

**FINAL  
OPERATIONAL RANGE ASSESSMENT PROGRAM  
PHASE I QUALITATIVE ASSESSMENT REPORT  
GOODPASTURE DROP ZONE  
GOODPASTURE, COLORADO**

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## EXECUTIVE SUMMARY

The United States (U.S.) Army is conducting qualitative assessments at operational ranges to meet the requirements of Department of Defense policy and to support the U.S. Army Sustainable Range Program. The operational range qualitative assessment (hereinafter referred to as Phase I Assessment) is the first phase of the U.S. Army Operational Range Assessment Program. This Phase I Assessment evaluates the operational range area at Goodpasture Drop Zone (DZ) to assess whether further investigation is needed to determine if potential munitions constituents of concern (MCOC) are or could be migrating off-range at levels that may pose an unacceptable risk to human health or the environment. In conducting the Phase I Assessment, MCOC sources, potential off-range migration pathways, and potential off-range human and ecological receptors are evaluated as appropriate.

Goodpasture DZ is a Colorado Army National Guard (COARNG) installation located in south-central Colorado within Pueblo County. The installation lies approximately five miles northeast of Beulah, Colorado, approximately 11 miles northwest of Colorado City, Colorado, and approximately 20 miles southwest of the city of Pueblo, Colorado. Goodpasture DZ is located on pastureland that is privately owned.

As part of the Operational Range Inventory Sustainment, an update to the Army Range Inventory Database-Geodatabase (ARID-GEO) was submitted to the U.S. Army Environmental Command in June 2005. ARID-GEO (2005) identified a single operational range encompassing a total of 178.71 acres. The total operational range area was derived from the Operational Use Area (total range area) acreage as reported in ARID-GEO (2005). This range consists of a training and maneuver area that is used as a practice drop zone. There is no other than operational area at Goodpasture DZ.

A review of available records and background data, as well as interviews with COARNG personnel, indicated that the installation used limited amounts of military munitions between the mid-1980s and late 1990s. Currently, the COARNG does not utilize Goodpasture DZ for training activities, as the most recent Memorandum of Understanding (MOU) has expired. The COARNG may renew the MOU in the future. Training has not been conducted at Goodpasture DZ for approximately 10 years. Former activities at Goodpasture DZ consisted of soldiers parachuting out of helicopters into the field and, on occasion, involved the use of pyrotechnics/obscurants to indicate wind direction to the jumpers. However, approximately 80 percent of the training occurred at night to conduct realistic mock exercises, and pyrotechnics/obscurants were not used during night events. Because training activities involved a maximum use of 24 pyrotechnics/obscurants per year for 10 to 15 years, there are only limited sources of MCOC at Goodpasture DZ. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated.

The single operational range at Goodpasture DZ is categorized as Unlikely.

### **Unlikely – Five-Year Review**

One range at Goodpasture DZ is categorized as Unlikely, totaling 178.71 acres. This range consists of a training and maneuver area. Ranges where, based upon a review of readily available information, there is sufficient evidence to show that there are no known releases or source-receptor interactions off-range that could present an unacceptable risk to human health or the environment are categorized as Unlikely. Ranges categorized as Unlikely are required to be re-evaluated at least every five years. Re-evaluation may occur sooner if significant changes (e.g., change in range operations or site conditions, regulatory changes) occur that affect determinations made during this Phase I Assessment.

**Table ES-1** summarizes the Phase I Assessment findings.

**Table ES-1: Summary of Findings and Conclusions for Goodpasture DZ**

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 178.71 acres	Limited source— limited or no military munitions use	Not evaluated (limited source identified)			Re-evaluate during the five-year review. Limited source was identified.

## ABBREVIATIONS/ACRONYMS

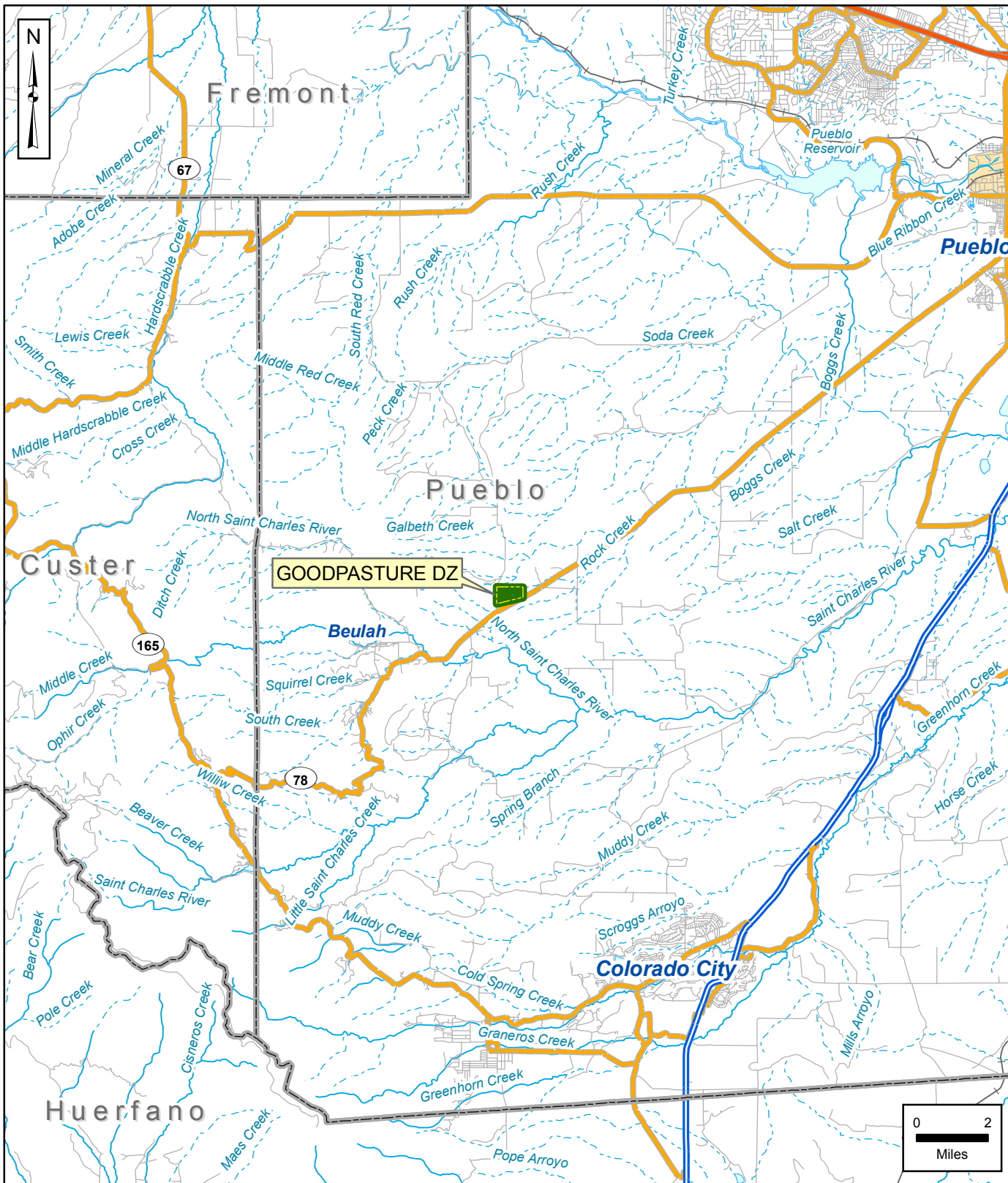
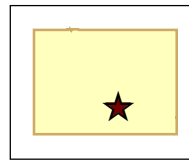
ARID-GEO	Army Range Inventory Database-Geodatabase
amsl	Above Mean Sea Level
bgs	Below Ground Surface
BN	Battalion
COARNG	Colorado Army National Guard
CSM	Conceptual Site Model
DAC	Defense Ammunition Center
DoD	Department of Defense
DODI	Department of Defense Instruction
DZ	Drop Zone
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
gpm	Gallons per Minute
GW	Groundwater pathway identified. (This refers to range grouping; M designation always precedes GW designation.)
H	Human receptors identified. (This refers to range grouping; pathway designation always precedes H designation.)
HUC	Hydrologic Unit Code
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
MIDAS	Munition Items Disposition Action System
MOU	Memorandum of Understanding
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RFMSS	Range Facility Management Support System
SFG(A)	Special Forces Group (Airborne)
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
U.S.	United States
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Command
USEPA	United States Environmental Protection Agency
°F	Degrees Fahrenheit



Operational Range Assessment Program  
Phase I Qualitative Assessment  
Goodpasture DZ, CO

Figure 1-1

General Goodpasture DZ Location



**Installation**

- Installation Boundary
- Operational Area

**Hydrology**

- Stream (Perennial)
- Stream (Intermittent)
- Canal/Ditch
- Water Body

**Transportation**

- Interstate
- Highway
- Major Road
- Local Road
- Railroad

**Administrative**

- Urban Area
- County Boundary

**Data Sources:**

AEC, ARID-GEO, 2005  
ESRI, StreetMap USA, 2005

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