

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
HORSETOOTH RESERVOIR
FORT COLLINS, COLORADO**

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Prepared for:

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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 Horsetooth Reservoir 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.

Horsetooth Reservoir encompasses approximately 5,034.27 acres in Larimer County, Colorado. The training area is located approximately one mile west of Fort Collins, Colorado, on property owned by Larimer County. The Army Range Inventory Database-Geodatabase (ARID-GEO) (2005), identified one operational range: a field training area that encompasses 5,034.27 acres. The training area, referred to by the Colorado Army National Guard (COARNG) as Horsetooth Reservoir, includes portions of Horsetooth Reservoir Park, Horsetooth Mountain Park and other Larimer County property. The COARNG had a memorandum of understanding (MOU) with Larimer County to use Horsetooth Reservoir that expired in 2005. The COARNG may choose to renew the MOU in the future. Interviews with COARNG and Horsetooth Reservoir Park personnel indicated that the COARNG use involved land navigation and Zodiac boat training. A site visit was conducted on 15 October 2007 to observe the general conditions of the site and verify that no military munitions were utilized at the operational range referred to as Horsetooth Reservoir.

A review of available records and background data, as well as interviews with COARNG personnel and the Horsetooth Reservoir Park Manager, indicated that the range at Horsetooth Reservoir has never been used for training involving military munitions (live-fire or non-live-fire). Training conducted at Horsetooth Reservoir was limited to land navigation and Zodiac boat training. Thus, no potential sources of MCOC exist at the site. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated, and the range at Horsetooth Reservoir is categorized as Unlikely.

Installations with operational ranges where no munitions or only small caliber blanks have been utilized are categorized as Unlikely. That is, based on a review of available information, there is sufficient evidence to show that due to the lack of munitions use there are no known releases or source-receptor interactions that could present an unacceptable risk to human health or the environment. 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 Horsetooth Reservoir

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human and Ecological Receptors	Conclusions
Unlikely	One operational range; 5,034.27 acres	No source—no current or historical use of live-fire military munitions	Not evaluated (no source identified)		Re-evaluate during the five-year review.

ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
C-BT	Colorado-Big Thompson
COARNG	Colorado Army National Guard
CSM	Conceptual Site Model
DoD	Department of Defense
JFHQ-CO	Joint Force Headquarters-Colorado
MCOG	Munitions Constituents of Concern
MOU	Memorandum of Understanding
ORAP	Operational Range Assessment Program
U.S.	United States
USACE	United States Army Corps of Engineers

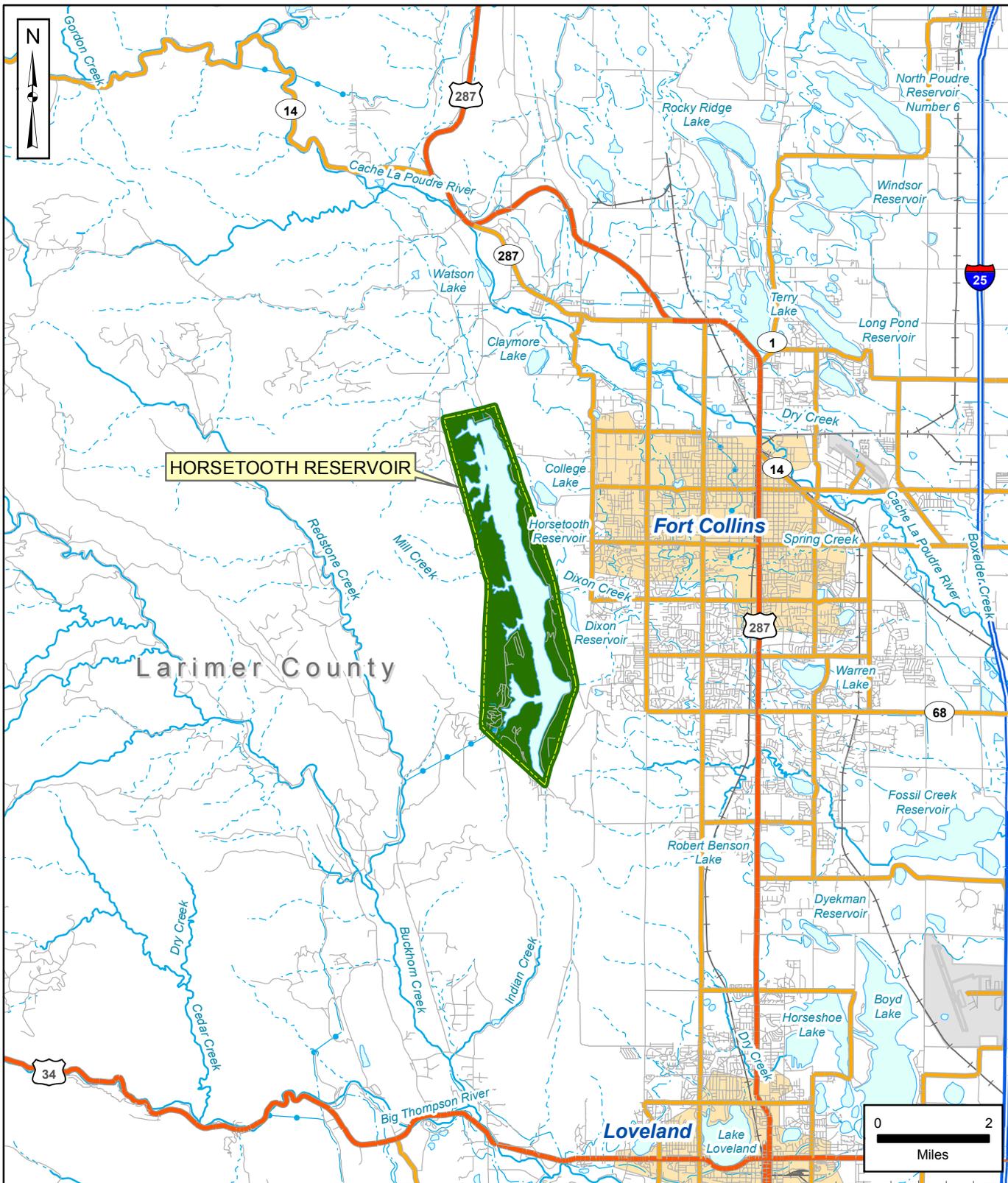


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**Figure 2-1
General Horsetooth Reservoir Location and Operational Range Area**



Installation

- Installation Boundary
- Operational Area

Hydrology

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

Transportation

- Interstate
- Highway
- Major Road
- Local Road

- Railroad
- Airport
- Urbanized Area

Data Sources:
AEC, ARID-GEO, 2005
ESRI, StreetMap USA, 2005

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