

APPENDIX B

INTERIM LAND USE CONTROL IMPLEMENTATION PLANS (LUCIPs)

U.S. FISH AND WILDLIFE SERVICE  
MOUNTAIN LONGLEAF NATIONAL WILDLIFE REFUGE  
LAND USE CONTROL IMPLEMENTATION PLAN

## Introduction

### 1. Background

This Interim Land Use Control Implementation Plan (LUCIP) and the interim land use controls (LUC) addressed within the LUCIP apply to property the Department of the Army (Army) will transfer to the U.S. Fish and Wildlife Service (FWS) for purposes of establishing the Mountain Longleaf National Wildlife Refuge (Refuge). This Interim LUCIP complies with requirements set forth in the Land Use Control Assurance Plan (December 2000) (LUCAP) signed by the U.S. Environmental Protection Agency (EPA), Alabama Department of Environmental Management (ADEM), U.S. Department of the Army for Fort McClellan, and the Anniston Calhoun County Fort McClellan Development Joint Powers Authority (JPA).

The transfer package for the Refuge will include a memorandum of agreement (MOA) between the FWS and the Army setting forth the terms and conditions of the transfer—the Transfer MOA. A local operational MOA will establish procedures for daily operations at the Refuge.

The Army will transfer the Refuge to the FWS while the property transferred is being characterized. The Army's characterization effort is focused on investigating for hazardous substances, to include munitions constituents, and for unexploded ordnance (UXO) and discarded military munitions (Figure 1). FWS and the Army will impose "interim" LUC on all sites being characterized prior to reaching a final remedy decision LUC. These LUCs may be revised or modified prior to the conduct of required response actions. Based on characterization and required response actions, the need for "final" LUC for certain areas or sites will be determined. If imposed, these LUC will be addressed in the appropriate decision document. This LUCIP will be revised to reflect any changes to LUC.

These interim LUCs for areas being characterized for UXO and discarded military munitions shall be applicable during characterization and prior to receipt of an approved explosives safety submission for required response actions. (Modification or revision to LUCs that address explosives safety-related concerns will be reviewed by the U.S. Army Technical Center for Explosives Safety (USATCES) and approved by the Department of Defense Explosives Safety Board (DDESB).)

This LUCIP consists of eight enclosures that describe the interim LUC for each characterization effort within the Refuge. Enclosure 1 describes interim LUC for UXO and discarded military munitions. Enclosures 2-8 describe interim LUC for the investigation areas being characterized for hazardous substances to include munitions constituents. The areas described in enclosures 2-8 lie within the areas the Army is characterizing for UXO and discarded military munitions.

## **2. Source and/or Decision Documents**

(See enclosures for the areas that are undergoing characterization and the basis for determination of appropriate LUC.)

## **3. Site Location and Description**

The Refuge is located in the eastern portion of the former Fort McClellan's Main Post. The property transferred by the Army encompasses approximately 7,700 acres and contains a large population of mountain longleaf pine. The military used this area in various types of training from 1912 (and possibly as early as 1898) to 1999. (Site-specific information for these areas is provided in the enclosures.)

## **4. LUC Boundaries**

LUC are defined for individual investigation or characterization areas or parcels located within the Refuge. (Site boundaries for these areas are provided in the enclosures.)

## **5. LUC Objectives**

The Army's goal for the LUC described in this LUCIP is to prevent risk to human health and the environment and to promote human safety by minimizing the potential for exposure to any hazards that may be present. (Site-specific information on the objectives of risk mitigation for these areas is provided in the enclosures.)

## **6. LUC Required to Achieve the Objectives**

Land Use Controls include any type of physical, legal, or administrative mechanism that restricts the use of or limits access to real property to prevent or reduce risks to human health and the environment. The LUC applicable for each characterization or investigation area are described in the enclosures for the individual areas. The LUC described in this LUCIP meet the Army's goal in section 5 above.

## **7. Right of Entry**

The Army reserves the right under the Transfer MOA to enter the property and may inspect the adequacy of LUC enforcement.

## **8. Frequency of Monitoring and Reporting Requirements**

- a. This plan will be updated as necessary to incorporate the results of characterization.
- b. The Army will compile an annual report on the status of the LUC. FWS will provide input to this report. The Army will provide this report, in March of each year, to the EPA Region 4, Alabama Department of Environmental Management, and the FWS. The report must accurately demonstrate whether LUC remain effective. If a LUC is not or has not been effective, the report must indicate corrective actions.
- c. Until a remedy is in place for the Refuge or specific portions of the refuge, 5-year reviews will not be required.

## **9. Responsibility for Monitoring, Maintaining, and Enforcing Interim LUC**

Unless otherwise stated, the Army is responsible for monitoring, maintaining, and enforcing interim LUC. In exercising its administrative jurisdiction over the property, FWS shall report any observed LUC violations to the Army's on-site representative and shall take other appropriate preventive action if danger to human health and environment is indicated. (Note: FWS will be responsible for any final LUC.)

#### **10. Enforcement Options Should a LUC Violation Occur**

Should a third party violate the terms and intent of these LUCIPs, the Army or FWS will address the violation with the third party. If the third party does not take corrective action within 30 days, FWS or the Army will consider options (e.g., civil action, criminal prosecution) available to correct the violation.

#### **11. Reducing or Removing LUC**

These LUC are intended to be protective of the public for existing site conditions.

- a. Interim LUC - At the time of property transfer to the FWS, the Army is characterizing the parcels included in this LUCIP. For Refuge sites currently being characterized, the LUC described herein are considered interim LUC. Pending the results of characterization and any required follow-on actions, there may be revisions, modifications, additions to, or deletions of the interim LUC. Any modifications, additions to, or deletions of the interim LUC will be in coordination with FWS. (Modification or revision to LUCs that address explosives safety-related concerns will be reviewed by the USATCES and approved by the DDESB.)
- b. Final LUC - Based on characterization or investigation and remedy decisions, final LUC that may be required for certain sites or areas will be documented in a decision document. This LUCIP will be revised to reflect changes to LUC based on final decisions for sites under investigation. If or when final LUC are required on the property, they shall remain in effect until:
  - (1) Changes in applicable Federal and State risk-based clean-up standards indicate that site contaminants no longer pose potential residential risk; or
  - (2) There is a reduction in site contaminant concentrations to below Federal and State residential risk-based clean-up standards.

#### **12. Point of Contact**

The point of contact is the Site Manager, U.S. Army Garrison/Transition Force, 291 Jimmy Parks Blvd., Fort McClellan, Alabama, 36205-5000; telephone 256-848-3847.

#### **13. Emergency Contacts**

Transition Force Security Operations 256-848-5680/4824 (duty hours)  
256-282-0140 (after duty hours)

#### **14. Disclaimer**

This LUCIP defines interim land use controls on property that will transfer from the Army to the FWS under a Fed-to-Fed transfer. The Army will maintain responsibility for these interim LUC. Final decisions on Refuge sites currently being characterized will be documented in decision documents. Those final decisions may include remedies that may include LUC. The Army's responsibilities for interim LUC under this LUCIP will be terminated upon institution of final remedy decisions. The FWS will have the responsibility for any final LUC that may be imposed as a result of final remedies.

## LIST OF ACRONYMS

AT	Anti-tank
ASR	Archives Search Report
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CWM	Chemical Warfare Materiel
DMM	Discarded Military Munitions
EBS	Environmental Baseline Survey
EE/CA	Engineering Evaluation/Cost Analysis
FWS	U.S. Fish and Wildlife Service
IT	International Technology Corporation
JPA	Anniston-Calhoun County Fort McClellan Redevelopment Joint Powers Authority
LAW	Light Antitank Weapon
LUCAP	Land Use Control Assurance Plan
LUCIP	Land Use Control Implementation Plan
LUC	Land Use Control
mm	millimeter
NFA	No Further Action
OE	Ordnance and Explosives
Q	Parcels identified in the EBS as having no evidence of CERCLA-related hazardous substance or petroleum product release or disposal, but which do contain other environmental or safety concerns
Q-X	Parcels that contain UXO-related issues
RI	Remedial Investigation
SI	Site Investigation
TNT	Trinitrotoluene
UXO	Unexploded Ordnance



**Figure 1 FWS Characterization/Investigation Areas**

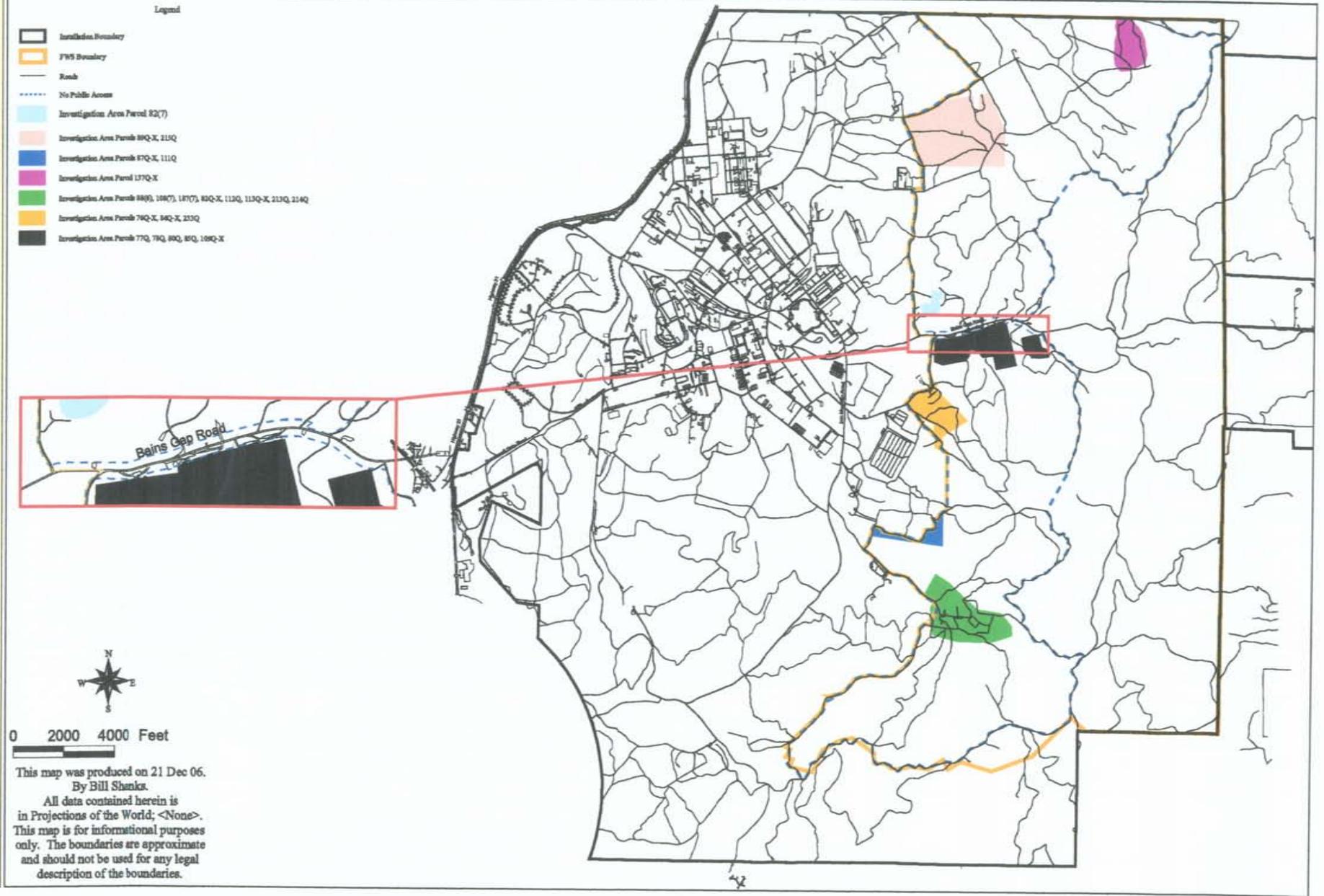


Table 1  
Property With Land Use Controls  
Land Use Control Implementation Plan  
FWS Mountain Longleaf National Wildlife Refuge

ENCLOSURE	CERFA PARCEL#	LAND USE CONTROLS INTERIM OR FINAL	RECIPIENT	COMMON NAME	DESCRIPTION
1	108Q-X	Interim	FWS/ JPA	Former Artillery Training Area	Former Artillery Training Area
1	119Q-X	Interim	FWS	Impact area - Main Post	Former Main Post Impact Area (large caliber rounds outside established impact area)
1	120Q-X	Interim	FWS	Impact area - Main Post	Former Main Post Impact Area (large caliber rounds outside established impact area)
1	124Q-X	Interim	FWS	Impact area - Main Post	Former Main Post Impact Area (large caliber rounds outside established impact area)
1	OE Investigation	Interim	FWS	OE Investigation Areas	Charlie EE/CA OE Investigation Area that falls within Refuge
2	082Q-X	Interim	FWS	Range 24A	Range 24A Multipurpose Range
2	088(6)	Interim	FWS	Ranges near Training Area T-24A	Range 24A Fog Oil Drum Storage Area
2	108(7)	Interim	FWS	Ranges near Training Area T-24A	Range 24A Multipurpose Range
2	112Q	Interim	FWS	Ranges near Training Area T-24A	Former Machine Gun Range
2	113Q-X	Interim	FWS	Ranges near Training Area T-24A	Former Demolition Area
2	187(7)	Interim	FWS	Ranges near Training Area T-24A	Former Chemical Munitions Disposal Area
2	213Q	Interim	FWS	Ranges near Training Area T-24A	Former Bandholtz Machine Gun Qualification Range
2	214Q	Interim	FWS	Ranges near Training Area T-24A	Bandholtz Field Firing Range
3	087Q-X	Interim	FWS/ JPA	Range 29	Range 29, Former Weapons Demonstration Range
3	111Q	Interim	FWS/ JPA	Range 29	Former Rifle Range
4	076Q-X	Interim	FWS/JPA	Baby Bains Gap Ranges	Range 20, Infiltration Course
4	084Q-X	Interim	FWS/ JPA	Baby Bains Gap Ranges	Range 26, Live Fire and Maneuver Range
4	223Q	Interim	FWS/ JPA	Baby Bains Gap Ranges	Former Range 25 East
5	077Q	Interim	FWS	Bains Gap Road Ranges	Range 21 Field Fire Range
5	078Q	Interim	FWS	Bains Gap Road Ranges	Range 22 Zero Range
5	080Q	Interim	FWS	Bains Gap Road Ranges	Range 24 Upper, Defensive Techniques Range
5	085Q	Interim	FWS	Bains Gap Road Ranges	Range 27, Special Operations Range
5	109Q-X	Interim	FWS	Bains Gap Road Ranges	Former Mortar Range (Firing Line)
6	089Q-X	Interim	FWS/ JPA	Weapons Demonstration Range	Range 31, Weapons Demonstration Range
6	215Q	Interim	FWS/ JPA	Weapons Demonstration Range	Former Defendum Field Firing Range No. 2
7	137Q-X	Interim	FWS	Fmr 81mm Mortar Range	Former 81mm Mortar Range
8	082(7)	Interim	FWS	Stump Dump	Fill Area
NFA HW - No Further Action for hazardous waste					
OE - Ordnance and Explosives					
UXO - unexploded ordnance					
Q - parcels identified in the Environmental Baseline Survey as having no evidence of CERCLA-related hazardous substance or petroleum product release or disposal, but which do contain other environmental or safety concerns.					
Q-X - parcels that contain UXO-related issues.					
FWS - Fish and Wildlife Service					
JPA - Anniston-Calhoun County Fort McClellan Redevelopment Joint Powers Authority					
EE/CA - Engineering Evaluation/Cost Analysis					

U.S. FISH AND WILDLIFE SERVICE MOUNTAIN LONGLEAF  
NATIONAL WILDLIFE REFUGE

Enclosure 1

Interim Land Use Controls for Ordnance and Explosives Investigation Area

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc. 1998, Final Environmental Baseline Survey (EBS), January.
- b. U.S. Army Corps of Engineers. St. Louis District, 2001, Archives Search Report, Fort McClellan. Anniston. Alabama, (ASR), September.
- c. Oak Ridge National Laboratories, 1999, Historical Aerial Photograph Investigation, August.
- d. U.S. Environmental Protection Agency, 1990, Environmental Photographic Interpretation Center.
- e. Foster Wheeler Environmental Corp, 2000, Reconnaissance Findings, Conceptual Plan, and Proposed Scope of Work, August.
- f. Foster Wheeler Environmental Corporation, 2002, Site Specific Work Plan Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response Fort McClellan, Alabama, February.

**3. Site Location and Description (See the Enclosure 1 Figure)**

The area described in this enclosure includes certain parts of the Refuge where characterization required for a munitions response are ongoing (see the Enclosure 1 Figure). The Refuge is located in the eastern section of the former Fort McClellan. It is comprised of portions of the Choccolocco Mountains and contains several thousand acres of mountain longleaf pine. Fort McClellan has documented use as a military training area since 1912, when the Alabama National Guard used the fort for artillery training. As early as 1898, the military may have used Choccolocco Mountains for artillery training. Military training occurred at this fort until base closure in 1999. The Refuge area was used for training military in small arms, 60mm and 81mm mortars, 40mm rifle grenades, smoke grenades, hand grenades, and slap flares. The area also was used for tank training and maneuvering. In addition to the on-going characterization for a munitions response, the Army is investigating the Refuge area for the presence of hazardous substances to include munitions constituents.

**4. LUC Boundaries (See the Enclosure 1 Figure)**

The boundary for the area where the interim LUC (see paragraph 6) apply is marked as the "No Public Access" area (Enclosure 1 Figure). Also shown is the Refuge area that the Army considers accessible for the intended reuse. This area is marked as "Public Access."

## 5. LUC Objectives

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to unexploded ordnance (UXO), discarded military munitions (DMM), and any environmental contaminants that may be present. This objective is achieved by:

- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

## 6. Interim LUC

### a. LUC for Specific Areas (See the Enclosure 1 Figure)

- (1) The area marked as "No Public Access" on the figure is delineated by signs. Trespass into prohibited areas subjects the trespasser to prosecution under Alabama state law and Federal law.
  - (a) Fish and Wildlife Service (FWS) will inspect the signage on a non-routine basis (during the course of performing other Refuge duties) to ensure it is both in place and legible. Should signage need to be replaced, FWS will contact the Army.
  - (b) The Army will be responsible for purchasing and installing new signs. All boundary signage is within line of sight of the adjoining signs. Signage will be according to guidance by the Army and the Occupational Safety and Health Act.
- (2) The areas noted as "Potential UXO Areas" within the "No Public Access" area on the figure are known or suspected to contain UXO.
  - (a) The public is prohibited from entering these areas.
  - (b) FWS personnel are prohibited from entering these areas, unless specifically authorized. Personnel with authorized access to these areas will receive a safety briefing and, when determined necessary, be escorted by military Explosives Ordnance Disposal (EOD) or UXO technicians.
  - (c) Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided that they have received a safety briefing or are qualified military EOD personnel or UXO Technicians. When determined necessary, military EOD or UXO technicians will escort these personnel. In addition, they may be provided UXO avoidance support during intrusive (e.g., drilling for environmental monitoring wells, taking soil samples) or other activities.
  - (d) Wildfires will be allowed to burn in these areas.

- (3) The area noted as "FWS Management Access" area within the "No Public Access" area is not known or suspected to contain UXO.
  - (a) FWS may have access provided they have received a safety briefing.
  - (b) FWS must coordinate with Fort McClellan operations prior to entry into this area.

- (4) The area noted as "Public Access" is not known or suspected to contain UXO. (Note: No UXO was found during characterization of this area.)
  - (a) The public will be allowed unlimited access to this area during daylight hours, as set by FWS.
  - (b) As an added safety measure, Refuge entrances will have available to the public posters and pamphlets outlining the dangers associated with UXO and actions that should be taken (Recognize, Retreat, Report) if UXO is suspected or encountered.
  - (c) An active community outreach educational program outlining the dangers associated with UXO and entering areas that are known or suspected to contain UXO will be implemented and maintained. This program should be based upon the Army's UXO Safety Education Program and emphasize the Three Rs (Recognize, Retreat, Report).

b. Access Controls (See the Enclosure 1 Figure)

- (1) The Army has installed gates and barriers to deny access to areas being characterized. These gates are under lock and key control. Gate signs warn people to keep out of the area and provide a telephone number for the Transition Force Security Operations.
- (2) Signs around the "No Public Access" area prohibit trespass into that area.

c. Inspections

- (1) Transition Force Security Operations personnel will inspect gates and barriers on a daily basis. (The enclosure 1 figure shows the locations of these gates and barriers.) The gates and barriers will be inspected on a non-routine basis during a 24-hour period. During these inspections, Transition Force Security Operations personnel will also inspect the boundaries and interiors to determine if trespassing has occurred. In addition, the integrity of warning signs will be inspected.
- (2) Army contract personnel and FWS personnel who enter the "No Public Access" area will report unauthorized personnel to the Transition Force Security Office or local law enforcement agencies.
- (3) The Army may inspect the property to verify that only Army authorized actions are occurring on the property.

d. UXO Safety Education Program:

- (1) An active community outreach educational program outlining the dangers associated with UXO and entering areas that are known or suspected to contain UXO will be implemented and maintained. This program should be based upon the Army's UXO Safety Education Program (See : <https://www.denix.osd.mil/denix/Public/Library/Explosives/UXOSafety/uxosaferv.html>) and emphasize the Three Rs (Recognize, Retreat, Report).
- (2) The Army will, at Army expense, provide initial UXO safety training to on-site FWS personnel.
- (3) Fort McClellan's Transition Force has instituted a community UXO Safety Educational Program that addresses potential explosive hazards on the former Army property. Fort McClellan's Transition Force provides this program to companies that work on Fort McClellan, such as utility companies and contractors; city and county law enforcement agencies; various city, county, state, and Federal agencies; civic groups; schools; nonprofit groups; and to the public, particularly those that live near the "No Public Access" area.

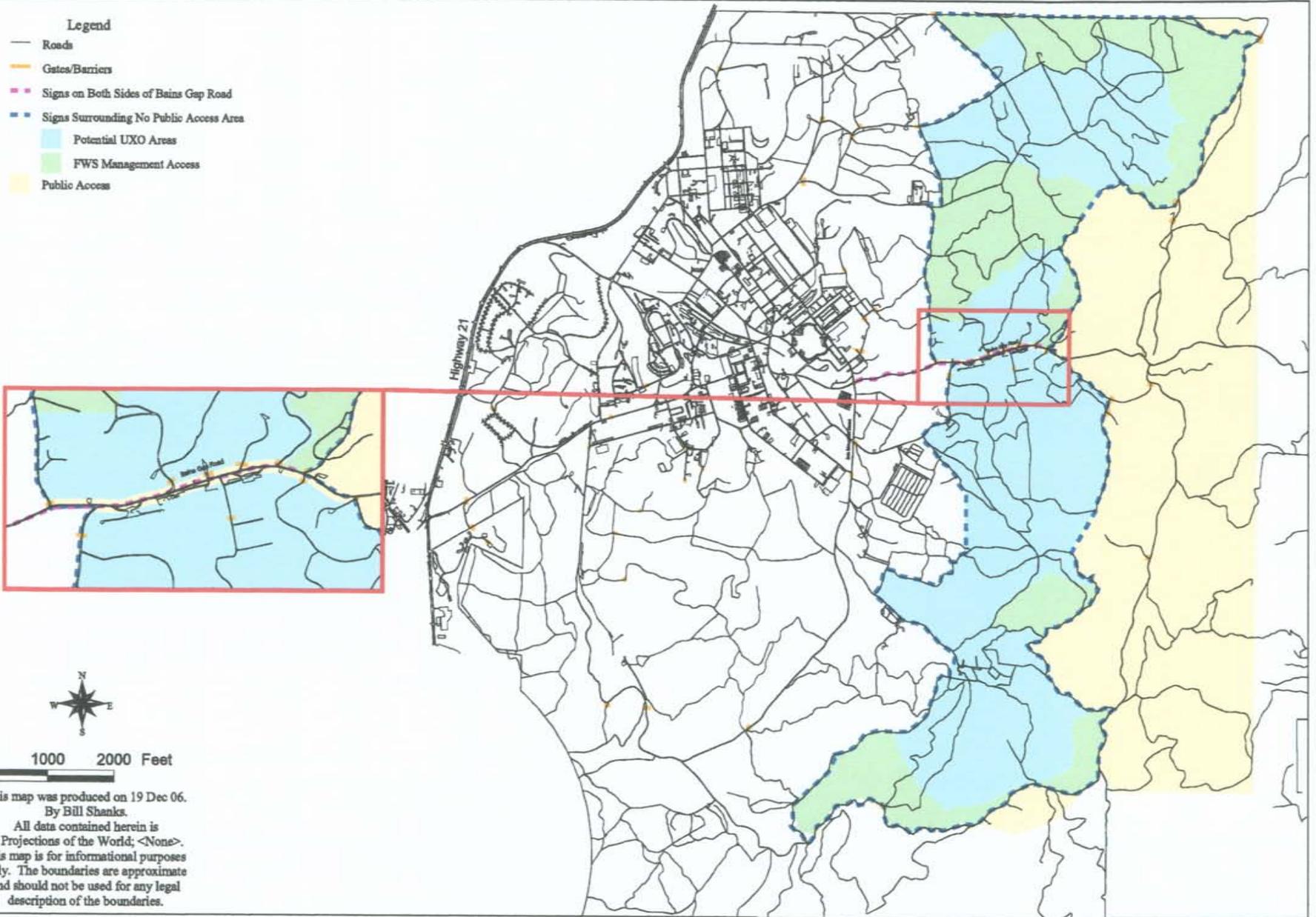
e. These Interim LUCs will be periodically reevaluated to determine their protectiveness and effectiveness.

7 - 14. See LUCIP introduction.



# Enclosure 1 Figure

- Legend**
- Roads
  - Gates/Barriers
  - Signs on Both Sides of Bains Gap Road
  - Signs Surrounding No Public Access Area
  - Potential UXO Areas
  - FWS Management Access
  - Public Access



0 1000 2000 Feet

This map was produced on 19 Dec 06.  
By Bill Shanks.

All data contained herein is  
in Projections of the World; <None>.  
This map is for informational purposes  
only. The boundaries are approximate  
and should not be used for any legal  
description of the boundaries.

U.S. FISH AND WILDLIFE SERVICE  
MOUNTAIN LONGLEAF NATIONAL WILDLIFE REFUGE

**Enclosure 2**

**Interim Land Use Controls for Ranges Near Training Area T-24A  
Parcels 88(6), 108(7), 187(7), 82Q-X, 112Q, 113Q-X, 213Q, 214Q**

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 2000, Supplemental Remedial Investigation (RI), Site-Specific Field Sampling Plan, Site-Specific Safety and Health Plan, and Site-Specific Unexploded Ordnance Safety Plan Attachments Ranges Near Training Area T-24A, Parcels 187(7), 112Q, 113Q-X, 213Q, and 214Q, September.
- c. IT, 2001, Site-Specific Field Sampling Plan Addendum and UXO Safety Plan Addendum for the Supplemental Remedial Investigation at Ranges Near Training Area T-24A, Parcels 187(7), 112Q, 113Q-X, 213Q, and 214Q, July.
- d. IT, 2002, Draft Site-Specific Field Sampling Plan Addendum II for the Remedial Investigation (Source Area) at Ranges Near Training Area T-24A, Parcels 187(7), 112Q, 113Q-X, 213Q, and 214Q, August.
- e. IT, 2002, Draft Site-Specific Field Sampling Plan Addendum III for the Remedial Investigation (Horizontal Extent – Surface Soil and Groundwater) at Ranges Near Training Area T-24A, Parcels 187(7), 112Q, 113Q-X, 213Q, and 214Q, October.
- f. Foster Wheeler Environmental Corporation, 2002, Site-Specific Work Plan, Charlie Area Engineering Evaluation/Cost Analysis (EE/CA) Ordnance and Explosives Response, Fort McClellan, Alabama, February.
- g. Parsons Engineering Science, Inc., 2002, Final Chemical Warfare Materiel (CWM) Engineering Evaluation/ Cost Analysis, Fort McClellan, June.
- h. Parsons, Engineering Science, Inc., 2002, Final Action Memorandum Chemical Warfare Materiel, Engineering Evaluation/Cost Analysis, Fort McClellan, October.

**3. Site Location and Description (See the Enclosure 2 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcels where characterization required for a hazardous substance response is ongoing. This investigation area lies within areas of the Refuge where characterization for a munitions response also is ongoing.
  - 1) Parcel 88(6) – Range 24A Fog Oil Drum Storage Area. This storage area located near range 24A, was built in 1986 and demolished in October 1999. Drums of fog oil used for military smoke training exercises were stored here. The facility consisted of a fenced, bermed concrete

containment pad that sloped to a floor drain connected to an oil-water separator and underground storage tank where spilled oil collected. The Army stopped training in the drum storage area in September 1998. Currently the site is being characterized.

- 2) Parcel 108(7) – Range 24A Multipurpose Range. There have been ranges in this area since at least 1956 as recorded on historic maps, and the Army used the range until September 1999. The range was used for smoke, demolition, and field flame expedient training. Early maps identified a rifle range, machine gun range, and a site used for detonation of munitions. Currently, the area is being characterized.
- 3) Parcel 187(7) – Former Chemical Munitions Disposal Area. This area, which occupies approximately 1.5 acres, is fenced and posted. The site was used from an unknown date until 1973. Training activities conducted at this site reportedly included disposal of chemical warfare munitions filled with phosgene, 3-quinuclidinyl benzilate, Sarin, and distilled mustard. Decontaminants reportedly used on this site were supertropical bleach and Decontamination Solution Number 2. Findings in the CWM EE/CA showed no evidence of CWM at this site and the decision for No Further Action is documented in the CWM Action Memorandum, August 2002. Currently the area is being characterized.
- 4) Parcel 82Q-X – Range 24A Multipurpose Range. See description for Parcel 108(7).
- 5) Parcel 112Q – Former Machine Gun Range. The dates of use and types of ordnance fired are unknown. The range appears on a 1959 map. An approximate firing range location and a potential beaten zone (area where bullets strike the ground) have been identified. Currently the range is being characterized.
- 6) Parcel 113Q-X – Former Demolition Area. This area, which overlaps Parcel 187(7), occupies approximately 3 acres. Although the dates of use and types of activities conducted on this parcel are unknown, this parcel was identified as a demolition area on a 1959 map. Currently the range is being characterized.
- 7) Parcel 213Q – Former Bandholtz Machine Gun Qualification Range. The dates of use are not available. This range is assumed to have been used only for small arms (.50 cal and below) training. An approximate firing range location and a potential beaten zone have been identified. Currently, this parcel is being characterized.
- 8) Parcel 214Q – Bandholtz Field Firing Range. Dates of use are not available. This range is assumed to have been used only for small arms (.50 cal and below) training. An approximate firing range location and a potential beaten zone have been identified. Currently, this parcel is being characterized.

- b. Previous investigations have identified benzene in groundwater associated with Parcel 187(7). An RI is underway to characterize the source and define the nature and extent of the groundwater contamination. Additional objectives of the RI

include determinations of whether lead contamination and groundwater contamination are present in Parcels 88(6), 108(7), 82Q-X, 112Q, 113Q-X, 213Q, and 214Q. In addition, these areas are included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM) and for munitions constituents other than lead.

#### **4. LUC Boundaries (See the Enclosure 2 Figure)**

The boundary for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 2 figure.

#### **5. LUC Objectives**

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

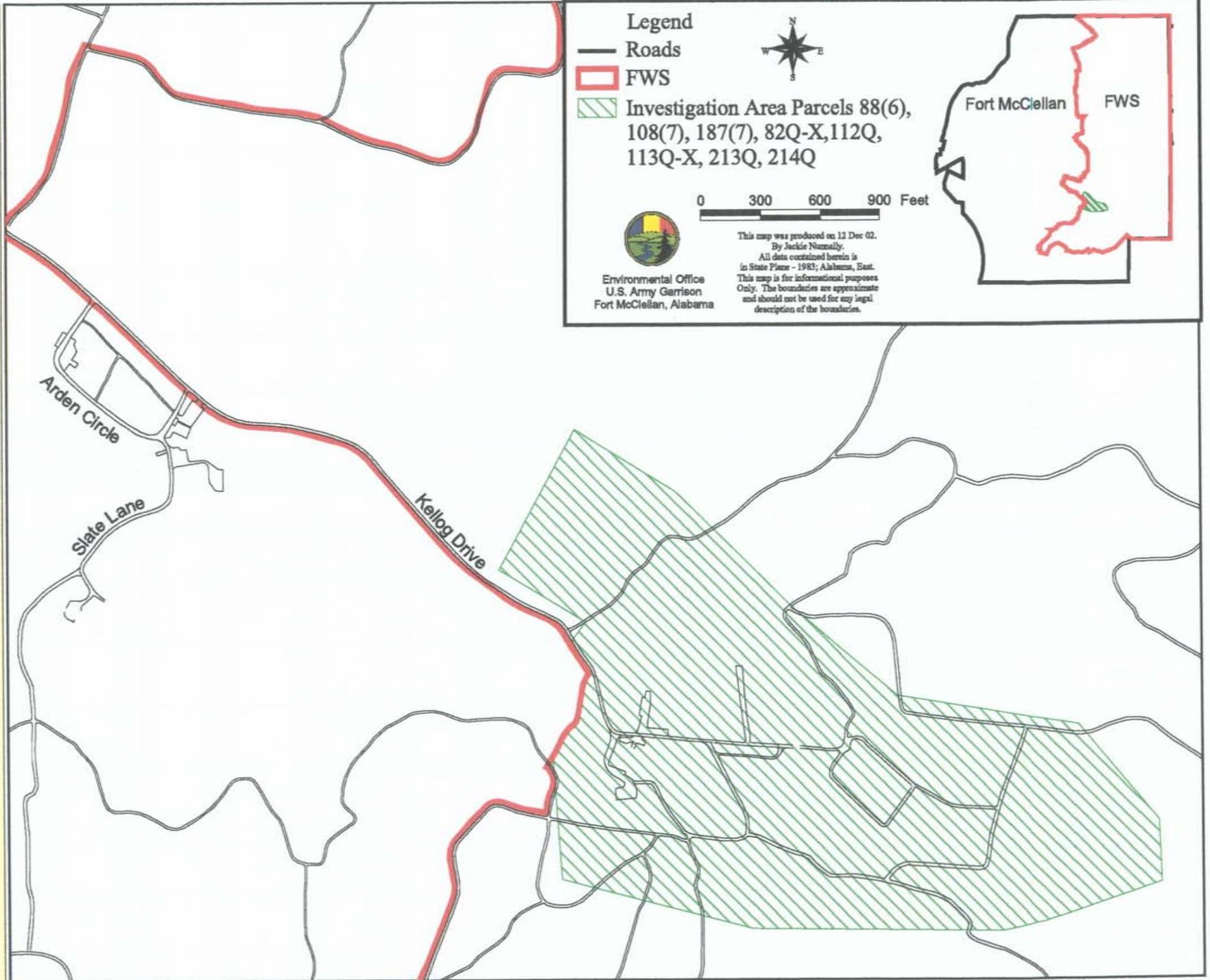
- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

#### **6. Interim LUC**

- a. The following activities are prohibited, except when authorized by the Army:
  - (1) Digging or excavating soil.
  - (2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1, LUC for the "No Public Access" area.)
- c. The Army may inspect Parcel 187(7) to verify that fencing and signs are in place, protective, and effective.
- d. The Army may inspect all parcels to verify that only authorized actions are occurring.
- e. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7 - 14. See LUCIP introduction.

Enclosure 2 Figure  
Interim LUCs



U.S. FISH AND WILDLIFE SERVICE  
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Enclosure 3  
Interim Land Use Controls for Parcels 87Q-X and 111Q

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 2002, Final Site Investigation Report, Range 29, Former Weapons Demonstration Range, Parcel 87Q-X, Former Rifle Ranges, Parcels 110Q and 111Q, and Former Impact Area, Parcel 239Q-X. January.
- c. Foster Wheeler Environmental Corporation, 2002, Site-Specific Work Plan, Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response, Fort McClellan, Alabama, February.
- d. U.S. Army Corps of Engineers, St. Louis District, 2001, Archives Search Report, Fort McClellan, Anniston, Alabama, (ASR), September.

**3. Site Location and Description (See the Enclosure 3 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcels where characterization required for a hazardous substance response is ongoing. This investigation area lies within areas of the Refuge where characterization for a munitions response also is ongoing.
  - 1) Parcel 87Q-X – Range 29, Former Weapons Demonstration Range. This range was in use from pre-1940 until base closure in 1999. Munitions used at the range prior to 1977 are unknown. After 1977, munitions used on this range included .45 cal, .38 cal, 9mm, C4, TNT, M-16, M-60, AT-4, M-72 LAW, and M-203. Currently the site is being characterized.
  - 2) Parcel 111Q – Former Rifle Range. The dates of use are unknown, but this range is identified as a rifle range on an ASR map dated World War II to 1950 and appears on a 1959 Army Service Map. Although the types of munitions used are unknown, it is assumed this range was only used for small arms (.50 cal and below) training. Currently, the site is being characterized.
- b. The site investigation (SI) indicated that metals, volatile organic compounds, perchlorate, herbicides, pesticides, and explosive compounds were detected in the sampled environmental media. Metals were detected in site media and pesticides were detected in groundwater at levels exceeding values used to make risk management decisions. Semivolatile organic compounds and polychlorinated biphenyls were not detected. Based on the SI, the Army recommended a remedial

investigation to determine the nature and extent of contamination. In addition, this area is included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM) and for munitions constituents other than those indicated above.

#### **4. LUC Boundaries (See the Enclosure 3 Figure)**

The boundary for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 3 figure.

#### **5. LUC Objectives**

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

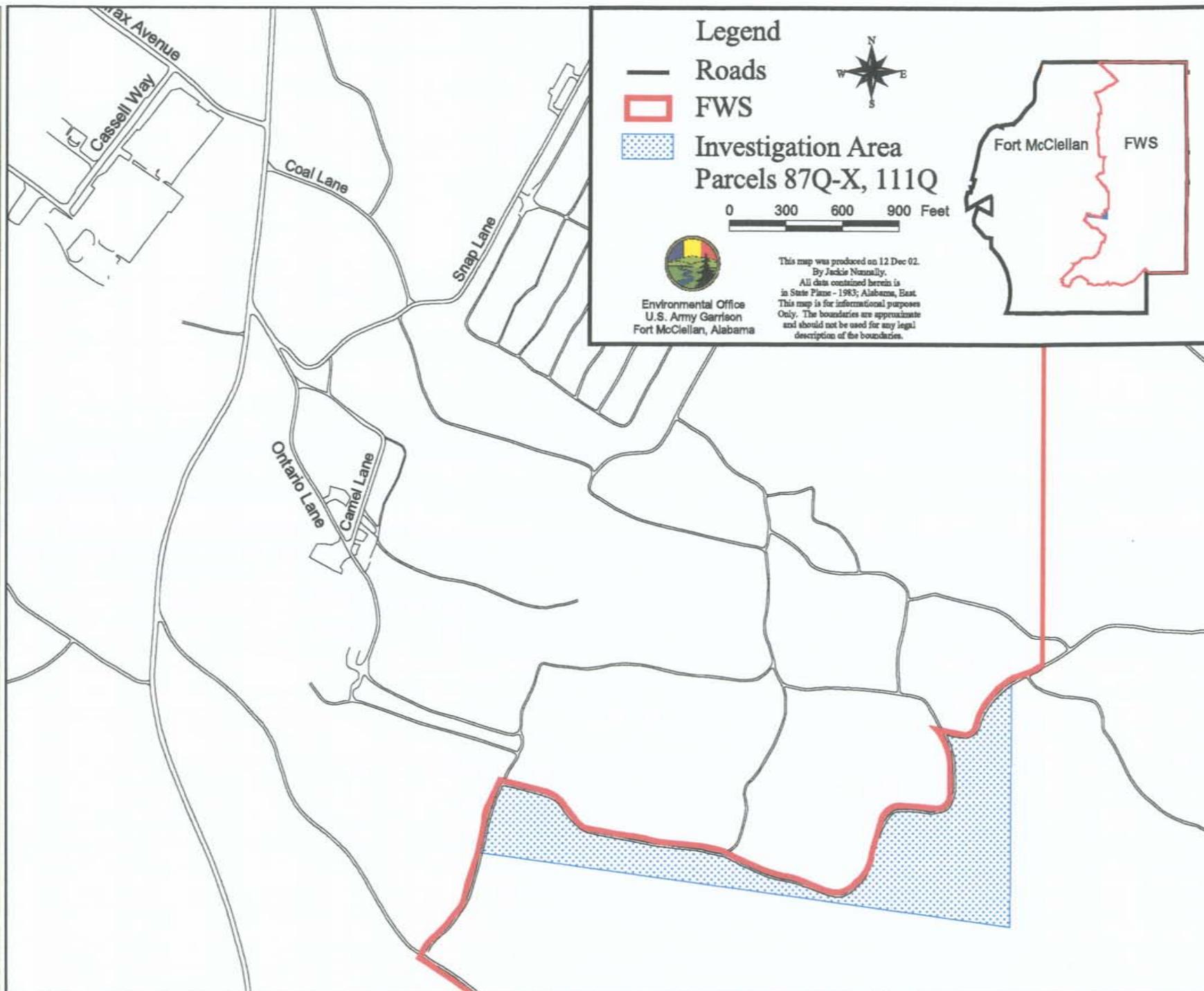
- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

#### **6. Interim LUC**

- a. The following activities are prohibited, except when authorized by the Army:
  - 1) Digging or excavating soil.
  - 2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1, LUC for the "No Public Access" area.)
- c. The Army may inspect these parcels to verify that only authorized actions are occurring.
- d. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7 - 14. See LUCIP introduction.

Enclosure 3 Figure  
Interim LUCs



U.S. FISH AND WILDLIFE SERVICE MOUNTAIN LONGLEAF  
NATIONAL WILDLIFE REFUGE

Enclosure 4

Interim Land Use Controls for Baby Bains Gap Ranges  
Parcels 76Q-X, 84Q-X, 223Q

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 2002, Final Site-Specific Field Sampling Plan for the Engineering Evaluation/Cost Analysis at the Baby Bains Gap Road Ranges - Range 18, Parcel 74Q; Range 20, Parcel 76Q-X; Range 23, Parcel 79Q; Range 25, Parcel 83Q; and Range 26, Parcel 84Q-X; Main Post Impact Area, Parcel 118Q-X; and Former Range 25 East, Parcel 223Q, January.
- c. Foster Wheeler Environmental Corporation, 2002, Site-Specific Work Plan, Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response, Fort McClellan, Alabama, February.
- d. U.S. Army Corps of Engineers, St. Louis District, 2001, Archives Search Report, Fort McClellan, Anniston, Alabama, (ASR), September.

**3. Site Location and Description (See the Enclosure 4 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcels where characterization required for a hazardous substance response is ongoing. This investigation area lies within areas of the Refuge where characterization for a munitions response also is ongoing.
  - 1) Parcel 76Q-X – Range 20, Infiltration Course. Sources state this range was in use since 1980 or the mid-1980s until base closure in 1999. The M-60 machine guns were fired at this range, and dynamite, trinitrotoluene, and C4 explosive were used here for artillery simulation. The ASR shows this area is within the Possible Artillery Impact Area. Currently the site is being characterized.
  - 2) Parcel 84Q-X – Range 26, Live Fire and Maneuver Range. According to the EBS this range was first displayed on a 1959 map. Weapons fired at this range included M-16 rifles since 1983. According to the ASR, the prior use of this area from 1949 was an Infiltration Course. The ASR shows this area is within the Possible Artillery Impact Area. Currently the site is being characterized.
  - 3) Parcel 223Q – Former Range 25 East. This range is shown on a 1937 map as a rifle range. Ordnance fired was presumed to be small arms. The ASR

shows this area is within the Possible Artillery Impact Area. Currently the site is being characterized.

- b. The Baby Bains Gap ranges were used as firing ranges for various kinds of firearms. The nature of the potential contamination is generally limited to metals (specifically lead), organic explosive residues, other components of gunpowder associated with firearm ammunition, and gun cleaning solvents. The site investigation for hazardous substances includes sampling for these and various other potential contaminants to include munitions constituents. In addition, this area is included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM).

#### **4. LUC Boundaries (See the Enclosure 4 Figure)**

The boundaries for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 4 figure.

#### **5. LUC Objectives**

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

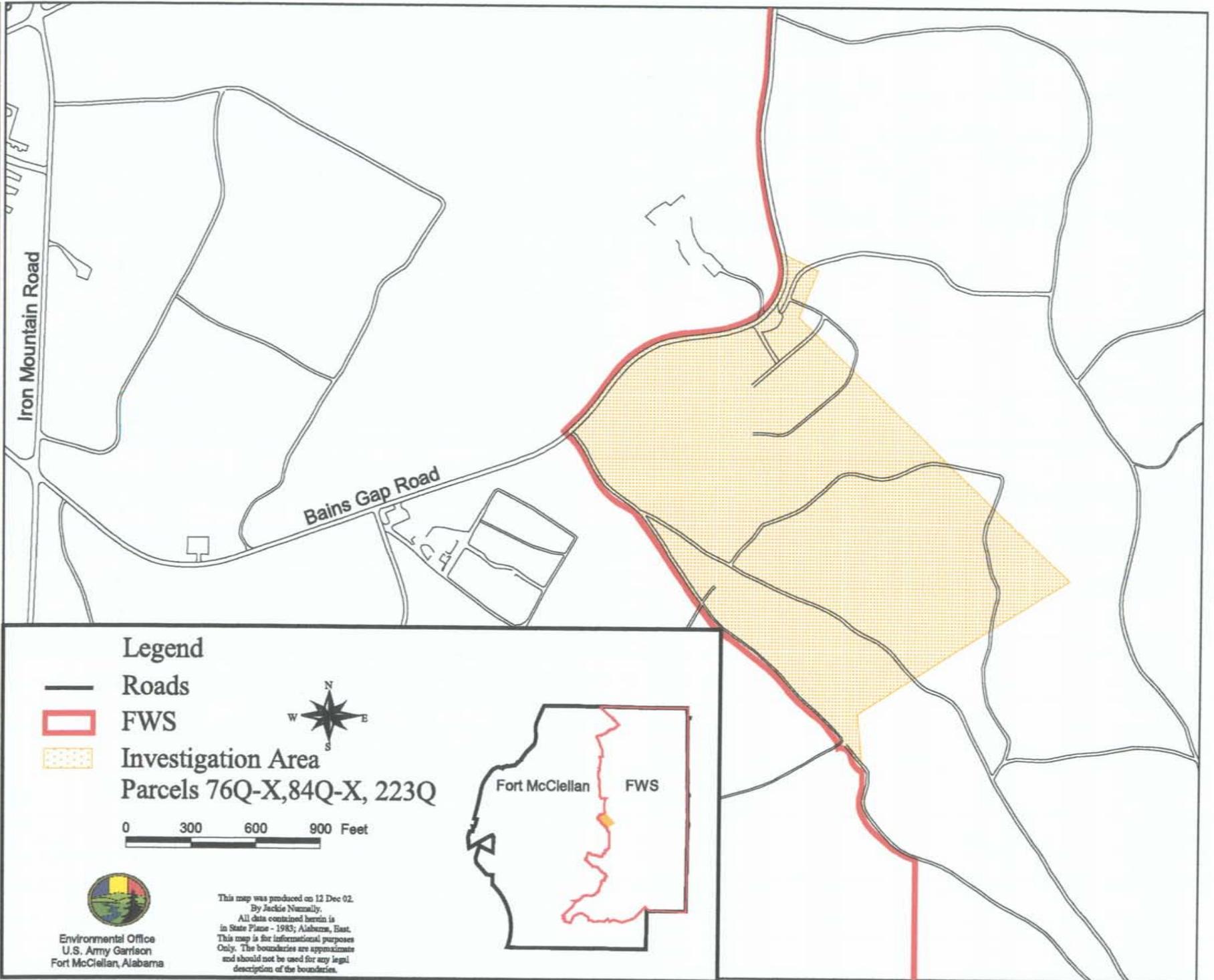
- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

#### **6. Interim LUC**

- a. The following activities are prohibited, except when authorized by the Army:
  - 1) Digging or excavating soil.
  - 2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1. LUC for the "No Public Access" area.)
- c. The Army may inspect these parcels to verify that only authorized actions are occurring.
- d. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7 - 14. See LUCIP introduction.

Enclosure 4 Figure  
Interim LUCs



Legend



Roads



FWS



Investigation Area

Parcels 76Q-X, 84Q-X, 223Q

0 300 600 900 Feet



Environmental Office  
U.S. Army Garrison  
Fort McClellan, Alabama

This map was produced on 12 Dec 02.  
By Jackie Nunnally.  
All data contained herein is  
in State Place - 1983; Alabama, East.  
This map is for informational purposes  
only. The boundaries are approximate  
and should not be used for any legal  
description of the boundaries.



U.S. FISH AND WILDLIFE SERVICE  
MOUNTAIN LONGLEAF NATIONAL WILDLIFE REFUGE

**Enclosure 5**

**Interim Land Use Controls for Bains Gap Road Ranges  
Parcels 77Q, 78Q, 80Q, 85Q, 109Q-X**

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 2002, Final Data Evaluation Report and Screening Level Ecological Risk Assessment for Bains Gap Road Ranges, Range 24 Upper, Parcel 80Q; Range 21, Parcel 77Q; Range 22, Parcel 78Q; Former Mortar Range (Firing Line), Parcel 109Q; and Range 27, Parcel 85Q, August.
- c. Foster Wheeler Environmental Corporation, 2002, Site-Specific Work Plan, Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response, Fort McClellan, Alabama, February.
- d. U.S. Army Corps of Engineers, St. Louis District, 2001, Archives Search Report, Fort McClellan, Anniston, Alabama, (ASR), September.

**3. Site Location and Description (See the Enclosure 5 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcels where characterization required for a hazardous substance response is ongoing. This investigation area lies within areas of the Refuge where characterization for a munitions response also is ongoing.
  - 1) Parcel 77Q – Range 21, Field Fire Range. This range was in use from 1951 through 1999 when the installation closed. The M-16 rifle (5.56mm) with tracer was fired at this range, and unspecified small arms were used prior to the advent of the M-16. Currently the site is being characterized.
  - 2) Parcel 78Q – Range 22, Zero Range. This range was in use from 1961 through 1999 when the installation closed. The M-16 rifle (5.56mm) with tracer was fired at this range. Within the Range 22 study area is the Former Mortar Range (Firing Line), Parcel 109Q-X, which was investigated as part of Range 22. Currently the site is being characterized.
  - 3) Parcel 80Q – Range 24 Upper, Defensive Techniques Range. This area was used for military training from about 1950 until 1990. The ASR shows an 81mm mortar range fan, the former Range 28, covering the area of Range 24 Upper. This 81mm mortar range first appeared on a 1950 range map. The mortar range was abandoned in 1967. The Defensive Techniques Range was constructed between 1983 and 1989. Training with M-16 rifles with tracers (white phosphorus) and flares occurred only

in 1989 and 1990, and the range was inactivated in 1990. Currently the site is being characterized.

- 4) Parcel 85Q – Range 27, Special Operations Range. The ASR indicates the range was built after World War II and it appears on a 1958 range map. The range was in use until 1999. Weapons fired at this range include M-16 rifles (5.56mm), 9mm pistol, 12-gauge shotgun, .45 caliber pistol, .38 caliber pistol, and machine gun. The range was divided into four main areas. Range 27A was a Shooting House constructed of stacks of tires filled with sand, a gravel floor, and no roof. The Army conducted training exercises with live ammunition in the shooting house. Range 27B was the Live Fire and Maneuver Close Quarters Battle Range. Range 27C was the Stress Pistol and Shotgun Range. Range 27D, the Pistol and Submachine Gun Qualification Range, shows high concentrations of bullet fragments along the base of a hill to the south of the range. Currently the site is being characterized.
- 5) Parcel 109Q-X – Former Mortar Range (Firing Line). This range is within the boundaries of Range 22, Parcel 78Q. Dates of use are unknown but the range appears on a 1959 map. Weapons fired at the mortar range possibly include 81mm and 60mm Mortars. Currently the site is being characterized.

- b. The Bains Gap Road ranges were used as firing ranges for various kinds of firearms. The nature of the potential contamination is generally limited to metals (specifically lead), organic explosive residues, other components of gunpowder associated with firearm ammunition, and gun cleaning solvents. The site investigation for hazardous substances include sampling for these and various other potential contaminants to include munitions constituents. In addition, this area is included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM).

#### 4. LUC Boundaries (See the Enclosure 5 Figure)

The boundaries for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 5 figure.

#### 5. LUC Objectives

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

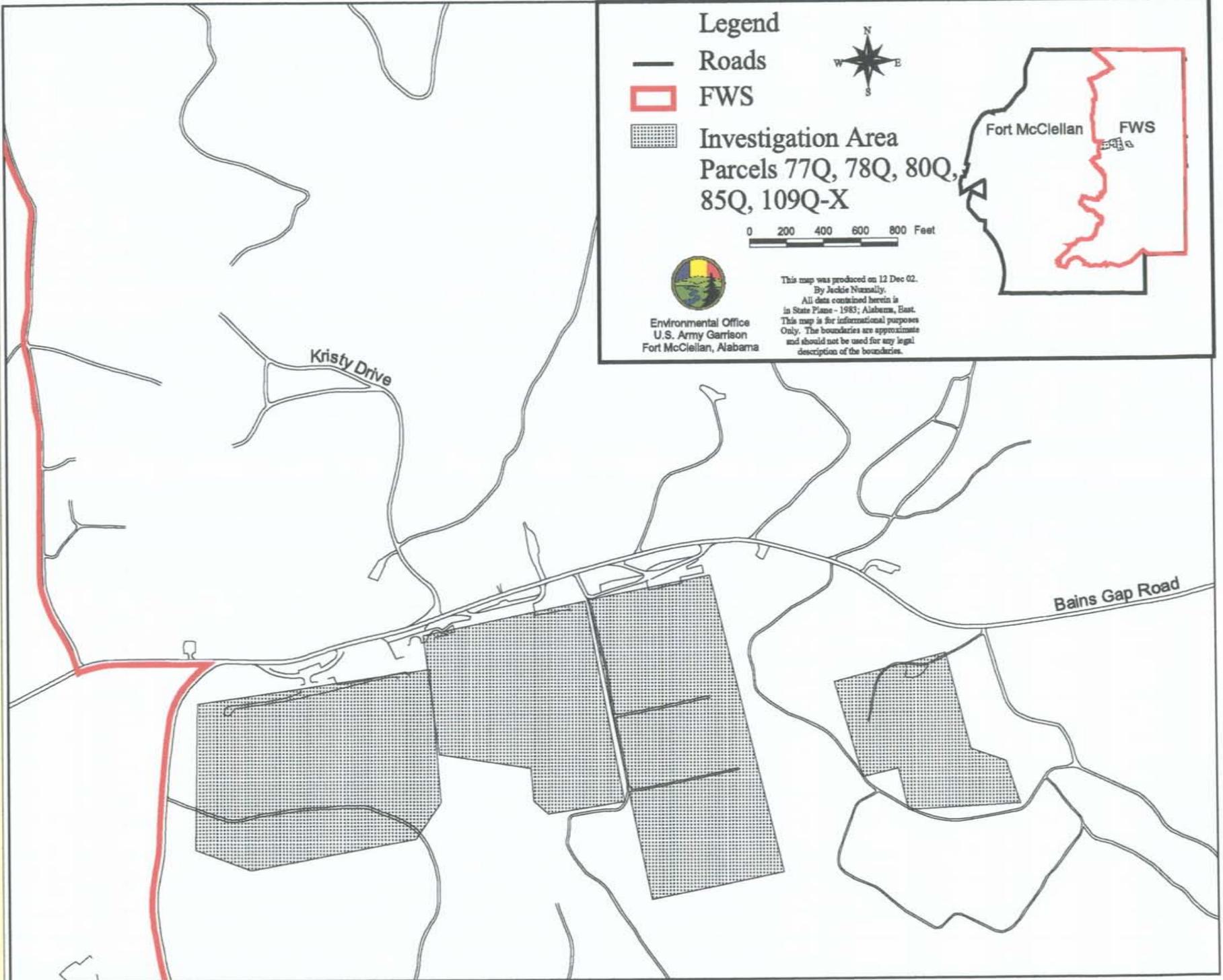
#### 6. Interim LUC

- a. The following activities are prohibited, except when authorized by the Army:

- 1) Digging or excavating soil.
  - 2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1, LUC for the "No Public Access" area.)
  - c. The Army may inspect these parcels to verify that only authorized actions are occurring.
  - d. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7 - 14. See LUCIP introduction.

Enclosure 5 Figure  
Interim LUCs



U.S. FISH AND WILDLIFE SERVICE  
MOUNTAIN LONGLEAF NATIONAL WILDLIFE REFUGE

Enclosure 6  
Interim Land Use Controls for Parcels 89Q-X and 215Q

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 2002, Final Site-Specific Field Sampling Plan for Range 31: Weapons Demonstration Range, Parcel 89Q-X, and Former Defendum Field Firing Range No. 2, Parcel 215Q, April.
- c. Foster Wheeler Environmental Corporation, 2002, Site-Specific Work Plan, Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response, Fort McClellan, Alabama, February.
- d. U.S. Army Corps of Engineers, St. Louis District, 2001, Archives Search Report, Fort McClellan, Anniston, Alabama, (ASR), Maps, September.

**3. Site Location and Description (See the Enclosure 6 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcels where characterization required for a hazardous substance response is ongoing. This investigation area lies within areas of the Refuge where characterization for a munitions response also is ongoing.
  - 1) Parcel 89(Q-X) – Range 31, Weapons Demonstration Range. Dates of use are from 1948 (ASR) or 1951 (EBS) through 1984 or 1985. Various weapons were used at the range to include small arms, machine guns, rifles, antitank weapons, 40mm grenades, incendiary rockets, recoilless rifles, parachute flares, and others. Range 31 was used as a firepower demonstration range and many weapons systems were fired at this location. Currently the area is being characterized.
  - 2) Parcel 215Q – Former Defendum Field Firing Range No. 2. Small arms are believed to have been used at this range, but the dates of operation are unknown. Currently the area is being characterized.
- b. Potential contaminant sources are primarily lead and explosives residue. The site investigation for hazardous substances will include sampling for various potential contaminants to include munitions constituents. In addition, this area is included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM).

#### **4. LUC Boundaries (See the Enclosure 6 Figure)**

The boundaries for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 6 figure.

#### **5. LUC Objectives**

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

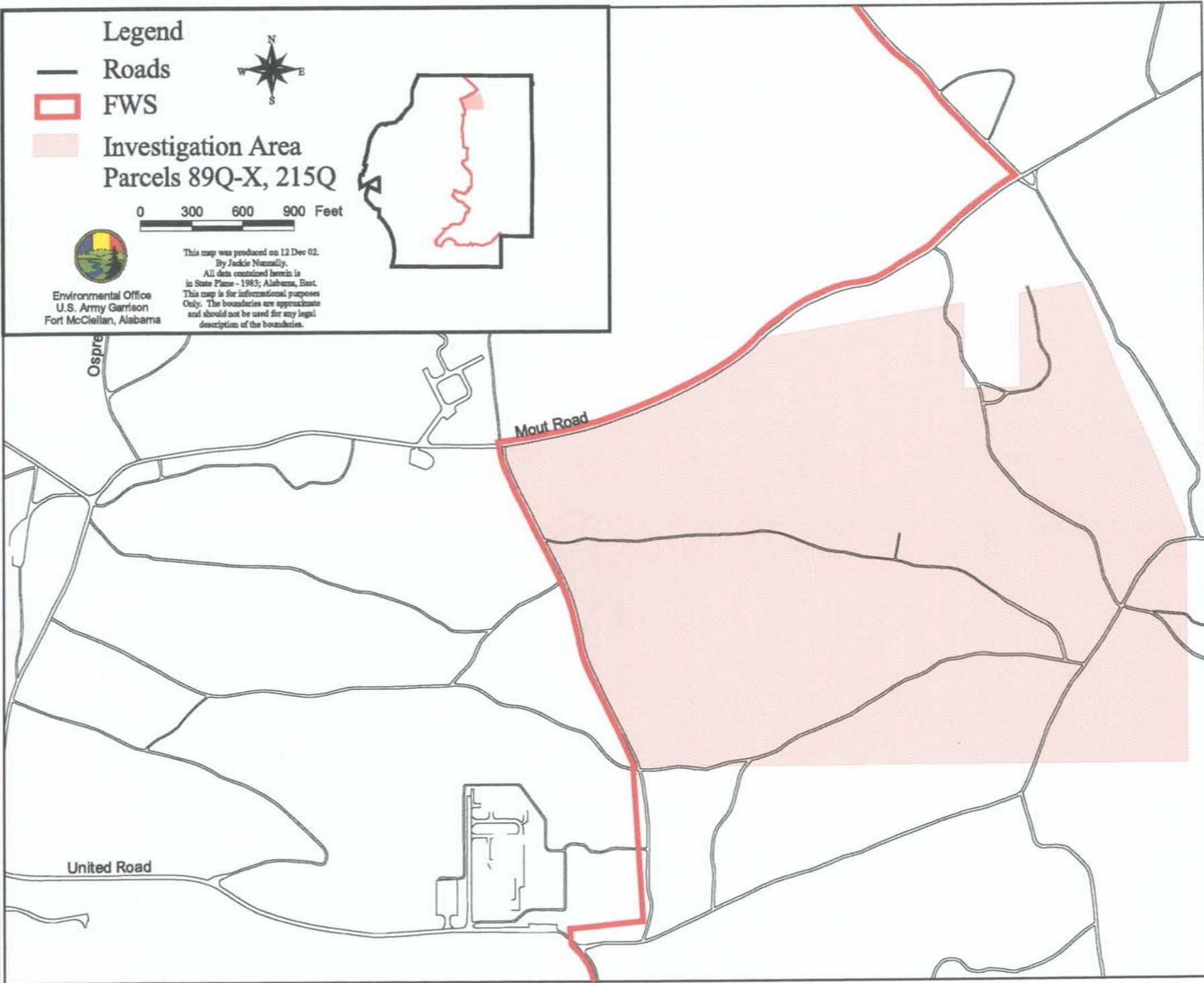
- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

#### **6. Interim LUC**

- a. The following activities are prohibited, except when authorized by the Army:
  - 1) Digging or excavating soil.
  - 2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1, LUC for the "No Public Access" area.)
- c. The Army may inspect these parcels to verify that only authorized actions are occurring.
- d. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7 - 14. See LUCIP introduction.

Enclosure 6 Figure  
Interim LUCs



U.S. FISH AND WILDLIFE SERVICE  
MOUNTAIN LONGLEAF NATIONAL WILDLIFE REFUGE

**Enclosure 7**  
**Interim Land Use Controls for Parcel 137Q-X**

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 2002, Final Site-Specific Field Sampling Plan for Former 81 mm Mortar Range, Parcel 137Q-X, April.
- c. Foster Wheeler Environmental Corporation, 2002, Site-Specific Work Plan, Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response, Fort McClellan, Alabama, February.
- d. U.S. Army Corps of Engineers, St. Louis District, 2001, Archives Search Report, Fort McClellan, Anniston, Alabama, (ASR), September.
- e. U.S. Environmental Protection Agency (EPA), 1990, Environmental Photographic Interpretation Center (EPIC) Report.

**3. Site Location and Description (See the Enclosure 7 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcel where characterization required for a hazardous substance is ongoing. This investigation area lies within areas of the Refuge where characterization for a munitions response also is ongoing.

Parcel 137(Q-X) – Former 81mm Mortar Range. The history of explosive ordnance used at this range is unknown. The ASR reports the range first appeared on a 1958 range map, but the range is visible in an aerial photo dated 1949 (Environmental Photographic Interpretation Center, EPA, 1999). The ASR reports the range was abandoned by 1967 and aerial photographs from 1972 and 1984 show the range is overgrown and abandoned. Currently the site is being characterized.

- b. Potential contaminant sources are primarily metals and explosive residue. The site investigation for hazardous substances will include sampling for these and various other potential contaminants to include munitions constituents. In addition, this area is included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM).

**4. LUC Boundaries (See the Enclosure 7 Figure)**

The boundaries for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 7 figure.

## 5. LUC Objectives

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

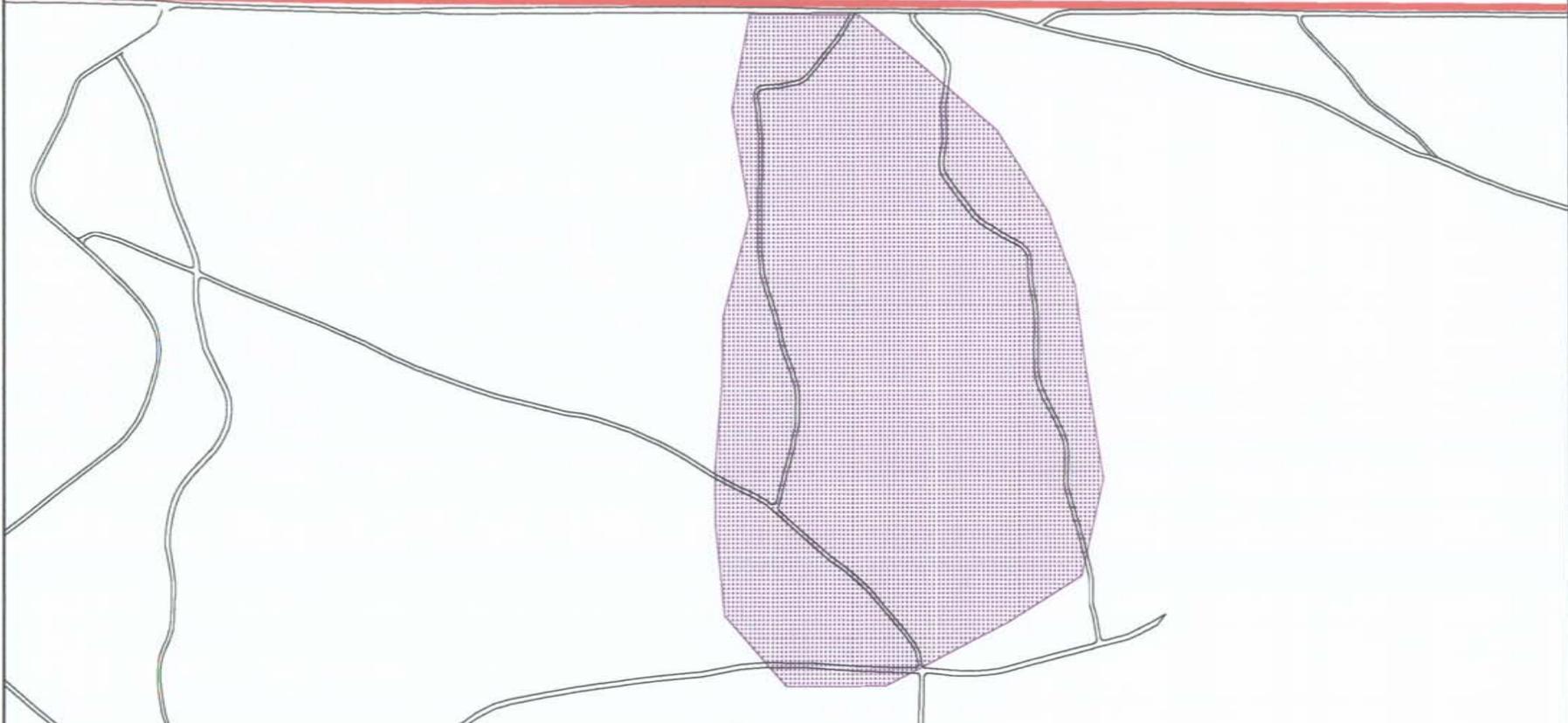
## 6. Interim LUC

- a. The following activities are prohibited, except when authorized by the Army:
  - 1) Digging or excavating soil.
  - 2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1, LUC for the "No Public Access" area.)
- c. The Army may inspect these parcels to verify that only authorized actions are occurring.
- d. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7 - 14. See LUCIP introduction.

Enclosure 7 Figure  
Interim LUCs

Falcon Road



Legend

-  Roads
-  FWS
-  Investigation Area  
Parcels 137Q-X



0 200 400 600 Feet



Environmental Office  
U.S. Army Garrison  
Fort McClellan, Alabama

This map was produced on 12 Dec 02.  
By Jackie Nunnally.  
All data contained herein is  
in State Plane - 1983, Alabama, East.  
This map is for informational purposes  
only. The boundaries are approximate  
and should not be used for any legal  
description of the boundaries.



U.S. FISH AND WILDLIFE SERVICE MOUNTAIN LONGLEAF  
NATIONAL WILDLIFE REFUGE

Enclosure 8  
Interim Land Use Controls for Parcel 82(7)

**1. Background**

See LUCIP introduction.

**2. Source and/or Decision Documents**

- a. Environmental Science and Engineering, Inc., 1998, Final Environmental Baseline Survey (EBS), January.
- b. IT, 1998, Site Specific Field Sampling Plan.
- c. Foster Wheeler Environmental Corporation, 2001, Master Conceptual Plan Ordnance and Explosives (OE) Response Fort McClellan, Alabama, January.
- d. IT, 2001, Technical Memorandum Engineering Evaluation/Cost Analysis (EE/CA) Fill Area Definition, August.
- e. IT, 2002, Draft EE/CA Parcels 78(6), 79(6), 80(6), 81(5), 175(5), 230(7), 227(7), 126(7), 229(7), 231(7), 233(7), and 82(7), August.

**3. Site Location and Description (See the Enclosure 8 Figure)**

- a. The area described in this enclosure includes the investigation area for the following parcel where characterization required for a hazardous substance response is ongoing. This investigation area lies within areas of the Refuge where characterizations for a munitions response also is ongoing.

Parcel 82(7) – Stump Dump. The Stump Dump was used as a disposal site from sometime before 1985 until approximately 1988 and covers approximately 10 acres. The site was intended for the disposal of storm debris such as vegetation, tree limbs, stumps; however, unauthorized dumping occurred at the site. The Army covered the site with a low-permeability cap in the mid 1990's. The entire site is surrounded by mixed coniferous/deciduous forest. The lateral extent of the waste material was known, thus trenching studies were not performed in support of the EE/CA; however, soil borings were used to verify the depth of the waste fill.

- b. Potential contaminant sources are from unauthorized dumping of construction debris, batteries, tires, paint cans, refrigerators, landscaping trash. In addition, this area is included in other investigations for unexploded ordnance (UXO) and discarded military munitions (DMM) and for munitions constituents.

**4. LUC Boundaries (See the Enclosure 8 Figure)**

The boundaries for the area where the interim LUC (see paragraph 6) apply are indicated in the enclosure 8 figure.

## 5. LUC Objectives

The interim LUC in paragraph 6 are intended to minimize risk to human health and the environment and to promote human safety. The objective is to minimize the potential for exposure to UXO, DMM, and any environmental contaminants that may be present and is achieved by:

- a. Controlling access to areas known or suspected to contain UXO or DMM.
- b. Educating the public on the explosive hazards associated with munitions that may be present, particularly UXO, and the actions they should take (Recognize, Retreat, Report) should they encounter a UXO or suspected UXO.

## 6. Interim LUC

- a. The following activities are prohibited, except when authorized by the Army:
  - 1) Digging or excavating soil.
  - 2) Use of groundwater.
- b. The Army prohibits entry into areas known or suspected to contain UXO or other DMM. (See Enclosure 1, LUC for the "No Public Access" area.)
- c. The Army may inspect these parcels to verify that only authorized actions are occurring.
- d. Army personnel, to include contractors, involved in intrusive or investigative activities are allowed to enter these areas, when authorized, provided they have received a safety briefing or are qualified military Explosives Ordnance Disposal (EOD) personnel or UXO Technicians. When determined necessary, these personnel will be escorted by military EOD or UXO technicians.

7-14. See LUCIP introduction.

Enclosure 8 Figure  
Interim LUCs

