



TABLE OF CONTENTS

	<u>Page</u>
4.18 FARMLAND	4.18-1
4.18.1 Affected Environment	4.18-1
4.18.2 Environmental Consequences	4.18-3
4.18.2.1 No Action Alternative	4.18-3
4.18.2.2 Freeway Alternative.....	4.18-3
4.18.2.3 Tollway Alternative	4.18-3
4.18.2.4 Regional Arterial Alternative.....	4.18-3
4.18.2.5 Combined Alternative (Recommended Alternative)	4.18-3
4.18.3 Suggested Mitigation	4.18-4
4.18.4 Summary of Impacts	4.18-4



LIST OF FIGURES

	<u>Page</u>
Figure 4.18-1 Farmland within the Study Area.....	4.18-2

LIST OF TABLES

	<u>Page</u>
Table 4.18-1 Gross Acres of Farmland within the Study Area.....	4.18-1
Table 4.18-2 Summary of Impacts to Prime Farmland and Farmland of State Importance	4.18-4



4.18 FARMLAND

INTRODUCTION

Prime and Unique Farmlands are protected under the Farmland Protection Policy Act of 1981 in order to minimize the extent that federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. The methodology for this assessment included the acquisition of soils mapping showing areas of Prime and Unique Farmland and state and locally important soil types, a field survey of land use, and evaluation of impacts to identified Prime and Unique Farmland utilizing GIS. Verification of Prime and Unique Farmland and Farmland of Statewide Importance were coordinated with the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) and a final rendering of impact severity was determined by the NRCS for the various build alternatives.

Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and that can economically produce sustained high yields of these crops when treated and managed according to acceptable farming practices. Unique Farmland is land other than Prime Farmland that is used to produce specific high-value food and fiber crops. It can economically produce sustained high yields of these specialized crops when treated and managed according to acceptable farming practices. Farmland of Statewide Importance is land that has been identified by criteria determined by the Colorado State Experiment Station, the Colorado State Department of Agriculture, and the Colorado State Soil Conservation Board. Farmland of Local Importance is land that has not been identified as having national or statewide importance, yet may have local significance based on the goals of the community and of the various agricultural enterprises that maintain a viable agricultural community. No public concerns were expressed through the public involvement process regarding Farmland.

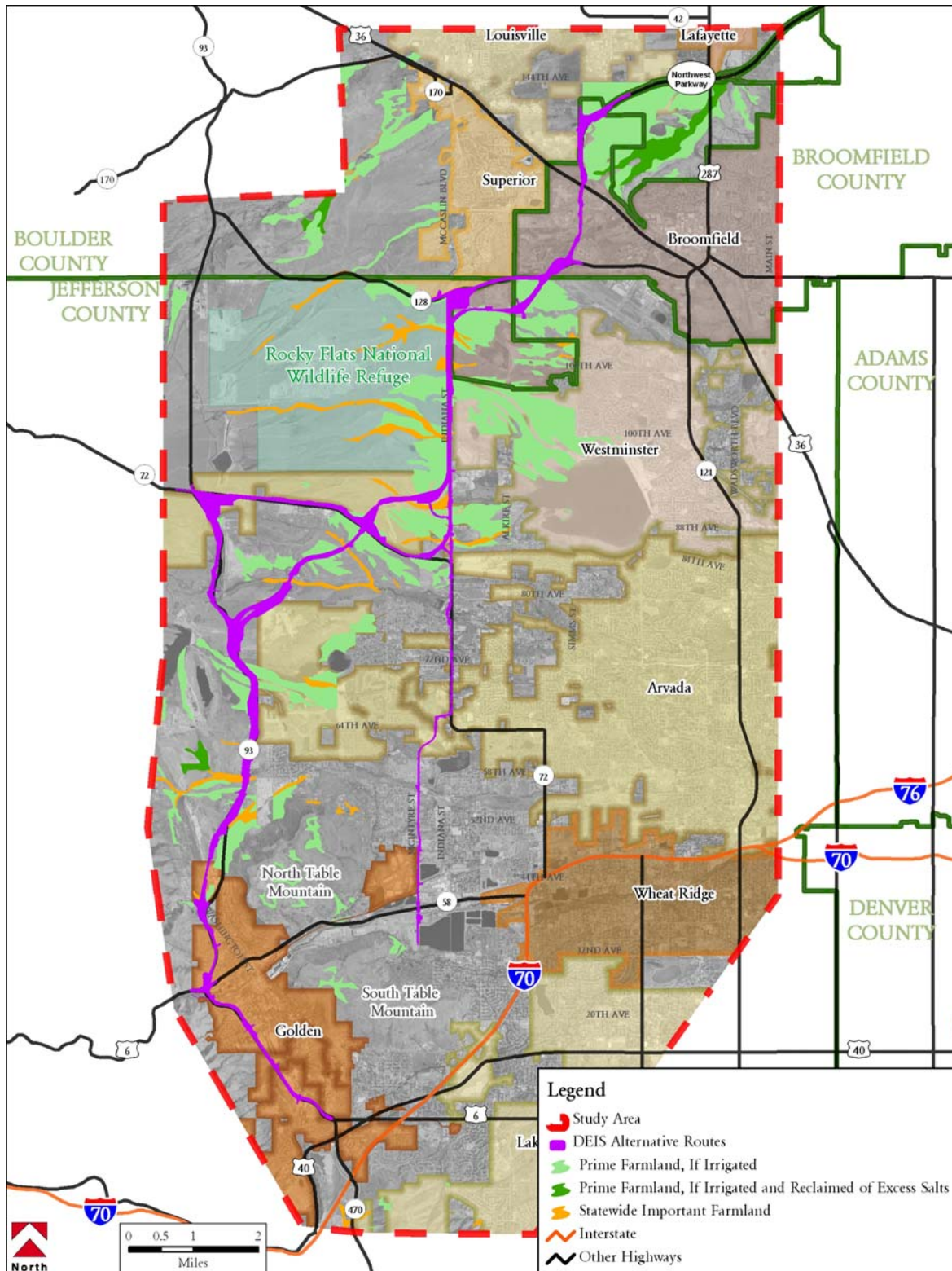
4.18.1 AFFECTED ENVIRONMENT

The NRCS Metropolitan Denver and Longmont offices were contacted to discover if any Prime or Unique Farmland, or Farmland of Statewide or Local Importance, exist within the Study Area. The NRCS identified soils that fall under the protected categories. The categories are listed and locations are shown (see **Table 4.18-1** and **Figure 4.18-1**). There are no Unique Farmlands identified in the study area. Land that currently has an urban use or that will be developed in the near future is not considered farmland. Recent land development and urbanization of the Broomfield and north Golden areas has removed much area from consideration for Prime Farmlands and Farmlands of State and Local Importance. Continued residential development is expected within the existing SH 93 corridor and Interlocken-Flatiron Crossing mixed-use development areas of Boulder and Broomfield Counties, further reducing the number of farms in the area. Future land use development in the study area has been researched and can be referenced (see **Section 4.1**).

Table 4.18-1 Gross Acres of Farmland within the Study Area

Soil Category	Boulder County Acreage	Jefferson County Acreage	Total Acreage
Farmland of Statewide Importance	231.7	949.7	1,181.4
Prime Farmland, if irrigated	3,604.9	5,477.6	9,082.5
Prime Farmland, if irrigated and reclaimed of excess salts and sodium	452.8	56.2	509.0

Figure 4.18-1 Farmland within the Study Area



Source: Compiled by FHU, 2006.



4.18.2 ENVIRONMENTAL CONSEQUENCES

Direct farmland impacts result from the removal of cultivated lands by placing impervious (paved) surface, constructing cut and fill slopes, and by acquiring potential right-of-way for transportation use. The amount of farmland acreage converted from each build alternative accounts for less than ½ percent of the total Prime Farmland and Farmland of Statewide Importance found within the study area. Impacts are determined from the overall disturbance estimated to occur from constructing each of the build alternatives, as outlined below.

4.18.2.1 NO ACTION ALTERNATIVE

This alternative would not impact Prime Farmland, Farmland of State Importance, or Farmland of Local Importance.

4.18.2.2 FREEWAY ALTERNATIVE

This alternative would impact a total of approximately 313.9 acres of Prime Farmland, 30.1 acres of Farmland of Statewide Importance, and no Farmland of Local Importance. No permanent loss of access to farmland or isolation of portions of active farm properties would occur as a result of this alternative. Temporary impacts and disruptions to accessibility may occur during construction. Ongoing conversion of agricultural land to residential and urbanized land uses will continue along the SH 93 corridor in Jefferson County and Northwest Parkway corridor in Broomfield. This alternative will not change the trend of cumulative indirect effects.

4.18.2.3 TOLLWAY ALTERNATIVE

This alternative would impact a total of approximately 326.6 acres of Prime Farmland, 32.1 acres of Farmland of State Importance, and no Farmland of Local Importance. No permanent loss of access to farmland or isolation of portions of active farm properties would occur as a result of this alternative. Temporary impacts and disruptions to accessibility may occur during construction. Ongoing conversion of agricultural land to residential and urbanized land uses will continue along the SH 93 corridor in Jefferson County and Northwest Parkway corridor in Broomfield. This alternative will not change the trend of cumulative indirect effects.

4.18.2.4 REGIONAL ARTERIAL ALTERNATIVE

This alternative would impact a total of approximately 170.3 acres of Prime Farmland, 28.7 acres of Farmland of Statewide Importance, and no Farmland of Local Importance. No permanent loss of access to farmland or isolation of portions of active farm properties would occur as a result of this alternative. Temporary impacts and disruptions to accessibility may occur during construction. Ongoing conversion of agricultural land to residential and urbanized land uses will continue along the SH 93 corridor in Jefferson County and Northwest Parkway corridor in Broomfield. This alternative will not change the trend of cumulative indirect effects.

4.18.2.5 COMBINED ALTERNATIVE (RECOMMENDED ALTERNATIVE)

This alternative would impact a total of approximately 328.5 acres of Prime Farmland, 33.5 acres of Farmland of Statewide Importance, and no Farmland of Local Importance. No permanent loss of access to farmland would occur as a result of this alternative. Two possible farms along the Indiana Street/McIntyre Street alignment could be bisected by this alternative. The loss of a direct, cross-street access for farm equipment and resources to and from central farm facilities is considered a detrimental affect due to the increased travel along alternate local roadways to circumnavigate the new roadway to access a now isolated portion of the farm. Vehicles currently must cross the existing street to access portions of the farm.

Temporary impacts and disruptions to accessibility may occur during construction. Ongoing conversion of agricultural land to residential and urbanized land uses will continue along the SH 93 corridor in Jefferson County and Northwest Parkway corridor in Broomfield. This alternative will not change the trend of cumulative indirect effects.

4.18.3 SUGGESTED MITIGATION

Coordination with the Natural Resources Conservation Service (NRCS) resulted in the drafting of an impact evaluation that was completed on October 13, 2005 and was reviewed and approved by the NRCS January 5, 2006. This evaluation included the completion of form NRCS-CPA-106: Farmland Conversion Impact Rating Form for Corridor Type Projects. This form calculates the relative impacts of each alternative on the overall identified farmlands within the study area under two methods. The first identifies the total amount of both Prime Farmland and Farmland of Statewide Importance present within the study area and weighs them against the converted amount of farmland by each alternative within the study area. The second method addresses the type of farmland impacts that could occur. The NRCS overall rating assessments were 139.3 for the Freeway Alternative, 138.7 for the Tollway Alternative, 138.4 for the Regional Arterial Alternative, and 145.6 for the Combined Alternative (Recommended Alternative). All alternatives were below the maximum rating threshold of 260.

NRCS is responsible for providing farmland impact assessments. Possible farmland mitigation consists of stockpiling and reusing topsoil from Prime Farmlands within the study area for landscaping use within the project. Also, farming on right-of-way where appropriate terrain and soils exist could be recommended in cooperation with CDOT, to local agencies and affected farms

If any important agricultural features are affected as the designs of the build alternatives are further defined, mitigation could be considered as appropriate, such as replacement of irrigation ditches and pipes. Loss or damage to crops resulting from construction activities could be compensated. Any loss of direct access at farm properties bisected by new road construction could be assessed for potential underpass construction or alternative accommodation of farm equipment and resources.

4.18.4 SUMMARY OF IMPACTS

Impacts resulting from construction of the build alternatives are distributed equally within Boulder, Broomfield, and Jefferson Counties. The Regional Arterial Alternative follows an alignment along existing roadways for its entire length utilizing substantial amounts of existing CDOT right-of-way. This results in impacts to Prime Farmland and Farmlands of Statewide Importance that are 145.0 acres less than the Freeway Alternative, 159.7 acres less than Tollway Alternative, and 163.0 acres less than the Combined Alternative (Recommended Alternative). The impacted acres of Farmland of Statewide Importance are very similar among all alternatives. The following summarizes the impact results (see **Table 4.18-2**).

Table 4.18-2 Summary of Impacts to Prime Farmland and Farmland of State Importance

Farmland Type	Freeway Alternative Acreage	Tollway Alternative Acreage	Regional Arterial Alternative Acreage	Combined Alternative (Recommended Alternative) Acreage
Prime Farmland with Irrigation	313.9	326.6	170.3	328.5
Farmland of Statewide Importance	30.1	32.1	28.7	33.5
Total Acres	344.0	358.7	199.0	326.0

The Regional Arterial Alternative has the least direct and cumulative indirect effects upon existing farmlands and preserves all access; therefore, it is ranked as the most compatible alternative to the preservation of Prime and Unique Farmlands. The Freeway Alternative and the Tollway Alternative are ranked as intermediate and equitable choices because there is very little difference between the direct and estimated cumulative indirect effects and all farm access is preserved. The Combined Alternative (Recommended Alternative) is considered the least compatible with the preservation of Prime and Unique Farmland because, although the difference in gross acreage impacted and expected cumulative indirect effects are similar to both the Freeway Alternative and the Tollway Alternative, this alternative would have access issues with existing farm properties along the Indiana Street/McIntyre Street alignment.



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REFERENCES

2000, Natural Resources Conservation Service; Farmland Protection Policy Act, 2000 CFR Title 7, Volume 6, Part 658.

2005, Natural Resources Conservation Service; Farmland Conversion Impact Rating for Corridor Type Projects, NCRS-CPA-106.

2005, Colorado Department of Transportation; Technical Reports Memorandum, p.19.



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