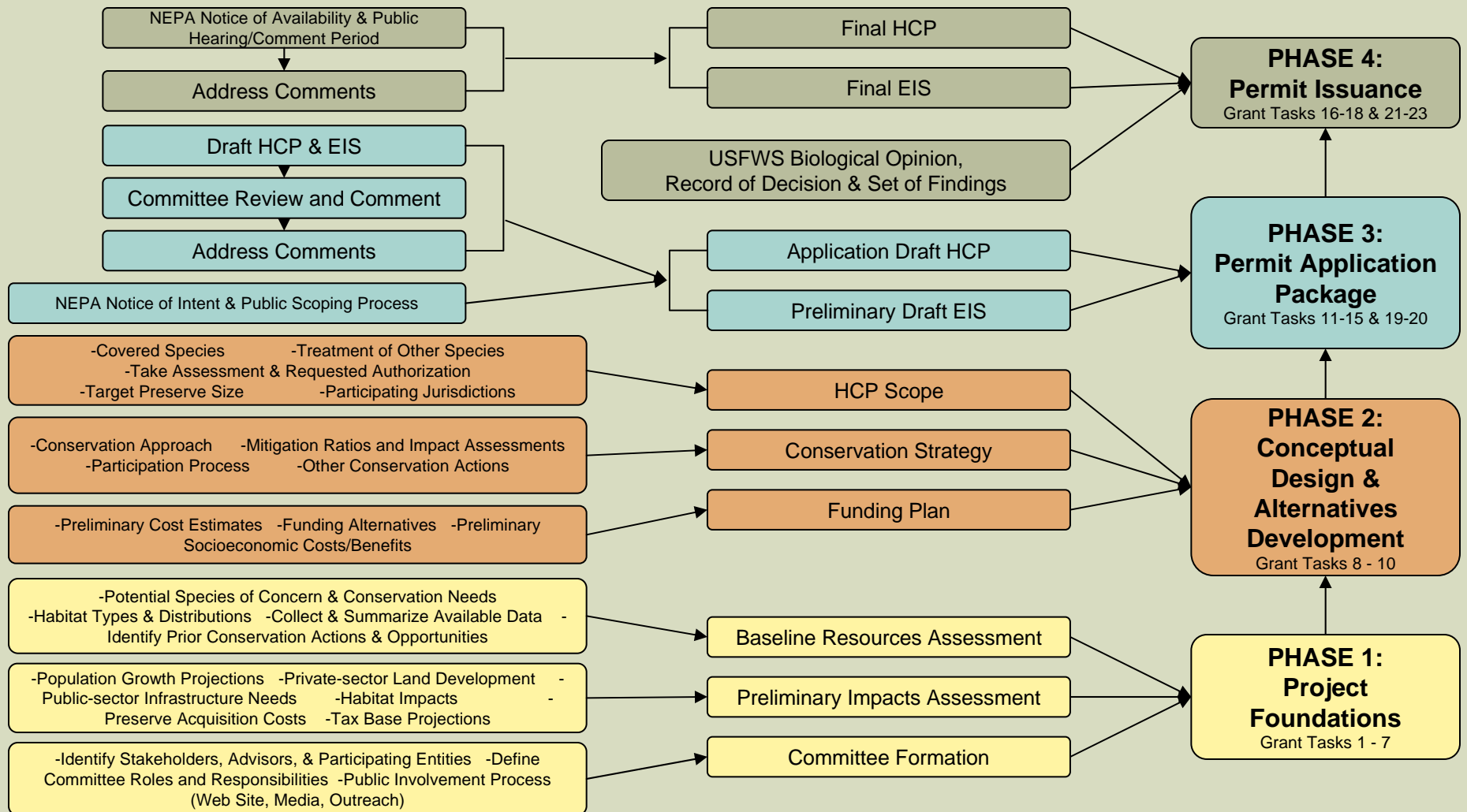


SEP-HCP Work Plan



Major Milestones

PERMIT ISSUANCE: SEPT 2012		
MAJOR MILESTONE: Complete Phase 4 Permit Issuance	Address public comments on draft HCP and draft EIS. Finalize HCP and assist USFWS with finalization of EIS and other permitting documents, as appropriate. Permit issued.	5 mos. APR 2012
	Local USFWS office review and comment. NEPA Notice of Availability, public hearing, and 60 to 90-day comment period on draft HCP and draft EIS.	7 mos. SEPT 2011
MAJOR MILESTONE: Complete Phase 3 Permit Application Package	Prepare Final Application Draft of HCP (incorporating comments from the first draft) and a complete draft of the PDEIS for approval by committees and Client. Submit draft HCP and PDEIS to USFWS as part of application for ESA Section 10(a) permit.	5 mos. APR 2011
	Prepare First Draft of HCP and Alternatives Considered/Affected Resources sections of the PDEIS. Present to committees for review and comment. Collect and address comments. Conduct NEPA scoping process, including Notice of Intent, public scoping meeting, and 30-day comment period.	7 mos. SEPT 2010
MAJOR MILESTONE: Complete Phase 2 Conceptual Design and Alternatives	Present conceptual alternatives to committees and identify consensus opinion regarding the preferred alternative for HCP. Preferred alternative scope, strategy, and funding mechanism form the framework of a Preliminary Draft HCP.	2 mos. JULY 2010
	Develop conceptual alternatives for HCP scope, conservation strategy, and funding plan.	2 mos. MAY 2010
MAJOR MILESTONE: Complete Phase 1 Project Foundations	Complete interim deliverables for Baseline Resources Assessment and Preliminary Impacts Assessment. Present assessments to committees and discuss early ideas and concerns.	2 mos. MAR 2010
	Initial briefings of committee members on overall ESA process and HCPs. Begin technical documents for species, habitats, population, and land development. Identify major framing issues and preferred alternatives for critical path decisions.	2 mos. JAN 2009
	Complete contracting arrangements. Preliminary project planning and scoping. Establish processes for communications and work flow. Early coordination with potential stakeholders and agencies. Establish process for committee involvement. Identify, contact, and appoint committee members.	2 mos. NOV 2009





CAMP BULLIS TRAINING SITE



CAMP BULLIS ENCROACHMENT ISSUES

April 5, 2010

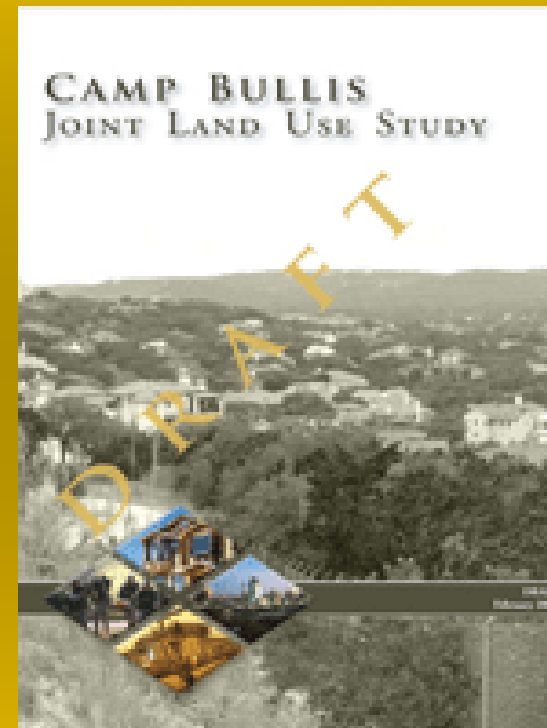
***Mr Jim Cannizzo, Environmental
Attorney Advisor, Camp Stanley and
Army Medical Center and School,
Fort Sam Houston and Camp Bullis***



Camp Bullis Endangered Species Issues



- **Military operations**
- **Light**
- **Noise**
- **Golden-cheeked Warbler (GCW)**
- **Karst invertebrates**
- **Conclusions**





CAMP BULLIS TRAINING SITE

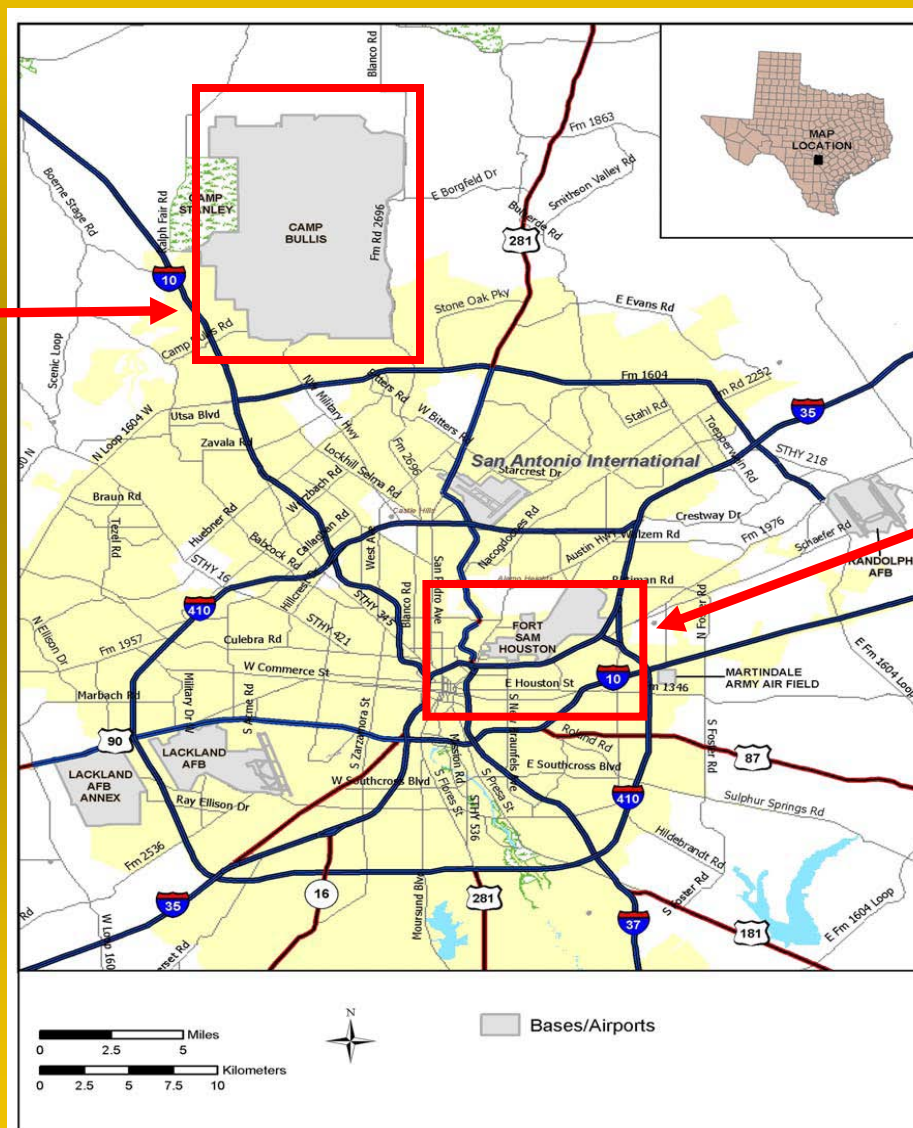


Location

Camp Bullis

**21 Mile
Separation**

Fort Sam Houston



Fort Sam Houston & Camp Bullis:

FSH Acres 3,000

CB Acres 28,000

Population 26,000



CAMP BULLIS TRAINING SITE



History

“A good range....is essential to this post.”

BG David S. Stanley
Annual Report, 1891

- **1 Dec 1906: Purchase of the Oppenheimer and Schasse Ranches**
- **17 September 1917: lease for 15,427 acres signed for land south of Camp Stanley. 90th Division General Order #84 (undated) designates the site as Camp Bullis. Camp Headquarters (Bld 5000) built during this time.**
- **1917-1919: Numerous units organized or stationed at Camps Funston, Stanley, Leon Springs, Samuel B. Morse & Bullis in support of WWI.**
- **1930: Cantonment Area Developments Begin (Wilkerson Rd, Swimming Pool, Bld 5903, etc.)**
- **1930's Pre WWII: M2A2 light tank testing, 2nd Division training & maneuver, Civilian Conservation Corps.**
- **1940 -1944: WWII: Expansion of Training Lands & Ranges, German & North African Villages –Training Site for 2nd, 95th & 88th Infantry Divisions, various Infantry Regiments. POW Camp for approx 200 Germans.**
- **1 November 1945: Surgeon General announces move of Medical Field Services School to Ft Sam Houston, & intent to concentrate all Army medical training there.**
- **1950-1973: Support of Korean & Vietnam conflicts – Medic Field Training.**
- **1956-1987: US Air Force Security Forces Air Base Defense School established**
- **1992: DOD increases military training in readiness to support Gulf Wars**
- **1995: US Air Force reestablishes Security Forces Air Base Defense School @ CB**
- **2005: Air Force establishes Basic Combat Convoy Course in support of GWOT**
- **Present Focus – Organizational & Institutional training in support of GWOT**



CAMP BULLIS TRAINING SITE



Land Acreage

- 27,993.31 Acres
- Approx 9 mi N-S
- Approx 4 mi E-W

Roads

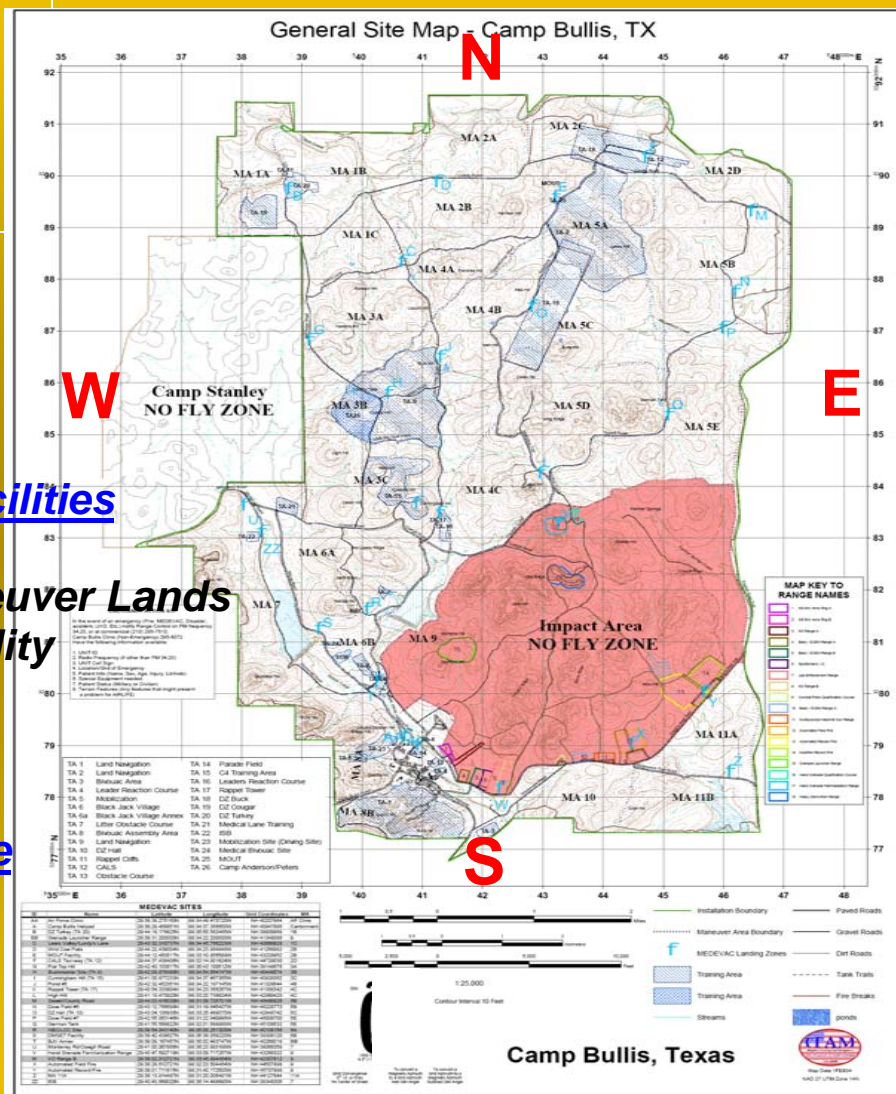
- 56 Paved Miles
- 46 Unpaved Miles

Ranges & Training Facilities

- 20 Live Fire Ranges
- 21,849 Acres of Maneuver Lands
- CACTF & MOUT Facility
- 4 Drop Zones
- 3 TTBs/FOBs
- VCCT & HEAT

Multi-Service Presence

- Army
- USAF
- USAR, ARNG
- DMRTI (Joint)
- Other Gov Agencies



Airfields

- 1 Fixed Wing CALS

Buildings

- 362 buildings
- 413,169 square feet

Utilities

Electric, gas, water & sewer
62 miles

Staff & Tenant

Population

- 715 Full Time Staff

Medical trainees:

- FSH current 4,000 students per day avg; BRAC + 5,000 more
- Throughput per yr = 45,000 with BRAC

CAMP BULLIS TRAINING SITE Cantonment Aerial View





CAMP BULLIS TRAINING SITE



PRIMARY CUSTOMERS

ACTIVE COMPONENT TENANTS:

- AMEDDC&S
- Defense Medical Readiness Training Institute (DMRTI)
- USAF Security Forces School
- USAF Basic Combat Convoy Course
 - Joint Operational Training Detachment
- INSCOM Detention Training Facility

OTHER ACTIVE COMPONENT NON-TENANTS

- US Army North (5th Army)
- US Army South (6th Army)
 - 470th MI Brigade

RESERVE COMPONENT TENANTS:

Army National Guard

- 1-141 INFANTRY
- C/5-19 SPECIAL FORCES

Army Reserve

- 6TH MI Battalion
- 321ST MI Battalion
- 338TH MI Battalion
- 341st Tactical Psyops Co
- SW Army Reserve Intelligence Support Center
- 2nd Battalion, Small Arms Readiness Group
- Small Arms Instructor Academy

NON-TENANTS:

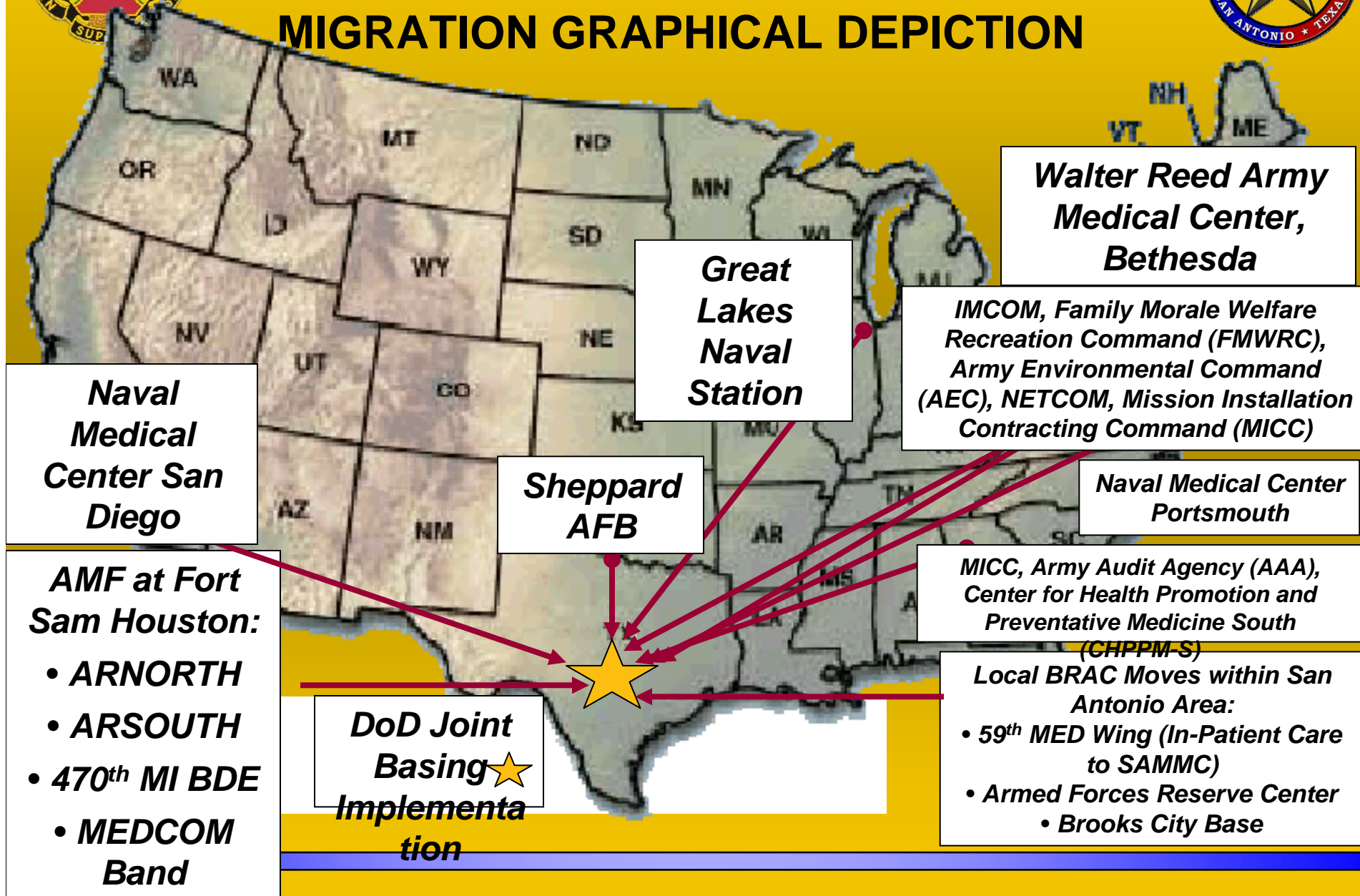
- 3-141 Infantry
- 302ND Engineer Co
- 321ST Civil Affairs Co
- 277TH Engineer Co
- 1st Battalion, 23rd Marines
- 4TH Recon Battalion, USMCR
 - Navy SEABEES
 - Army ROTC (Jr/Sr)

NON-DOD

- Secret Service
- Dept of Energy
- US Customs
- Immigration & Naturalization
 - FBI
- US Marshals
- TX Dept of Public Safety
 - SA Police Dept
- Bexar County Sherriff Dept
 - Alamo Area Council of Governments



MIGRATION GRAPHICAL DEPICTION





Fort Sam Houston BRAC Growth – all courses/ops rely on Camp Bullis for Field Training



POPULATION GROWTH FY06-FY11

BRAC Directed Moves	
Student Growth – (4115); Does not include AFRC growth	9850
AMF & Other Growth	2335
Additional Family Members (3190 military school-aged)	9195

ESTIMATED CONSTRUCTION FY06-FY11

SQUARE FOOTAGE TOTAL	8,148,889
• Renovation	1,361,634
• New Construction	6,787,255
CONSTRUCTION TOTAL	\$2.59 B
• COE	\$2.29 B
• NAF	\$140.0 M
• CoSA	\$23.9 M
• Private	\$134.6 M

MISSION

Current Mission Expansion

PRIMARY: Medical Training
SECONDARY: Patient Care
TERTIARY: Headquarters / C2

Army Modular Force

Fifth U.S. Army (ARNORTH)
MEDCOM Band (small to medium)
Sixth U.S. Army (ARSOUTH)
470th Military Intelligence Brigade
56th Signal Battalion

New BRAC Missions

MEDICAL TRAINING: Med Ed Tng Campus (METC)
PATIENT CARE: San Antonio Mil Med Ctr (SAMMC)
HEADQUARTERS: IMCOM, MICC
MEDICAL RESEARCH: Battlefield Health/Trauma
NON-MED RESEARCH: Tri-Service Lab
**USAR / ARNG UNIT: Armed Forces Rsv Ctr (AFRC)
at Camp Bullis**
JOINT BASE WING HEADQUARTERS

Statistics as of 01 May 09

Small Arms Weapons Training

20 Live Fire Ranges

Small Arms A&B

Basic 10/25 Meter A, B & C

Sportsman's Range 1&2

Law Enforcement Range

Known Distance Range A&B

Combat Pistol Qualification Range

Multipurpose Machine Gun Range

Automated Field Fire

Automated Record Fire

Modified Record Fire

Grenade Launcher

Hand Grenade Familiarization

Hand Grenade Qualification

Heavy Demolition

Convoy Live Fire





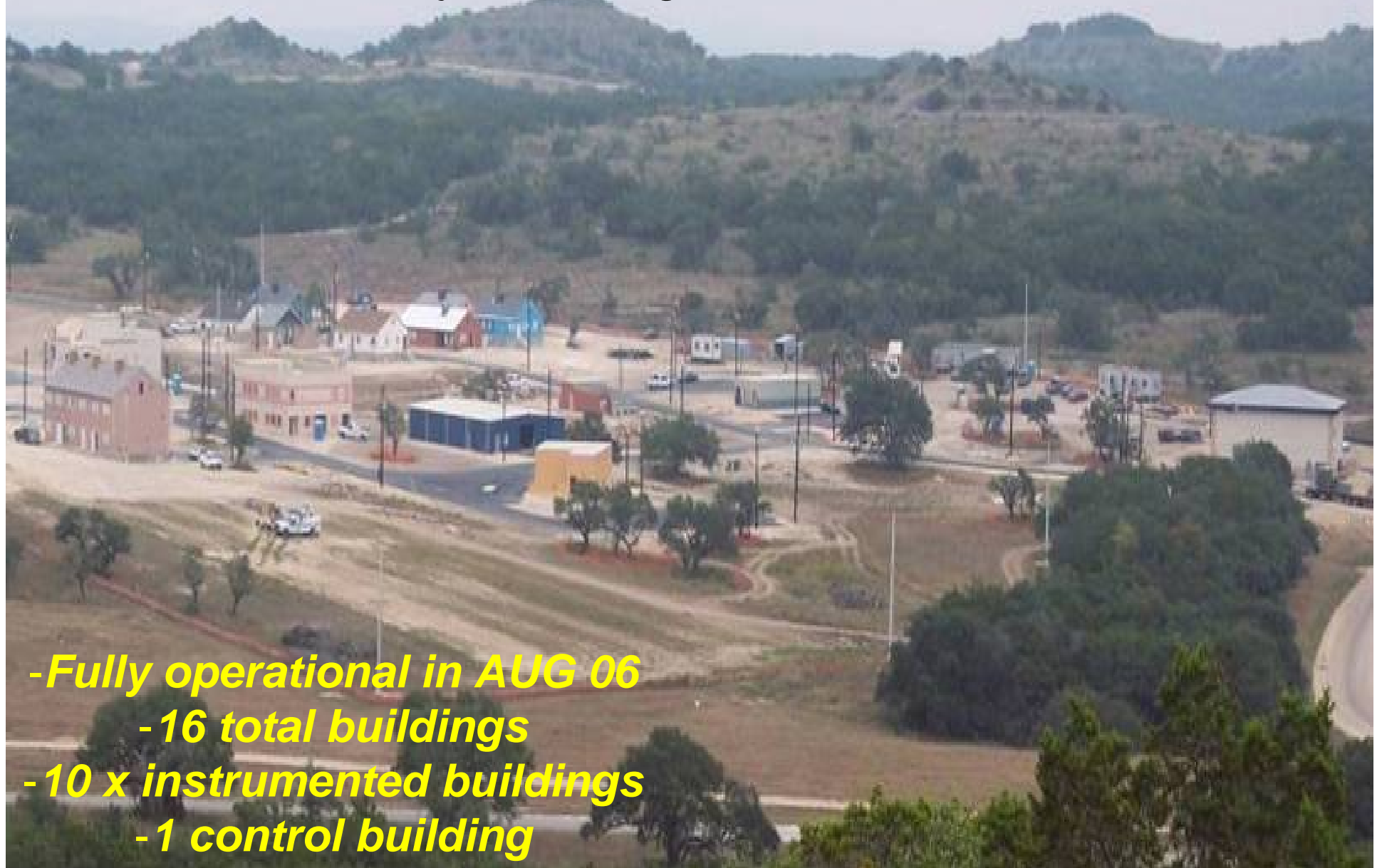
CAMP BULLIS TRAINING SITE

TRAINING FACILITIES



Combined Arms Collective Training Facility (CACTF)

Premier Facility for Training in Urban Combat Conditions



- Fully operational in AUG 06***
- 16 total buildings***
- 10 x instrumented buildings***
- 1 control building***

TACTICAL TRAINING BASES

*Tactical Training Base
WARRIOR*

*Tactical Training Base
COURAGE*

Under Enemy Attack

Inside the Walls



Tactical Simulation Center for Military Medicine (TAC-SIMM)



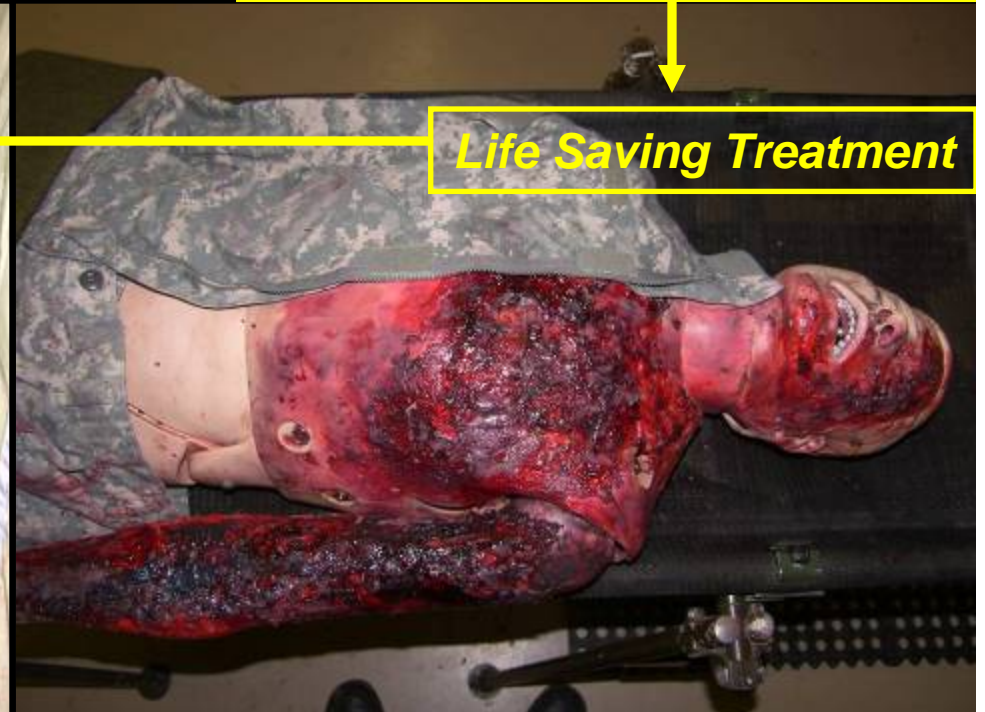
Extract Casualties



Casualty collection and Triage



Evacuate to Higher Care



Life Saving Treatment

Virtual Combat Convoy Trainer (VCCT)



- Building accommodates four simulators

- VCCT supports convoy ops “crawl” phase



Combat Assault Landing Strip



Land



Load



Take Off

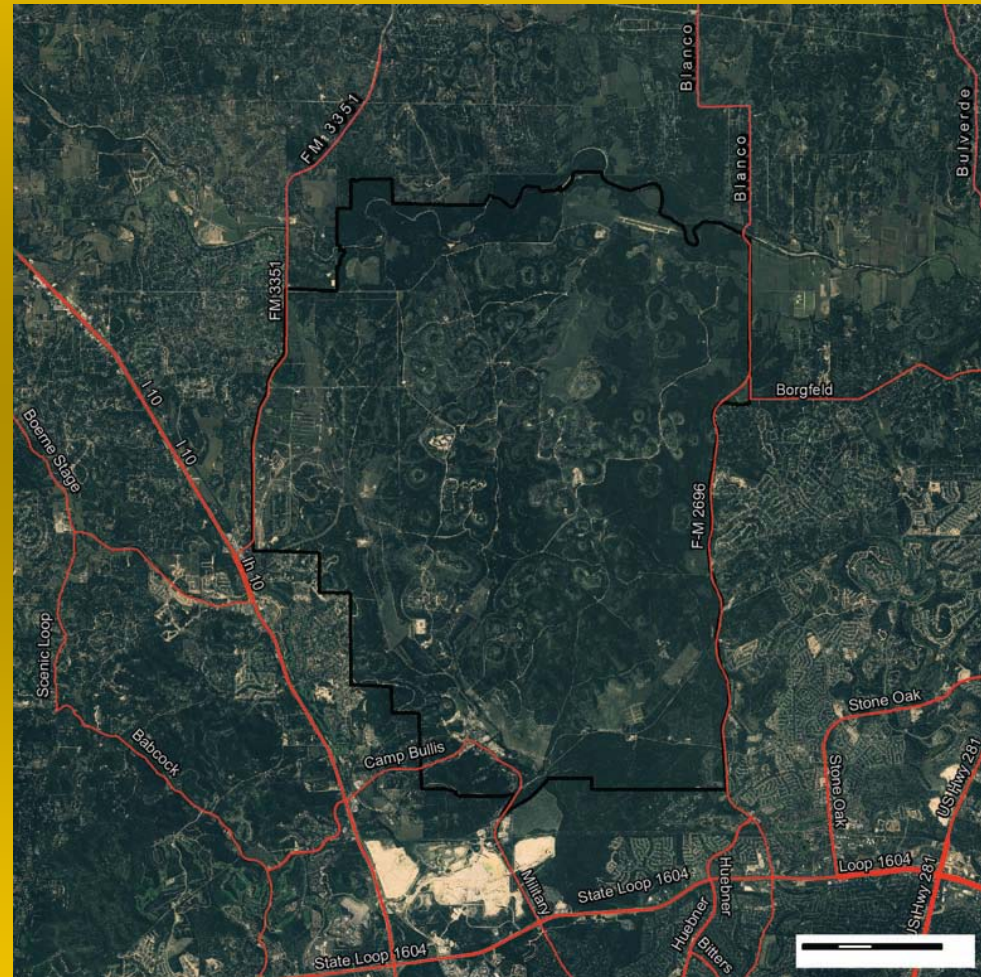


Airborne!



Development Around Camp Bullis

- 1. Camp Bullis here for over 100 years, was rural, now surrounded on all but northern boundry and a few gaps in other areas***
- 2. Light, noise, and Endangered Species Displacement Issues now threaten the mission***

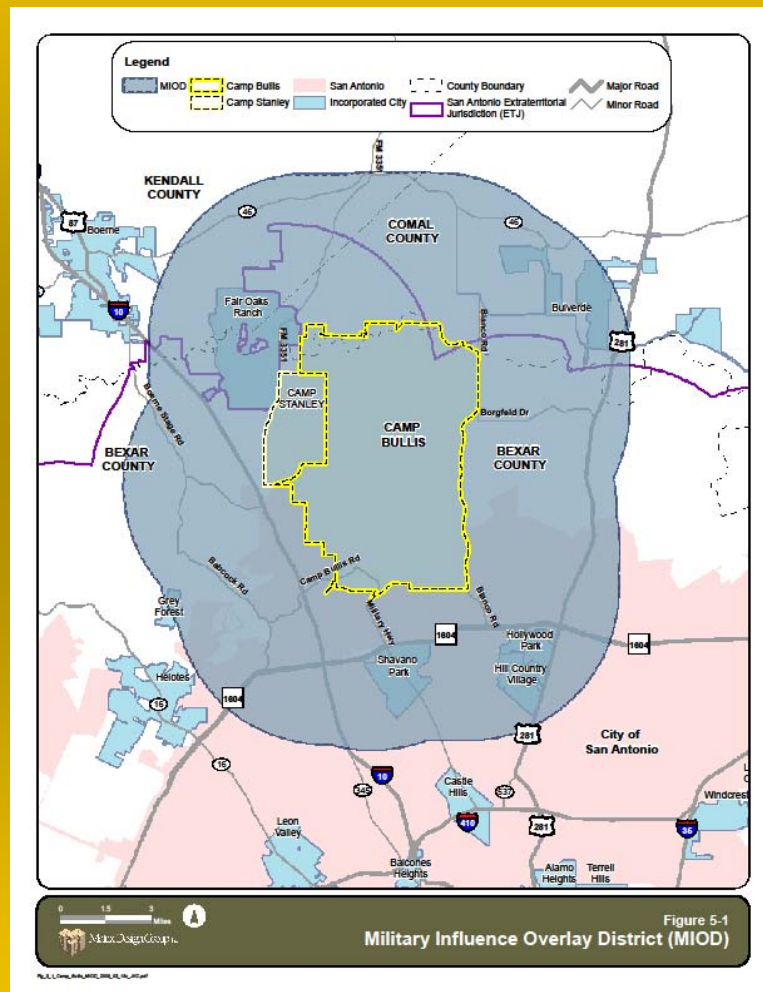




CAMP BULLIS Joint Land Use Study (JLUS)



JLUS (Jun 09) Military Influence Overlay District



- MIOD extends five miles around the boundaries of Camp Bullis***
- Is NOT a greenbelt, buffer, or prohibition on all development, instead it merely is an area of compatibility concerns for which the JLUS makes specific recommendations to be considered by local jurisdictions to decide whether they can or should be implemented***
- JLUS specifically will say each jurisdiction should perform a takings analysis before implementing any recommendation***



LIGHT POLLUTION

"Own the Night"



- ***Light Pollution Degrades Night Training***

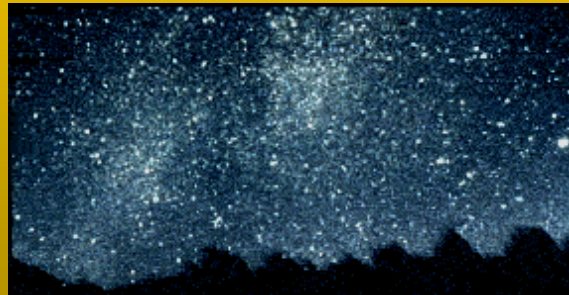




LIGHT POLLUTION

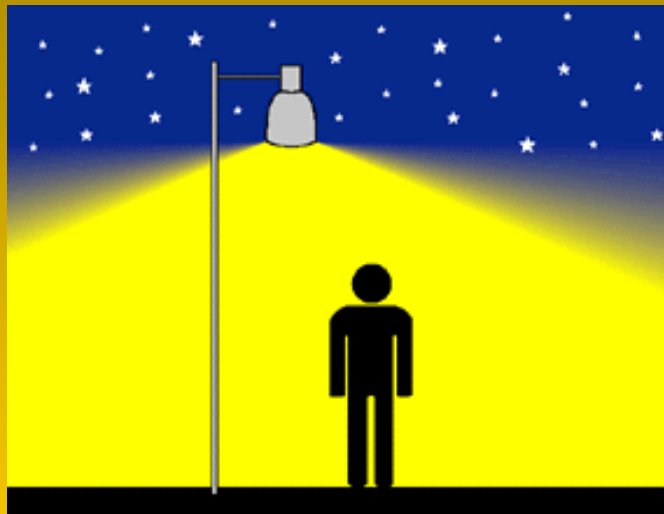


- Experts in the field of light pollution recommend that signs be lit from the top so as to avoid projecting light into the atmosphere



- *Not old style fixtures like this*

- Light the ground, not the sky
- Use full cut-off fixtures





LIGHT POLLUTION



- Over lighting is expensive; 2 fc consumes two times the energy of 1 fc
- Quality lighting related to light levels can generate tremendous energy savings.
- Energy Savings = Community Savings





LIGHT POLLUTION



**Effective, efficient, uniform
lighting stops at the property
line ...**





LIGHT POLLUTION



***In addition to shape of fixture and strength of bulb,
eliminating unnecessary lighting after certain hours
can address the problem***

CoSA Light Ordinance 12/11/08

F. With the exception of lighting which is
required for security and safety
such as parking lot illumination, businesses
must turn off outdoor lights
emitting illumination levels exceeding 2
foot-candles (fc) after 11:00
p.m.



LIGHT POLLUTION



Light Pollution degrades everyone's dark sky experience, not just military training

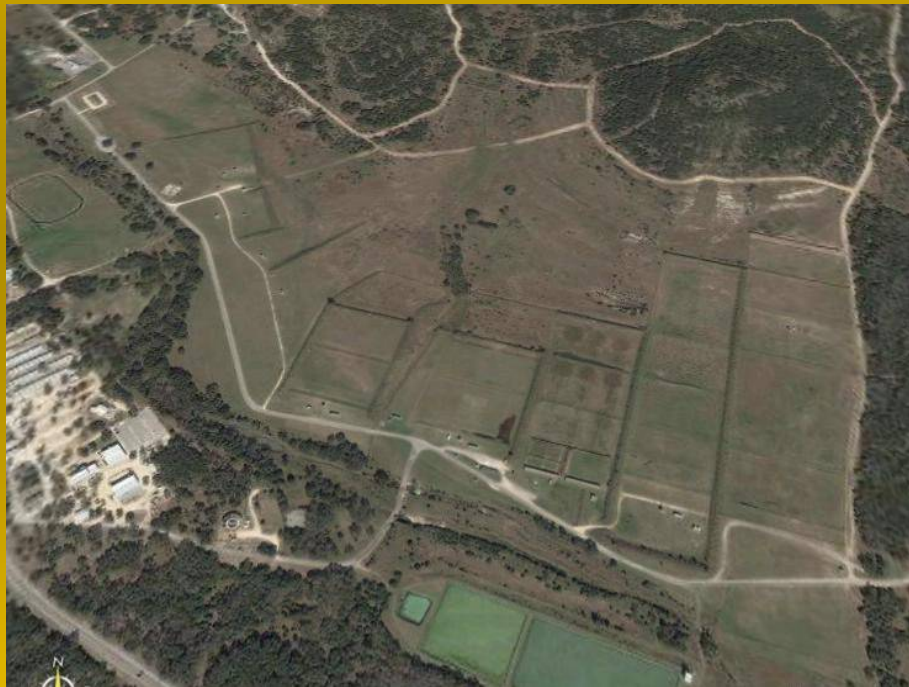




CAMP BULLIS TRAINING SITE



Noise from Small Arms Ranges Generates Complaints



- Camp Bullis' has 20 small arms ranges, mostly in SE around the 6,000 acre impact area
- 8 million rounds fired 2007; 10 million 2008; with BRAC this will continue to increase:
 - 7.62 the largest caliber, plus some grenades
- If more land to S and E is developed:
 - Noise complaints will result, especially if a school or high density housing is built
 - Proposal for City to annex land to enable a large school to be sited 1,800 ft to east of range complex rejected by City staff & school district changed to different site

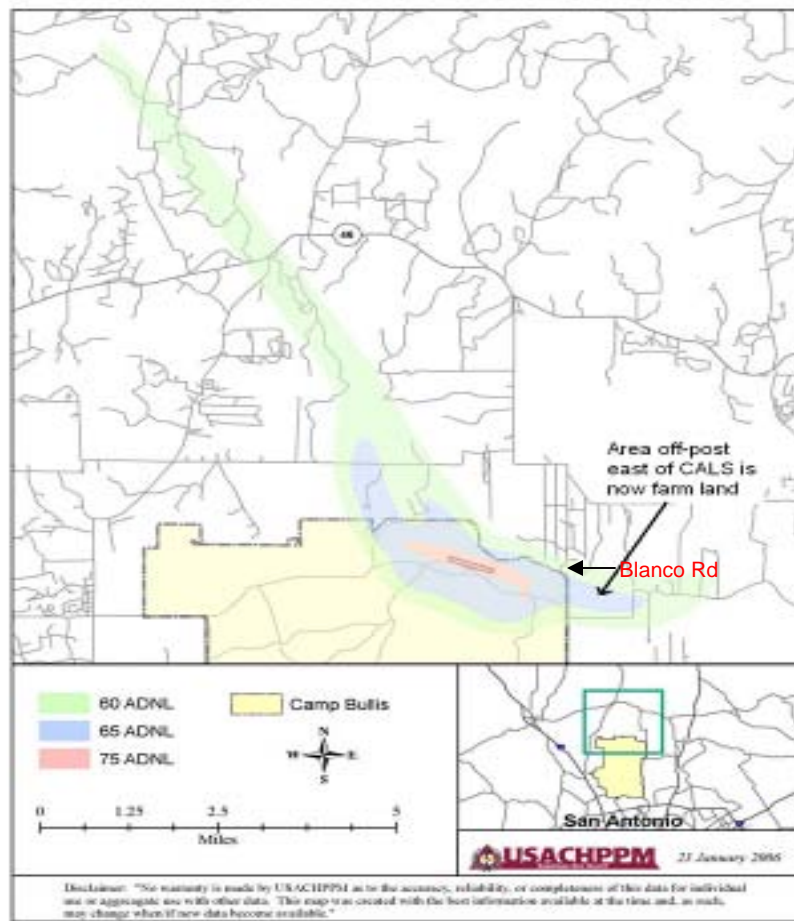


CAMP BULLIS TRAINING SITE



Combat Assault Landing Strip (CALS)

CAMP BULLIS
COMBAT ASSAULT LANDING STRIP
FUTURE OPERATIONAL NOISE CONTOURS



- Camp Bullis' ONLY airfield and only location where an airfield would fit on the Camp
- Used by C-130/C-17 aircraft to:
 - Practice combat assault operations
 - Land under simulated tactical conditions and on-load or off-load troops, supplies, etc.
- If farmland to the east developed or ranchland to north:
 - Noise complaints could result whenever this airfield is used, use is relatively low (about 20 flights last year)
 - Mostly C-130 which have a smaller noise contour that depicted here

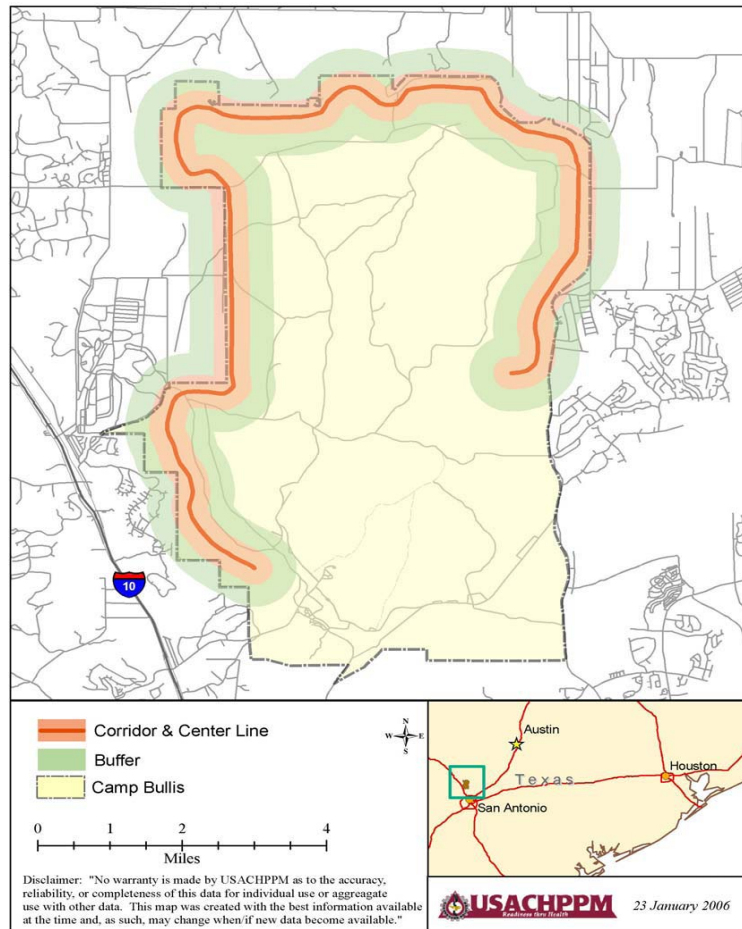


CAMP BULLIS NAP OF THE EARTH

Flight Corridor



CAMP BULLIS
NAP OF THE EARTH FLIGHT CORRIDOR



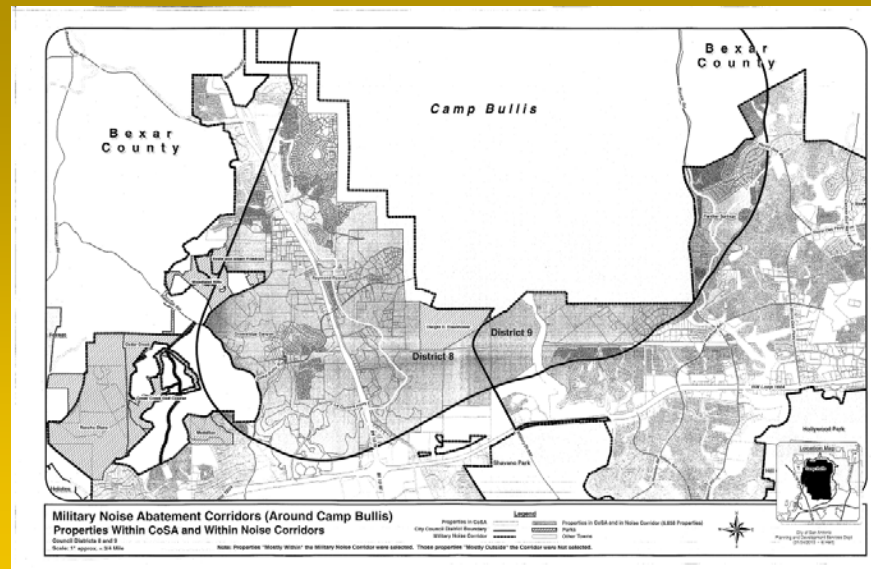
- Helicopter flights at nap of the earth (low level) profiles could be affected. Image from 2007 BRAC EIS



CoSA Noise Overlay District



- CoSA working on sound attenuation zoning overlay district, June 2010 projected date
- Small area around Camp Bullis drop zone pattern, helo low fly and range noise
- 25 DbA reduction or STC 40 (same as 2008 Houston airport ordinance)





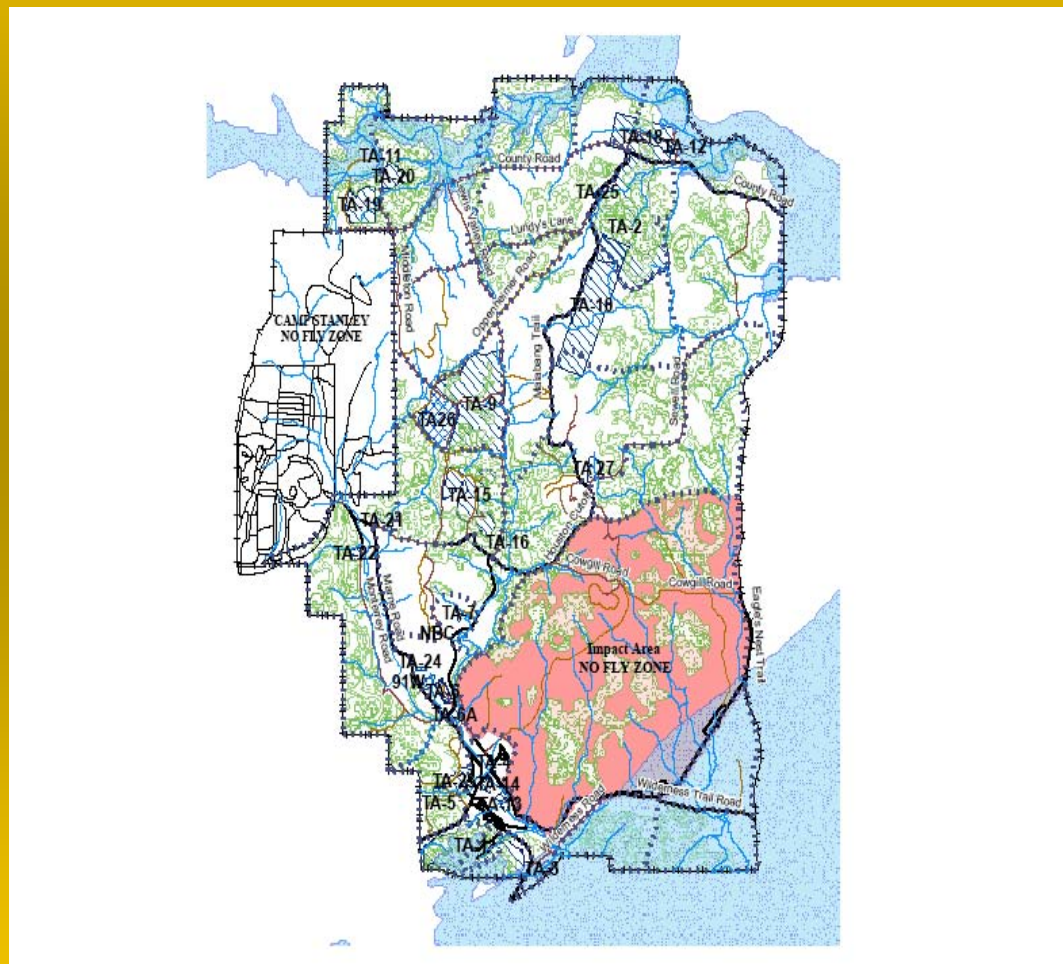
Camp Bullis Endangered Species Issues



Why species restrictions matters!

- Land for field training is limited to 18,000 acres of CB's 28,000 acres
 - Virtually unusable areas (10,000 acres total):
 - 6,000 acre impact area; 1,000 acre inner cantonment & MOUTs & Camp AP;
 - 3,000 acre rugged area north by Cibolo Creek

Blue is recharge zone
Red is impact area
Green is wooded areas





Camp Bullis Endangered Species Issues



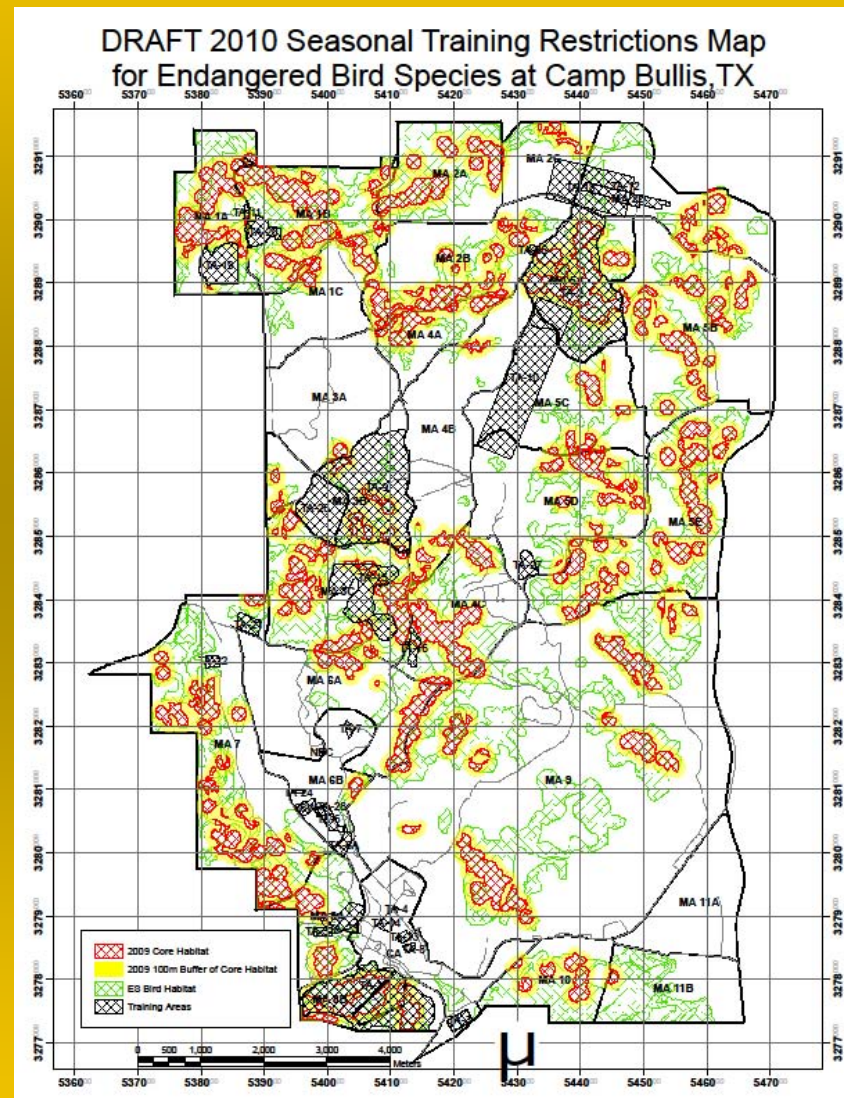
- From 2009 survey data, 10,000 acres of Camp Bullis is Warbler habitat

- 6,500 acres are unoccupied habitat

- * green

- 3,500 acres is occupied (core habitat) * red

- colored areas = restrictions; inability to thin 10,000 acres of trees is the most significant restriction; also seasonal for 9,222 acres

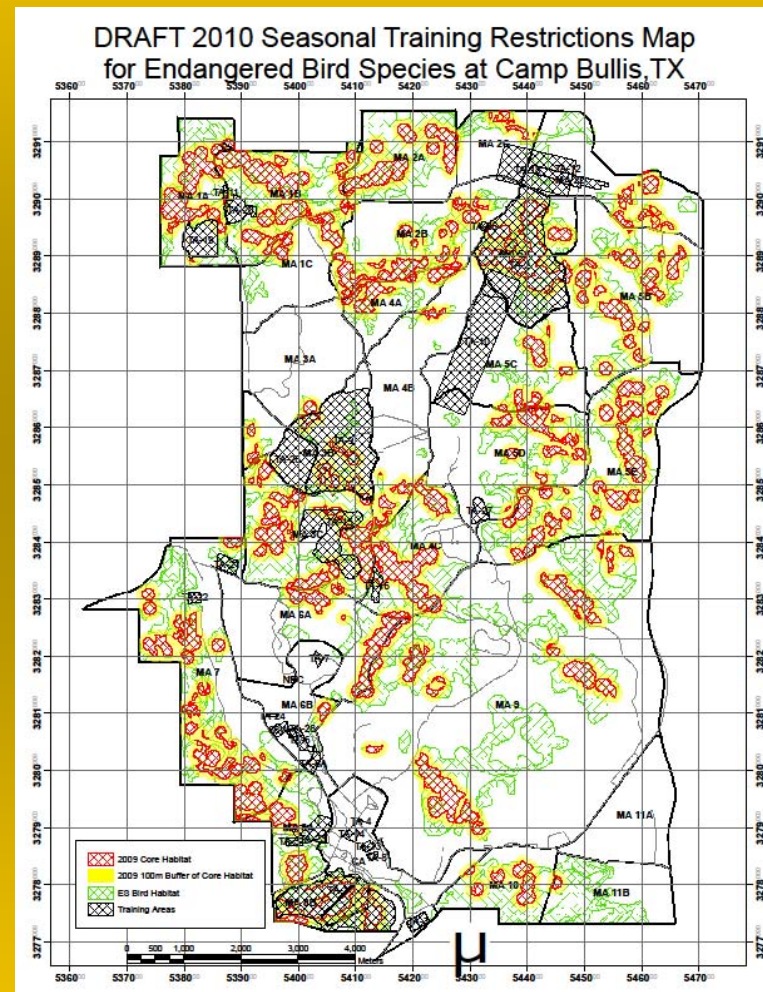




Camp Bullis Endangered Species Issues



- 2009 + 391 acres occupied habitat (13%) *red
 - pop. actually went up about 1%, GCWs appeared to have been more widely distributed
- 2008 + 211 acres (7%)
 - will be harder to mitigate if occupied habitat continues to increase
- Population: singing males + near 200% 1991- 2009 using rolling 3 year average





Camp Bullis Endangered Species Issues



- 2007: 2,913 acres core + 4,502 acres
100m buffer = 7,415 acres (seasonally
restricted from light, noise, & smoke)**
- 2008: 3,125 acres core + 4,876 acres
100m buffer = 8,001 acres (seasonally
restricted from light, noise, & smoke)**
- 2009: 3,516 acres core + 5,706 acres
100m buffer = 9,222 acres (seasonally
restricted from light, noise, & smoke)**

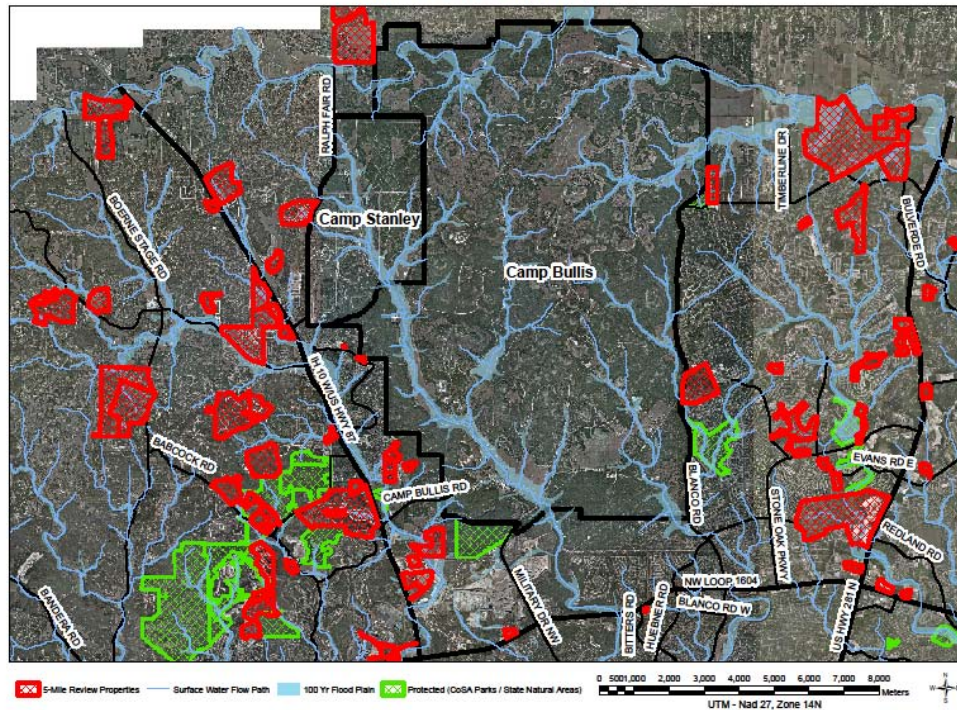




Camp Bullis Endangered Species Issues



5-Mile Development Reviews with Aerial Image
18 March 2010 - Camp Bullis, TX



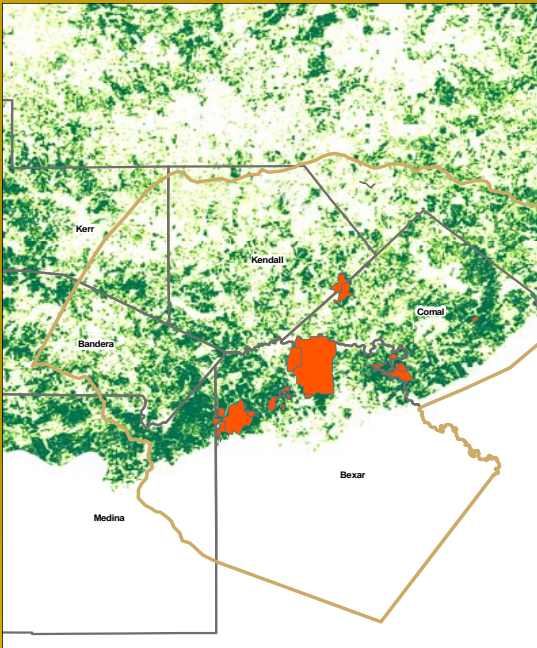
- **Intensive development around Camp Bullis; 65+ comment ltrs (7/08 – 3/10) per City of San Antonio - Camp Bullis comment system**
- **Approximately 50% of the land referred to in our comment letters concerned possible warbler habitat (old growth ashe juniper and oak), 4,100 acres**
- **Until City species survey ordinance passed (Aug 20, 09), there were no tools in Planning and Zoning Commissions to directly assist**



Camp Bullis Endangered Species Issues Mitigation Efforts



Draft Recovery Unit 5



- ***Mitigation exchange concept; up to 5,000 acres anywhere w/in draft Recovery Area 5 per 22 Sep 09 BO (5 yrs); 500 acre minimum size tracts***
- ***City of San Antonio 3,000 acres (\$15M cost to them) near Govt Canyon SNA on Camp Bullis' behalf; transferred Sep 09 to TPWD w/ warbler conservation easement***
- ***Netted 1,100 acres of mitigation credit; 762 acres being cleared on Camp Bullis with this credit***
- ***Army contribution to TPWD of about \$300k to facilitate the transaction/help w long-term mgmt***



Solutions for Camp Bullis Encroachment



- ***Dramatic results, unusable to useable***
- ***Methods to clear cedar: Cedar eaters, bulldozers, and chain saw crews***
- ***605 acres of the 762 acres thinned***
- ***Progress was slowed by heavy rains; season started a month late because USFWS authorizations not received until late Sep; and funding problems***
- ***Very cost effective vs buying needed acres (\$1,000 vs \$10-40,000 per acre)***





Solutions for Camp Bullis Encroachment



- Camp Bullis has Cooperative agreements with TNC and TPWD for acquisitions of conservation easements for additional mitigation credits***
- Obtaining more ACUB \$ to make the 1 Sep 2010 – 1 Mar 2011 thinning season, 500 acres minimum creditable amount***
- City of SA inventorying remaining lands with DoD OEA grant (\$112k) to seek more credit – Rancho Diana (1,150 acres north of Helotes over recharge zone) likely the best potential tract***

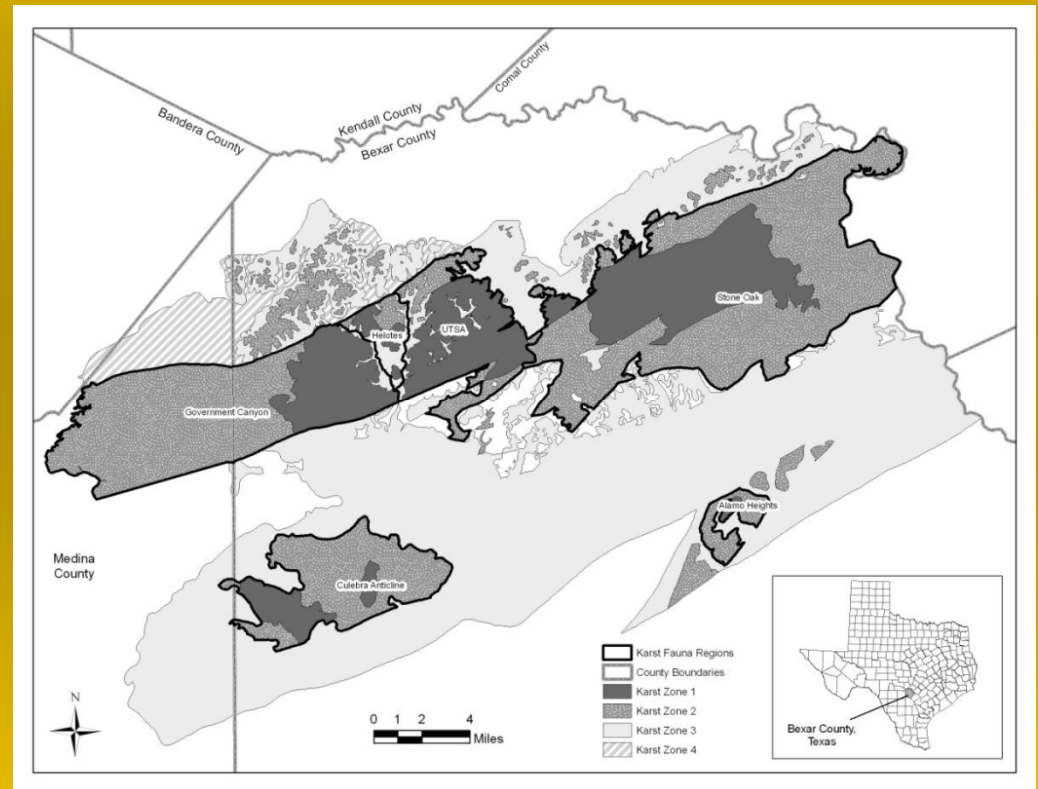




How karst-invertebrate clearing affects Camp Bullis !



- Species recovery team reviews recovery plan (2008 USFWS Plan) goals periodically, will tighten restrictions on remaining karst habitat if goals not met
- Camp Bullis has 2,500 acres of occupied karst habitat
- Buffers around each feature as big as 90 acres and protective measures such as fire ant eradication

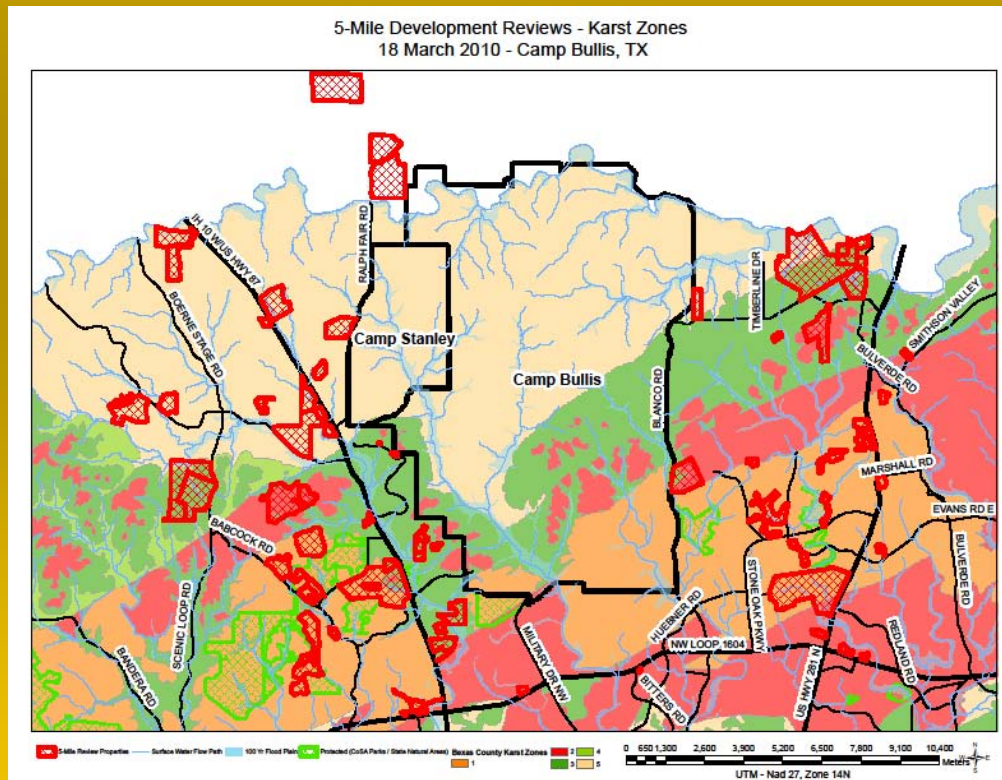




Camp Bullis Endangered Species Issues



- **Intensive development around Camp Bullis; 65+ comment ltrs (7/08 – 3/10) per City of San Antonio Camp Bullis comment system**
- **Approx 36% of the land in comment letters ref karst zone 1 and 2 land (about 3,000 acres)**



2008 USFWS Draft Recovery Plan for Bexar County Karst Invertebrates:

“Zone 1 areas are known to contain listed invertebrate karst species.

Zone 2 areas have a high probability of containing habitat suitable for listed invertebrate karst species. “



Conclusions in General



- **Light Issues** largely resolved with city and county light measures and upcoming CPS street light retrofit
- **Noise issues** largely resolved with upcoming City of San Antonio sound attenuation zoning overlay, some issues remaining around combat assault landing strip & helo routes
- **Species issues** are making progress with Section 7 mitigation exchange, City of San Antonio Aug 09 species ordinance, proposed revisions to tree ordinance, and upcoming RHCP





Conclusion/Questions



Pressure on Camp Bullis & Hill Country



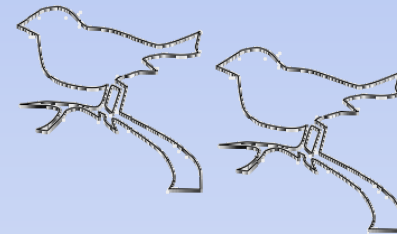
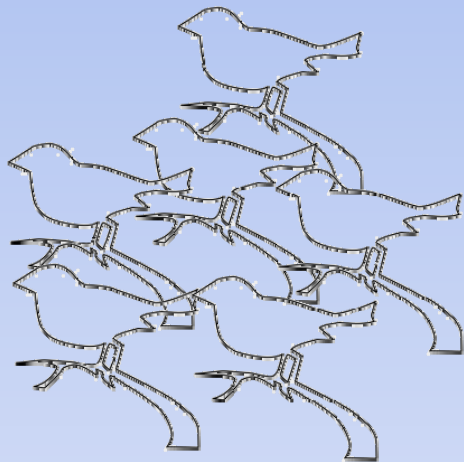
Black-capped Vireos

Life History



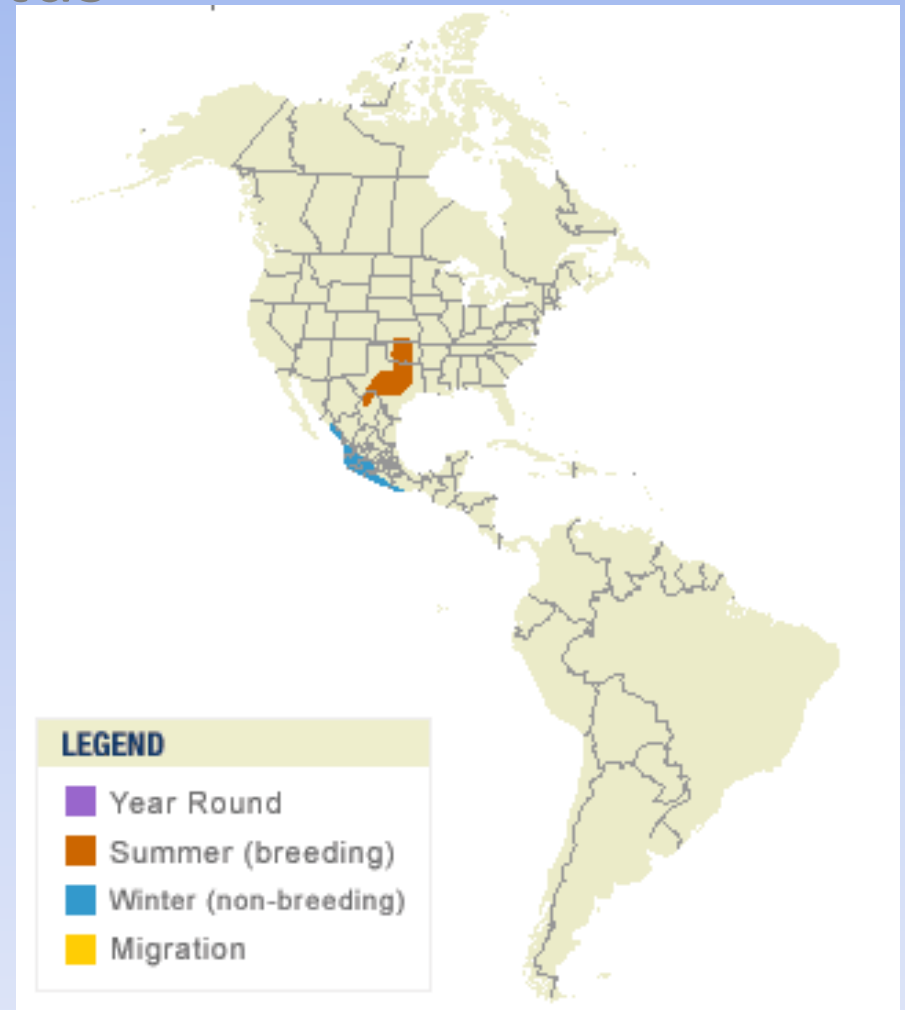
Background information

- Endangered species status



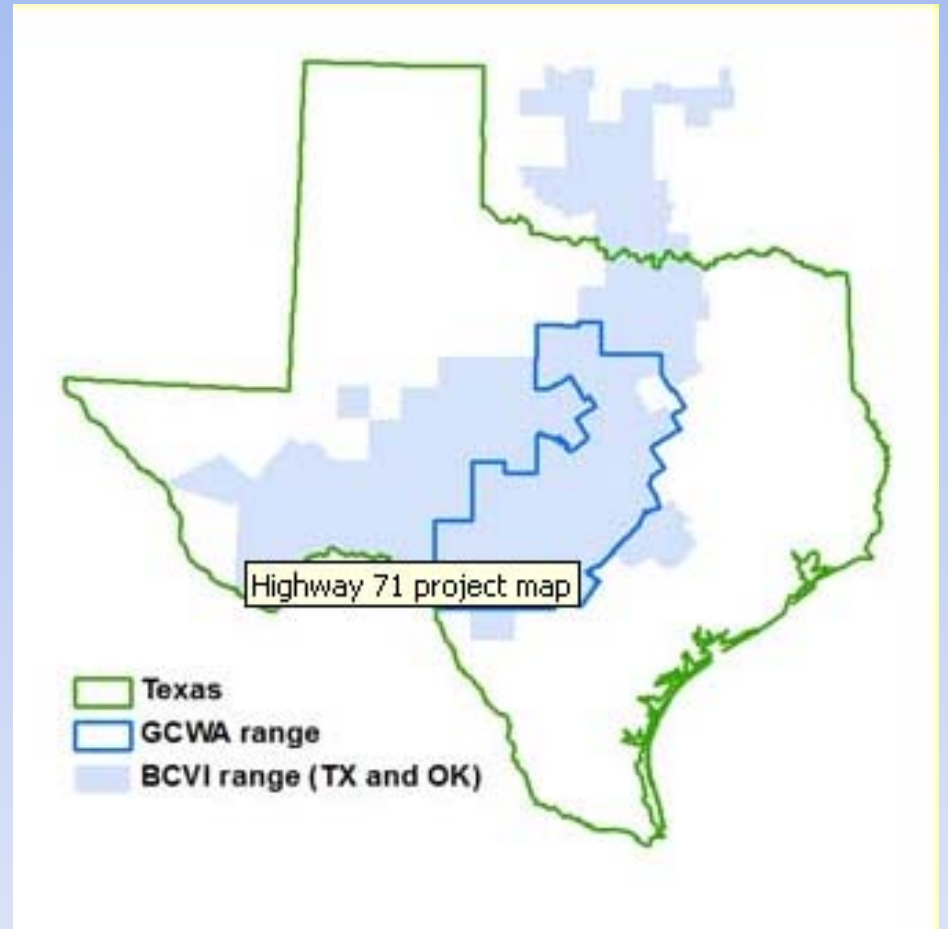
Background information

- Endangered species status
- Distribution



Background information

- Endangered species status
- Distribution



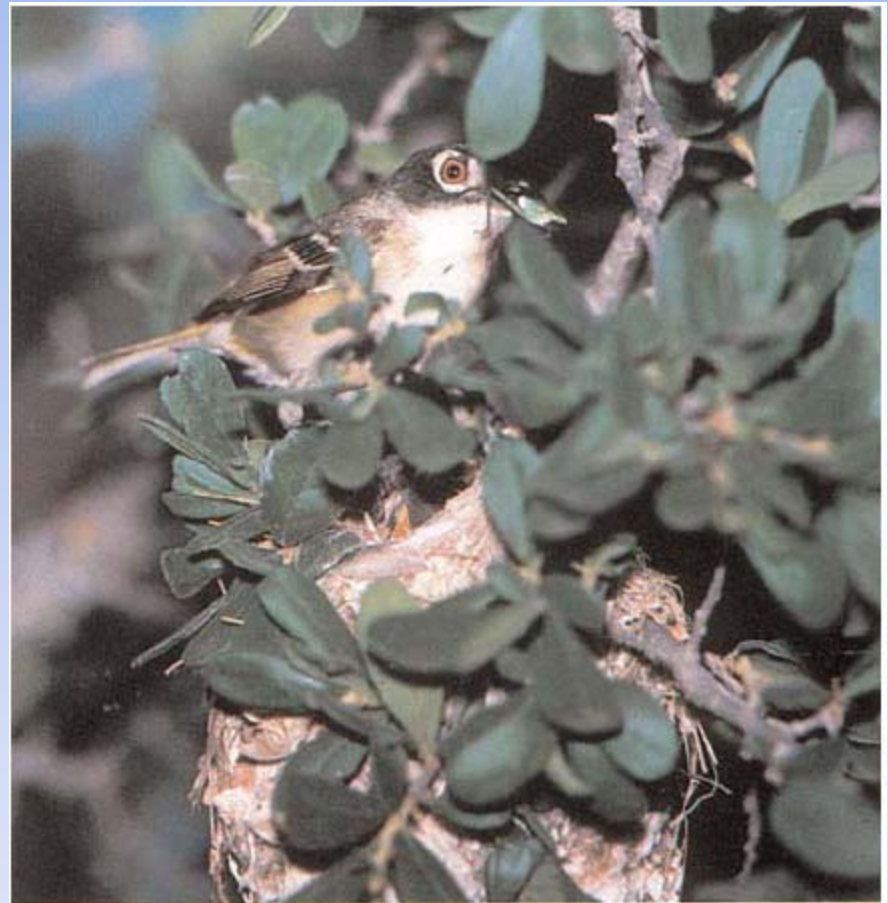
Background information

- Endangered species status
- Distribution
- Habitat



Background information

- Endangered species status
- Distribution
- Habitat
- Food
- Nesting



Background information

- Endangered species status
- Distribution
- Habitat
- Food
- Nesting
- Nest success
- Threats



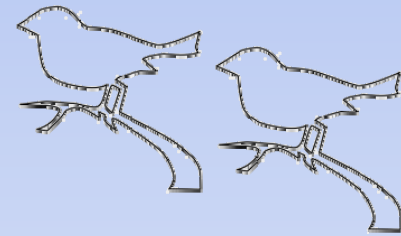
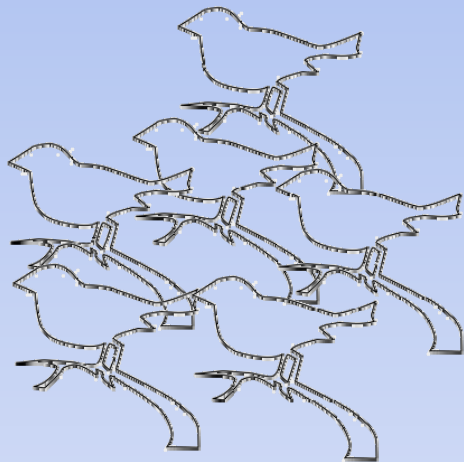
Photo courtesy of The Nature Conservancy of Texas

Golden-cheeked Warbler: The Big Picture



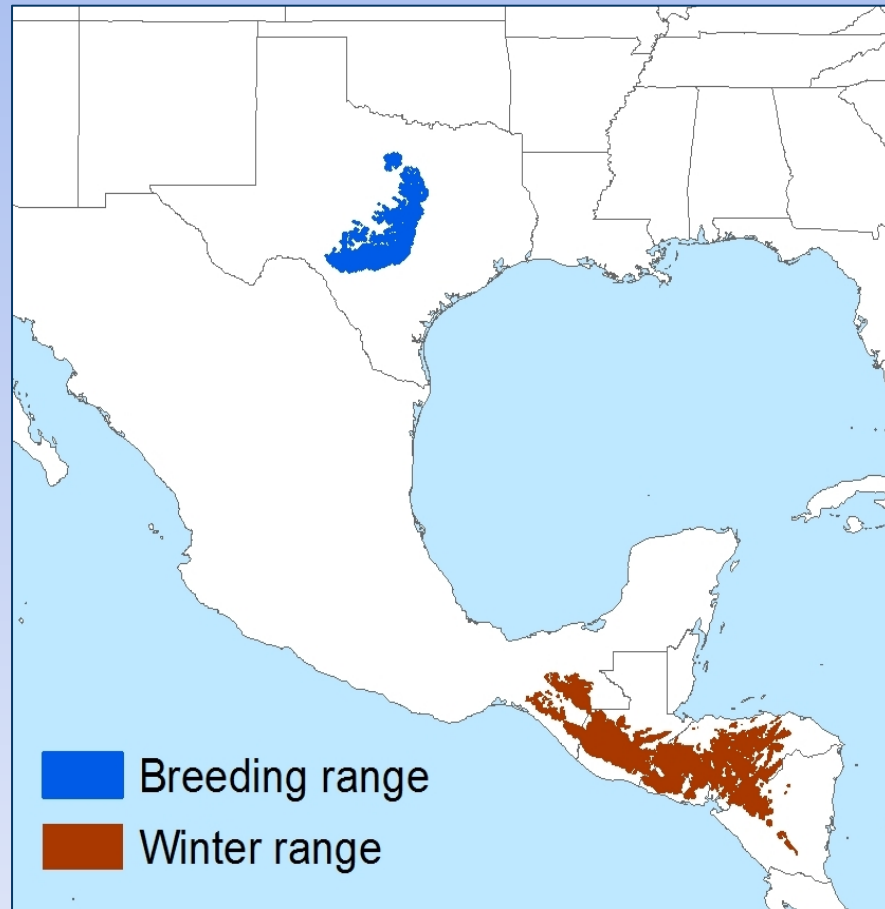
Background information

- Endangered species status



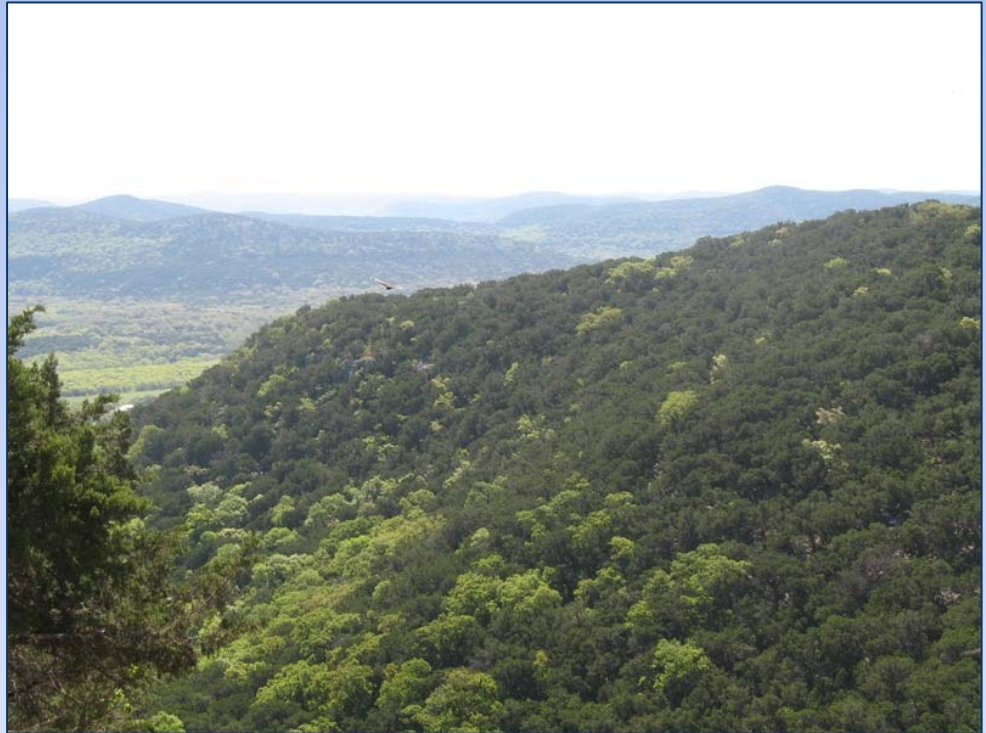
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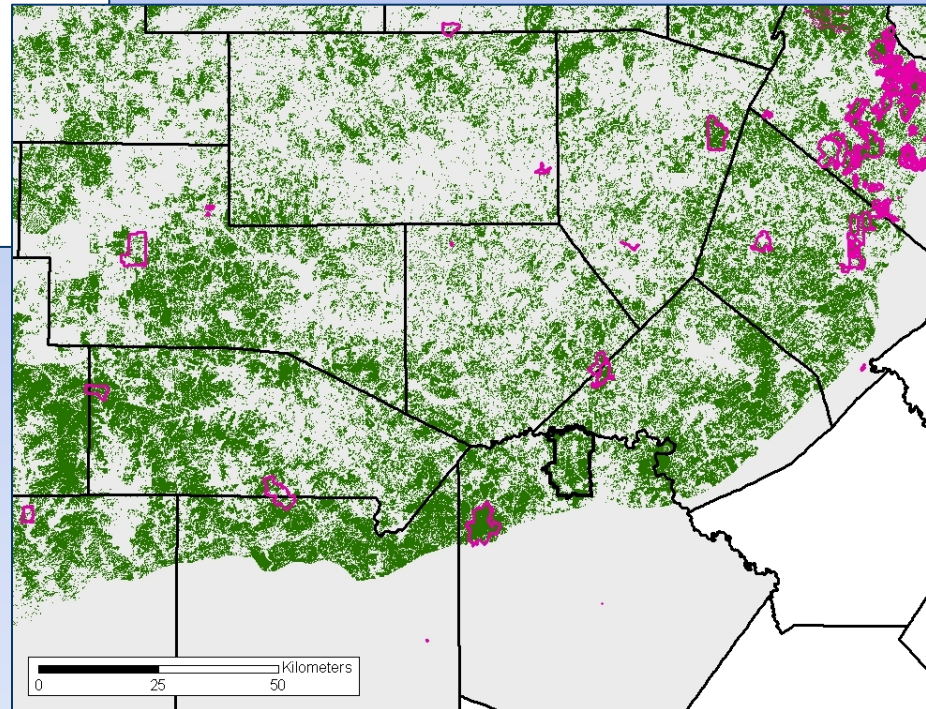
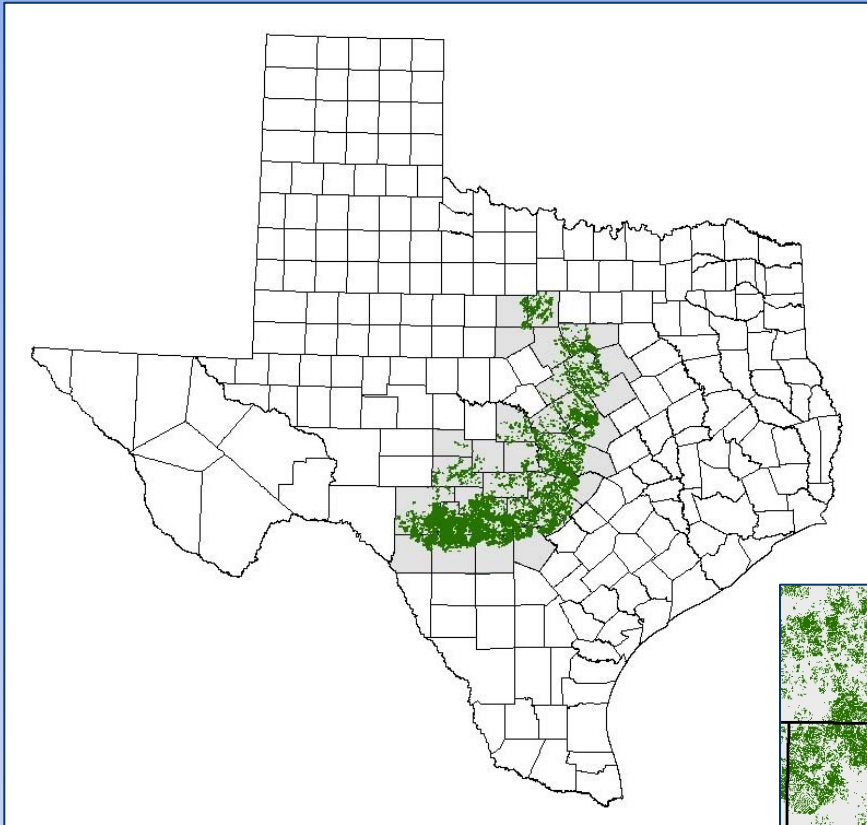
- Endangered species status
- Distribution



Background information

- Endangered species status
- Distribution
- **Habitat**





Background information

- Endangered species status
- Distribution
- Habitat
- Food



Background information

- Endangered species status
- Distribution
- Habitat
- Food
- Nesting



Background information

- Endangered species status
- Distribution
- Habitat
- Food
- Nesting
- Nest success
- Threats



What We Don't Know

- Impacts of recreation within protected habitat
- Size / Configuration of preserve needed



Questions?

