# Idaho and Southwestern Montana Greater Sage-Grouse

## Draft Land Use Plan Amendment and Environmental Impact Statement

## Volume I

US Department of the Interior
Bureau of Land Management

US Department of Agriculture
Forest Service

October 2013

BLM
Forest Service

# TABLE OF CONTENTS

Chapter Page

## Volume One

**DEAR READER LETTER**

**EXECUTIVE SUMMARY ..... ES-1**

ES.1 Introduction ..... ES-1
ES.2 Purpose of and Need for the Land Use Plan Amendments ..... ES-4
ES.3 Scoping ..... ES-6
ES.4 Issues ..... ES-7
ES.5 Planning Criteria ..... ES-9
ES.6 Management Alternatives ..... ES-9
ES.6.1 Alternative A: No Action ..... ES-11
ES.6.2 Elements Common to Alternatives B, C, D, E, and F ..... ES-11
ES.6.3 Alternative B ..... ES-14
ES.6.4 Alternative C ..... ES-14
ES.6.5 Alternative D ..... ES-15
ES.6.6 Alternative E ..... ES-15
ES.6.7 Alternative F ..... ES-16
ES.7 Environmental Consequences ..... ES-16

**CHAPTER 2 MAPS**

## Volume Two

**CHAPTER 1. INTRODUCTION ..... 1-1**

1.1 Background ..... 1-1
1.1.1 Forest Service Involvement ..... 1-5
1.1.2 USFWS Involvement ..... 1-6
1.1.3 State Government and Wildlife Agencies Involvement ..... 1-6
1.1.4 Idaho and Southwestern Montana Sub-Region ..... 1-8
1.2 Purpose and Need ..... 1-11
1.3 Description of the Greater Sage-Grouse Planning Area ..... 1-12
1.3.1 Overview ..... 1-12
1.3.2 Land Uses ..... 1-18
1.4 Planning Process ..... 1-18
1.4.1 BLM Planning Process ..... 1-18
1.4.2 Forest Service Planning Process ..... 1-22
1.5 Scoping and Identification of Issues ..... 1-24
1.5.1 The Scoping Process ..... 1-24
1.5.2 Issues Identified for Consideration in the Idaho and Southwestern Montana Sub-Region ..... 1-26
1.5.3 Planning Issues ..... 1-26
1.6 Development of Planning Criteria ..... 1-34
1.6.1 Preliminary Planning Criteria ..... 1-34

## TABLE OF CONTENTS *(continued)*

Chapter Page


1.7 Relationship to Other Policies, Plans and Programs ..... 1-37
1.7.1 Federal Plans ..... 1-37
1.7.2 State Plans ..... 1-38
1.7.3 County Plans ..... 1-38
1.7.4 Endangered Species Recovery Plans ..... 1-40
1.7.5 Memoranda of Understanding ..... 1-40
1.7.6 Activity Plans and Amendments ..... 1-43
1.7.7 Habitat Management Plans ..... 1-43

**CHAPTER 2. ALTERNATIVES ..... 2-1**

2.1 Background ..... 2-1
2.1.1 How to Read This Chapter ..... 2-1
2.1.2 Alternative Development Process ..... 2-2
2.1.3 Developing Alternatives for the Idaho and Southwestern Montana Sub-Region ..... 2-5
2.1.4 Range of Reasonable Alternatives ..... 2-7
2.2 Brief Alternative Descriptions ..... 2-7
2.2.1 Management Common to All Alternatives (Alternatives A through F) ..... 2-8
2.2.2 Alternative A – No Action Alternative ..... 2-10
2.2.3 Brief Description of the Action Alternatives ..... 2-11
2.3 Additional Alternatives Considered ..... 2-17
2.3.1 Eliminated From Detailed Analysis ..... 2-17
2.3.2 Incorporated in Whole or In Part ..... 2-19
2.4 Summary Comparison of Alternatives ..... 2-21
2.4.1 Description of Alternatives ..... 2-28
2.5 Preferred Alternative ..... 2-45
2.5.1 Consideration for Selecting a Preferred Alternative ..... 2-45
2.5.2 Identification of the Preferred Alternative ..... 2-45
2.6 Detailed Description of Alternatives ..... 2-46
2.6.1 Alternative A – No Action ..... 2-47
2.6.2 Alternative B ..... 2-62
2.6.3 Alternative C ..... 2-64
2.6.4 Alternative D ..... 2-65
2.6.5 Alternative E ..... 2-75
2.6.6 Alternative F ..... 2-91
2.6.7 Decision to be Made ..... 2-92
2.6.8 How to Read Tables 2-17 and 2-18 ..... 2-92
2.7 Summary of Environmental Consequences ..... 2-185
2.8 Summary Comparison of Alleviated Threats ..... 2-195

## TABLE OF CONTENTS *(continued)*

Chapter Page


**CHAPTER 3. AFFECTED ENVIRONMENT ..... 3-1**

3.1 Introduction ..... 3-1
3.1.1 Organization of Chapter 3 ..... 3-3
3.2 Special Status Species – Greater Sage-Grouse ..... 3-5
3.2.1 Conditions within the Planning Area ..... 3-5
3.2.2 Habitat Conditions and Trends ..... 3-12
3.2.3 Regional Context ..... 3-12
3.3 Vegetation ..... 3-25
3.3.1 Conditions within the Planning Area ..... 3-26
3.3.2 Conditions on BLM-Administered Lands ..... 3-28
3.3.3 Conditions on Forest Service-Administered Lands ..... 3-36
3.3.4 Trends ..... 3-36
3.4 Fish and Wildlife ..... 3-37
3.4.1 Terrestrial Wildlife ..... 3-37
3.4.2 Regional Context ..... 3-37
3.4.3 Aquatic Wildlife ..... 3-44
3.5 Other Special Status Species ..... 3-48
3.5.1 Conditions within the Planning Area ..... 3-48
3.6 Wild Horse and Burro Management ..... 3-56
3.6.1 Conditions on BLM-Administered Lands ..... 3-57
3.6.2 Conditions on Forest Service-Administered Lands ..... 3-57
3.6.3 Regional Context ..... 3-57
3.7 Wildland Fire Management ..... 3-59
3.7.1 Conditions within the Planning Area ..... 3-61
3.7.2 Trends ..... 3-63
3.7.3 Regional Context ..... 3-67
3.8 Livestock Grazing ..... 3-70
3.8.1 Conditions within the Planning Area ..... 3-71
3.8.2 Regional Context ..... 3-73
3.9 Recreation ..... 3-74
3.9.1 Conditions within the Planning Area ..... 3-74
3.9.1 Trends ..... 3-79
3.10 Travel Management ..... 3-81
3.10.1 Conditions on BLM-Administered Lands ..... 3-81
3.10.2 Conditions on Forest Service-Administered Lands ..... 3-84
3.10.3 Current Conditions ..... 3-85
3.10.4 Regional Context ..... 3-85
3.11 Lands and Realty ..... 3-86
3.11.1 Conditions within the Planning Area ..... 3-87
3.11.2 Trends ..... 3-96
3.11.3 Regional Context ..... 3-97
3.12 Mineral Resources ..... 3-101

3.12.1 Conditions within the Planning Area ..... 3-102
3.12.2 Trends ..... 3-116
3.13 Special Designations ..... 3-119
3.13.1 Areas of Critical Environmental Concern (ACEC) ..... 3-120
3.13.1 Wilderness ..... 3-127
3.13.2 Wilderness Study Areas ..... 3-132
3.13.3 National Landscapes, Monuments, and Conservation Areas ..... 3-133
3.13.4 Wild and Scenic Rivers ..... 3-135
3.13.5 Regional Context ..... 3-138
3.14 Soil Resources ..... 3-138
3.15 Conditions within the Planning Area ..... 3-139
3.15.1 Trends ..... 3-141
3.16 Water Resources ..... 3-142
3.16.1 Existing Conditions ..... 3-142
3.16.2 Conditions within the Planning Area ..... 3-142
3.16.3 Trends ..... 3-146
3.17 Cultural Resources ..... 3-146
3.17.1 Considering Effects on Cultural Resources Pursuant to Section 106 of the NHPA ..... 3-147
3.17.2 Conditions of the Planning Area ..... 3-148
3.17.3 Trends ..... 3-152
3.18 Tribal Interests ..... 3-152
3.19 Visual Resources ..... 3-155
3.19.1 Conditions on BLM-Administered Lands ..... 3-156
3.19.2 Conditions on Forest Service-Administered Lands ..... 3-157
3.20 Lands with Wilderness Characteristics ..... 3-160
3.21 Forest Service Roadless Areas ..... 3-162
3.22 Air Quality and Climate Change ..... 3-162
3.22.1 Conditions within the Planning Area ..... 3-164
3.22.2 Conditions on BLM-Administered and Forest Service-Administered Lands ..... 3-166
3.22.3 Trends ..... 3-166
3.23 Social and Economic Conditions (Including Environmental Justice) ..... 3-167
3.23.1 Indicators ..... 3-172
3.23.2 Existing Conditions and Trends ..... 3-172
3.24 Forest and Woodland Products ..... 3-203

**CHAPTER 4. ENVIRONMENTAL CONSEQUENCES ..... 4-1**

4.1 Analytical Assumptions ..... 4-2
4.1.1 General Methodology for Analyzing Impacts ..... 4-3
4.1.2 Incomplete or Unavailable Information ..... 4-4
4.2 Sage-Grouse and Sage-Grouse Habitat ..... 4-4

4.2.1 Methods and Assumptions ..... 4-4
4.2.2 Nature and Type of Effects ..... 4-8
4.2.3 Impacts on GRSG and GRSG Habitat Common to All Alternatives ..... 4-17
4.2.4 Alternative A ..... 4-26
4.2.1 Impacts Common to All Action Alternatives ..... 4-37
4.2.2 Alternative B ..... 4-42
4.2.3 Alternative C ..... 4-49
4.2.4 Alternative D ..... 4-54
4.2.5 Alternative E ..... 4-59
4.2.6 Alternative F ..... 4-64
4.3 Vegetation ..... 4-66
4.3.1 Methods and Assumptions ..... 4-66
4.3.2 Nature and Type of Effects ..... 4-67
4.3.3 Impacts on Vegetation Common to All Alternatives ..... 4-72
4.3.4 Alternative A ..... 4-73
4.3.5 Alternative B ..... 4-82
4.3.6 Alternative C ..... 4-100
4.3.7 Alternative D ..... 4-102
4.3.8 Alternative E ..... 4-104
4.3.9 Alternative F ..... 4-106
4.4 Wild Horse and Burro Management ..... 4-107
4.4.1 Methods and Assumptions ..... 4-107
4.4.2 Nature and Type of Effects ..... 4-109
4.4.3 Impacts Common to All Alternatives ..... 4-109
4.4.4 Alternative A ..... 4-110
4.4.5 Alternative B ..... 4-112
4.4.6 Alternative C ..... 4-113
4.4.7 Alternative D ..... 4-114
4.4.8 Alternative E ..... 4-116
4.4.9 Alternative F ..... 4-117
4.5 Wildland Fire Management ..... 4-118
4.5.1 Methods and Assumptions ..... 4-118
4.5.2 Nature and Type of Effects ..... 4-119
4.5.3 Impacts on Wildland Fire Management Common to All Alternatives ..... 4-121
4.5.4 Alternative A ..... 4-123
4.5.5 Alternative B ..... 4-124
4.5.6 Alternative C ..... 4-127
4.5.7 Alternative D ..... 4-128
4.5.8 Alternative E ..... 4-130
4.5.9 Alternative F ..... 4-132

4.6 Livestock Grazing/Range Management....4-134
4.6.1 Methods and Assumptions....4-134
4.6.2 Nature and Type of Effects....4-135
4.6.3 Impacts on Livestock Grazing Common to All Alternatives....4-138
4.6.4 Alternative A....4-139
4.6.5 Alternative B....4-143
4.6.6 Alternative C....4-146
4.6.7 Alternative D....4-148
4.6.8 Alternative E....4-150
4.6.9 Alternative F....4-152
4.7 Travel Management....4-154
4.7.1 Methods and Assumptions....4-154
4.7.2 Nature and Type of Effects....4-155
4.7.3 Impacts on Travel Management Common to All Alternatives....4-156
4.7.4 Alternatives Analysis....4-156
4.8 Lands and Realty....4-157
4.8.1 Methods and Assumptions....4-158
4.8.2 Nature and Type of Effects....4-159
4.8.3 Impacts on Lands and Realty Common to All Alternatives....4-160
4.8.4 Alternative A....4-161
4.8.5 Alternative B....4-162
4.8.6 Alternative C....4-164
4.8.7 Alternative D....4-166
4.8.8 Alternative E....4-167
4.8.9 Alternative F....4-168
4.9 Leasable Minerals (Leased and Unleased), Including Fluid Minerals and Nonenergy Solid Leasable Minerals....4-169
4.9.1 Fluid Minerals....4-169
4.9.2 Geothermal....4-183
4.10 Locatable Minerals....4-190
4.10.1 Methods and Assumptions....4-190
4.10.2 Nature and Type of Effects....4-192
4.10.3 Impacts on Locatable Minerals Common to All Alternatives....4-192
4.10.4 Alternative A....4-193
4.10.5 Alternative B....4-194
4.10.6 Alternative C....4-194
4.10.7 Alternative D....4-195
4.10.8 Alternative E....4-195
4.10.9 Alternative F....4-195
4.11 Mineral Materials (Salables)....4-195
4.11.1 Methods and Assumptions....4-195
4.11.2 Nature and Type of Effects....4-197

4.11.3 Alternative A ..... 4-197
4.11.4 Alternative B ..... 4-198
4.11.5 Alternative C ..... 4-199
4.11.6 Alternative D ..... 4-199
4.11.7 Alternative E ..... 4-200
4.11.8 Alternative F ..... 4-200
4.12 Nonenergy Leasable Minerals ..... 4-201
4.12.1 Methods and Assumptions ..... 4-201
4.12.2 Nature and Type of Effects ..... 4-202
4.12.3 Alternative A ..... 4-202
4.12.5 Alternative B ..... 4-203
4.12.6 Alternative C ..... 4-204
4.12.7 Alternative D ..... 4-205
4.12.8 Alternative E ..... 4-207
4.12.9 Alternative F ..... 4-207
4.13 Special Designations ..... 4-207
4.13.1 ACECs and ZAs ..... 4-207
4.13.2 Methods and Assumptions ..... 4-207
4.13.3 Nature and Type of Effects ..... 4-208
4.13.4 Alternative A ..... 4-211
4.13.5 Alternative B ..... 4-211
4.13.6 Alternative C ..... 4-212
4.13.7 Alternative D ..... 4-212
4.13.8 Alternative E ..... 4-212
4.13.9 Alternative F ..... 4-212
4.14 Lands with Wilderness Characteristics and Roadless Areas ..... 4-212
4.14.1 Methods and Assumptions ..... 4-213
4.14.2 Nature and Type of Effects ..... 4-213
4.14.3 Impacts on lands with Wilderness Characteristics Common to All Alternatives ..... 4-215
4.14.4 Alternative A ..... 4-216
4.14.5 Alternative B ..... 4-218
4.14.6 Alternative C ..... 4-218
4.14.7 Alternative D ..... 4-219
4.14.8 Alternative E ..... 4-220
4.14.9 Alternative F ..... 4-220
4.15 Social and Economic Conditions (Including Environmental Justice) ..... 4-221
4.15.1 Methods and Assumptions ..... 4-221
4.15.2 Nature and Types of Effects ..... 4-222
4.15.3 Economic Impacts ..... 4-222
4.15.4 Social Impacts ..... 4-237
4.15.5 Environmental Justice Impacts ..... 4-239

4.16 Cumulative Effects ..... 4-242
4.16.1 Cumulative Analysis Methodology ..... 4-242
4.16.2 Past, Present, and Reasonably Foreseeable Future Actions ..... 4-243
4.16.3 Special Status Species – Greater Sage-Grouse ..... 4-291
4.16.4 Vegetation ..... 4-301
4.16.5 Wild Horses and Burros ..... 4-304
4.16.6 Wildland Fire ..... 4-305
4.16.7 Livestock Grazing ..... 4-307
4.16.8 Travel and Transportation ..... 4-309
4.16.9 Lands and Realty ..... 4-309
4.16.10 Leasable Minerals ..... 4-311
4.16.11 Locatable Minerals ..... 4-313
4.16.12 Mineral Materials ..... 4-313
4.16.13 Nonenergy Leasable Minerals ..... 4-313
4.16.14 Special Designations ..... 4-314
4.16.15 Lands with Wilderness Characteristics ..... 4-315
4.16.16 Social and Economic Conditions (Including Environmental Justice) ..... 4-316
4.17 The Relationship Between Short-Term Uses of the Human Environment and Maintenance and Enhancement of Long-Term Productivity ..... 4-319
4.18 Irreversible and Irretrievable Commitment of Resources ..... 4-320
4.19 Unavoidable Adverse Impacts ..... 4-320

**CHAPTER 5. CONSULTATION AND COORDINATION ..... 5-1**

5.1 Introduction ..... 5-1
5.2 Public Involvement ..... 5-1
5.2.1 Scoping Period ..... 5-2
5.2.2 Public Notification of Scoping ..... 5-2
5.2.3 Public Scoping Open Houses ..... 5-2
5.2.4 Other Public Involvement ..... 5-3
5.2.5 Future Public Involvement ..... 5-4
5.3 Consultation and Coordination ..... 5-4
5.3.1 Cooperating Agencies ..... 5-5
5.3.2 USFWS Section 7 Consultation ..... 5-7
5.3.3 Native American Tribal Consultation ..... 5-8
5.4 Consultation Letters ..... 5-9
5.5 List of Preparers ..... 5-9

**CHAPTER 6. REFERENCES ..... 6-1**

**CHAPTER 7. ACRONYMS AND GLOSSARY ..... 7-1**

7.1 Acronyms ..... 7-1
7.2 Glossary ..... 7-4

## FIGURES

Page

## Volume One

ES-1 Idaho and Southwestern Montana GRSG EIS Planning Area Boundaries ..... ES-5

2-1 Alternative A: Existing Habitat with Preliminary Priority and General Habitat
2-2 Alternative B: Preliminary Priority and General Management Areas
2-3 Alternative C: Preliminary Priority Management Area
2-4 Alternative D: Preliminary Priority, Medial, and General Management Areas
2-5 Alternative E: Idaho Core, Important, and General Habitat Zones, Montana Preliminary Priority and General Management Areas, and Utah SGMA
2-6 Alternative F: Preliminary Priority, General, and Restoration Management Areas
2-7 Alternative A: Open and Closed to Grazing
2-8 Alternative B: Open and Closed to Grazing
2-9 Alternative C: Open and Closed to Grazing
2-10 Alternative D: Open and Closed to Grazing
2-11 Alternative E: Open and Closed to Grazing
2-12 Alternative F: Open and Closed to Grazing
2-13 Alternative A: Travel and Transportation
2-14 Alternative B: Travel and Transportation
2-15 Alternative C: Travel and Transportation
2-16 Alternative D: Travel and Transportation
2-17 Alternative E: Travel and Transportation
2-18 Alternative F: Travel and Transportation
2-19 Alternative A: Right-of-way Exclusion and Avoidance
2-20 Alternative B: Right-of-way Exclusion and Avoidance
2-21 Alternative C: Right-of-way Exclusion and Avoidance
2-22 Alternative D: Right-of-way Exclusion and Avoidance
2-23 Alternative E: Right-of-way Exclusion and Avoidance
2-24 Alternative F: Right-of-way Exclusion and Avoidance
2-25 Alternative A: Areas Withdrawn from Locatable Mineral Entry
2-26 Alternative B: Areas Withdrawn from Locatable Mineral Entry
2-27 Alternative C: Areas Withdrawn from Locatable Mineral Entry
2-28 Alternative D: Areas Withdrawn from Locatable Mineral Entry
2-29 Alternative E: Areas Withdrawn from Locatable Mineral Entry
2-30 Alternative F: Areas Withdrawn from Locatable Mineral Entry
2-31 Alternative A: Open, Closed, or Stipulations to Nonenergy Leasing
2-32 Alternative B: Open, Closed, or Stipulations to Nonenergy Leasing
2-33 Alternative C: Open, Closed, or Stipulations to Nonenergy Leasing
2-34 Alternative D: Open, Closed, or Stipulations to Nonenergy Leasing
2-35 Alternative E: Open, Closed, or Stipulations to Nonenergy Leasing
2-36 Alternative F: Open, Closed, or Stipulations to Nonenergy Leasing
2-37 Alternative A: Oil and Gas Potential Constraints
2-38 Alternative B: Oil and Gas Potential Constraints

2-39 Alternative C: Oil and Gas Potential Constraints
2-40 Alternative D: Oil and Gas Potential Constraints
2-41 Alternative E: Oil and Gas Potential Constraints
2-42 Alternative F: Oil and Gas Potential Constraints
2-43 Alternative A: BLM Areas of Critical Environmental Concern
2-44 Alternative C: BLM Areas of Critical Environmental Concern
2-45 Alternative F: BLM Areas of Critical Environmental Concern
2-46 Alternative F: BLM Areas of Critical Environmental Concern and Forest Service Zoological Areas
2-47 Alternative A: Open and Closed to Geothermal Leasing
2-48 Alternative B: Open and Closed to Geothermal Leasing
2-49 Alternative C: Open and Closed to Geothermal Leasing
2-50 Alternative D: Open and Closed to Geothermal Leasing
2-51 Alternative E: Open and Closed to Geothermal Leasing
2-52 Alternative F: Open and Closed to Geothermal Leasing
2-53 Alternative A: Existing Designated Utility Corridors
2-54 Alternative B: Existing Designated Utility Corridors
2-55 Alternative C: Existing Designated Utility Corridors
2-56 Alternative D: Existing Designated Utility Corridors
2-57 Alternative E: Existing Designated Utility Corridors
2-58 Alternative F: Existing Designated Utility Corridors
2-59 Alternative A: Lands Identified for Disposal or Exchange
2-60 Alternative B: Lands Identified for Disposal or Exchange
2-61 Alternative C: Lands Identified for Disposal or Exchange
2-62 Alternative D: Lands Identified for Disposal or Exchange
2-63 Alternative E: Lands Identified for Disposal or Exchange
2-64 Alternative F: Lands Identified for Disposal or Exchange
2-65 Alternative A: Right-of-way Exclusion and Avoidance Areas for Wind
2-66 Alternative B: Right-of-way Exclusion and Avoidance Areas for Wind
2-67 Alternative C: Right-of-way Exclusion and Avoidance Areas for Wind
2-68 Alternative D: Right-of-way Exclusion and Avoidance Areas for Wind
2-69 Alternative E: Right-of-way Exclusion and Avoidance Areas for Wind
2-70 Alternative F: Right-of-way Exclusion and Avoidance Areas for Wind

## Volume Two

1-1 Greater Sage-Grouse Distribution ..... 1-2
1-2 BLM USFS GRSG Planning Strategy Sub-region/EIS Boundaries ..... 1-4
1-3 USFWS Priority Areas for Conservation with Preliminary Priority and General Habitat ..... 1-7
1-4 Idaho and Southwestern Montana Sub-Regional Planning Area ..... 1-10
1-5 Idaho and Southwestern Montana Greater Sage-Grouse Population Areas ..... 1-17
1-6 BLM Nine Step Planning Process ..... 1-19

## FIGURES *(continued)* Page


3-1 Western United States WAFWA Zones ..... 3-6
3-2 Wild Horse and Burro Herd Management Areas and Herd Areas ..... 3-58
3-3 Fire History in the Planning Area ..... 3-68
3-4 Fire Frequency in the Planning Area ..... 3-69
3-5 Special Recreation Management Areas ..... 3-76
3-6 Authorized Rights-of-Way in the Planning Area ..... 3-89
3-7 Pending and Expired Rights-of-Way in the Planning Area ..... 3-90
3-8 Oil and Gas Potential of Federal Oil and Gas Mineral Estate ..... 3-104
3-9 Geothermal Potential of Federal Geothermal Mineral Estate ..... 3-107
3-10 Mineral Material Commodity Types in the Planning Area ..... 3-108
3-11 Locatable Mineral Potential in the Planning Area ..... 3-110
3-12 Existing Surface Management Plans or Notices in the Planning Area ..... 3-111
3-13 Unleased Known Phosphate Leasing Areas ..... 3-115
3-14 Special Designations in the Planning Area ..... 3-121
3-15 Existing Areas of Critical Environmental Concern with Preliminary Priority and General Habitat ..... 3-122
3-16 Lands with Wilderness Characteristics and Roadless Areas in Planning Area ..... 3-163

## Volume One

ES-1 Acres of GRSG Habitat by Surface Management ..... ES-3
ES-2 Identified Threats to Greater Sage-Grouse ..... ES-6
ES-3 Planning Issues ..... ES-7

## Volume Two

1-1 BLM and Forest Service Land Use Plans Proposed for Amendment ..... 1-8
1-2 Identified Threats to Greater Sage-Grouse (from greatest to least) ..... 1-11
1-3 Acres of GRSG Habitat by Surface Management ..... 1-13
1-4 Acres of GRSG Habitat by County ..... 1-14
1-5 County Land Use and Sage-Grouse Management Plans ..... 1-39
2-1 USFWS-Identified Threats to Greater Sage-Grouse and Their Habitat and Applicable BLM and Forest Service Resource Programs for Addressing Threats* ..... 2-3
2-2 Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat) ..... 2-22
2-3 Description of Alternatives ..... 2-28
2-4 Existing Fluid Minerals Timing Restrictions To Protect Greater Sage-Grouse Habitat, By Land Use Plan ..... 2-55
2-5 Mid-Scale Indicators and Suitability Characteristics for GRSG Habitat ..... 2-69
2-6 Fine-Scale Indicators Suitability Characteristics for GRSG Seasonal-Use Areas ..... 2-69
2-7 Fine-Scale Indicators Suitability Characteristics for GRSG Lek Sites ..... 2-70
2-8 Site-Scale Nesting and Early Brood-Rearing Habitat Characteristics ..... 2-71
2-9 Site-Scale Indicators and Suitability Characteristics for GRSG Summer Habitat ..... 2-71
2-10 Site-Scale Indicators and Suitability Characteristics for GRSG Winter Habitat ..... 2-72
2-11 Alternative E Suppression ..... 2-83
2-12 Alternative E Prevention ..... 2-84
2-13 Alternative E Restoration ..... 2-87
2-14 General Characteristics of Late Brood Rearing Habitat ..... 2-90
2-15 General Characteristics of Winter Habitat ..... 2-90
2-16 General Characteristics of Productive Breeding/Nesting and Early Brood Rearing Habitat ..... 2-90
2-17 Goals and Objectives by Alternative ..... 2-95
2-18 Management Actions by Alternative ..... 2-98
2-19 Summary of Environmental Consequences ..... 2-187
2-20 Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region ..... 2-197
3-1 Acres of GRSG Habitat by Surface Management ..... 3-2
3-2 Acres of GRSG Habitat by Population Area within the Idaho and Southwestern Montana Planning Area ..... 3-9
3-3 Acres of GRSG Population Areas within PACs ..... 3-10
3-4 Habitat Conditions, Trends and Primary Threats to GRSG Habitat in the Idaho and Southwestern Montana Planning Area ..... 3-13

3-5 Occupied[a] Lek Metrics for GRSG Population Areas within the Idaho and Southwestern Montana Sub-Region ..... 3-24
3-6 Acres of Vegetation Communities within PPH and PGH on BLM-Administered and Forest Service-Administered Lands within the Planning Area ..... 3-29
3-7 Acres of Low Sagebrush within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-30
3-8 Acres of Mixed Sagebrush within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-31
3-9 Acres of Tall Sagebrush within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-31
3-10 Acres of Annual Grass within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-32
3-11 Acres of Perennial Grass within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-33
3-12 Acres of Crested Wheatgrass within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-34
3-13 Acres of Conifer Encroachment within PPH and PGH on BLM- and Forest Service-Administered lands within the Planning Area by GRSG Analysis Area ..... 3-35
3-14 Acres of Conifer and Pinyon-Juniper Land Cover within GRSG Habitat ..... 3-37
3-15 Acres of Cheatgrass Potential within GRSG Habitat ..... 3-37
3-16 Acres of Cropland within GRSG Habitat ..... 3-38
3-17 Native and Nonnative Fish Species Found within the Planning Area and their Status ..... 3-45
3-18 Special Status Species within the Planning Area ..... 3-49
3-19 HMAs within the Planning Area ..... 3-59
3-20 Acres of Wild Horse and Burro Areas within GRSG Habitat in the Planning Area ..... 3-59
3-21 BLM Treatment Types and Acreages Over the Past Five Years ..... 3-63
3-22 Acres of Wildland Fire within GRSG Habitat ..... 3-70
3-23 Acres with High Probability for Wildland Fire within GRSG Habitat[1] ..... 3-70
3-24 Idaho and Southwestern Montana Sub-Region Planning Area – Allotments ..... 3-72
3-25 Acres of Grazing Allotments within GRSG Habitat ..... 3-73
3-26 Acres of BLM Allotments Not Meeting Land Health Standards within GRSG Habitat ..... 3-74
3-27 Miles of Fences within GRSG Habitat ..... 3-74
3-28 Recreation Management Areas ..... 3-75
3-29 Falconry Permits (Fall 2010-Spring 2011) ..... 3-79
3-30 Miles of Roads within GRSG Habitat ..... 3-85
3-31 Acres of Roads within GRSG Habitat ..... 3-86
3-32 Acres of GRSG Habitat by Surface Management ..... 3-87
3-33 Land Classifications/Designations in Planning Area (Acres) ..... 3-88
3-34 Acres of GRSG Habitat within City Limits ..... 3-97
3-35 Number of Communication Towers within GRSG Habitat ..... 3-98
3-36 Acres of Transmission Lines within GRSG Habitat ..... 3-98

3-37 Acres of Utility Corridors within GRSG Habitat ..... 3-99
3-38 Miles of Railroads within GRSG Habitat ..... 3-99
3-39 Acres of Railroads within GRSG Habitat ..... 3-99
3-40 Acres of Vertical Obstructions within GRSG Habitat ..... 3-100
3-41 Acres of Wind Towers within GRSG Habitat ..... 3-100
3-42 Acres of Wind Energy Authorizations within GRSG Habitat ..... 3-101
3-43 Existing Mineral Materials Cases[1] ..... 3-106
3-44 Authorized or Pending 3809 Plans and Notices[1] ..... 3-112
3-45 BLM Areas of Critical Environmental Concern ..... 3-123
3-46 BLM-Administered Wilderness Areas ..... 3-130
3-47 Forest Service-Administered Wilderness Areas ..... 3-132
3-48 National Park Service Wilderness Areas ..... 3-132
3-49 National Historic Trails ..... 3-135
3-50 Forest Service-Administered Wild and Scenic Rivers ..... 3-137
3-51 BLM-Administered Wild and Scenic Rivers ..... 3-137
3-52 Acres of Conservation Areas within GRSG Habitat ..... 3-138
3-53 Recorded Cultural Resource Surveys and Sites within GRSG Habitat in the Planning Area ..... 3-148
3-54 Well Known Historic Properties within the Planning Area ..... 3-149
3-55 Forest Service Priority Heritage Assets and Listed Properties within the Planning Area ..... 3-150
3-56 BLM Visual Resource Management Class Acres ..... 3-157
3-57 Lands with Wilderness Characteristics within the Planning Area ..... 3-162
3-58 Commuter Patterns in the Socioeconomic Study Area, 2010 ..... 3-168
3-59 BLM and Forest Service Plans, Management Units, and Counties within the Socioeconomic Study Area ..... 3-170
3-60 Population Growth, 1990-2010 ..... 3-172
3-61 Demographic Characteristics, Share in Total Population (percent), 2010 ..... 3-174
3-62 Employment by Sector within the Socioeconomic Study Area ..... 3-179
3-63 Labor Income by Sector within the Socioeconomic Study Area (2010 dollars) ..... 3-180
3-64 Annual Unemployment, 2007 – 2011 ..... 3-184
3-65 Estimated Annual Visits by Planning Unit ..... 3-186
3-66 Visitor Spending from Recreation on BLM- and Forest Service-Administered Land in Socioeconomic Study Area, FY 2011 ..... 3-186
3-67 Farm Earnings Detail, 2010 (2010 dollars) ..... 3-188
3-68 Active and Billed Animal Unit Months ..... 3-190
3-69 Mining Sector Employment by County ..... 3-192
3-70 Payments in Lieu of Taxes (PILT) Received in the Socioeconomic Study Area by County in 2010 ..... 3-197
3-71 BLM and Forest Service Employment and Related Expenditures in the Socioeconomic Study Area ..... 3-198
3-72 Population Race and Ethnicity, 2010 ..... 3-200
3-73 Low-Income Populations, 2006-2010 Average ..... 3-202

4-1 Resource Programs Impacting GRSG by Threat in the Sub-region ..... 4-6
4-2 GRSG Habitat Condition[1] and Trend Analysis within the Idaho and Southwestern Montana Sub-region after 10 Years[2] ..... 4-18
4-3 GRSG Habitat Condition[1] and Trend Analysis within the Idaho and Southwestern Montana Sub-region after 50 Years[2] ..... 4-19
4-4 GRSG Habitat within Avoidance Areas for ROWs and SUAs in the Idaho and Southwestern Montana Sub-region ..... 4-20
4-5 GRSG Habitat within Exclusion Areas for ROWs and SUAs in the Idaho and Southwestern Montana Sub-region ..... 4-22
4-6 GRSG Habitat Acres Closed to Grazing in the Idaho and Southwestern Montana Sub-region ..... 4-24
4-7 GRSG Habitat Where Motorized Travel Would Be Limited to Roads, Designated Roads, and Trails in the Idaho and Southwest Montana Sub-Region ..... 4-27
4-8 GRSG Habitat within BLM ACECs and Forest Service Zoological Areas in the Idaho and Southwestern Montana Sub-region ..... 4-29
4-9 Alternative A: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Oil and Gas Leasing by Population Area ..... 4-32
4-10 Alternative A: Percent of GRSG Habitat and Occupied Leks Affected by Mineral Withdrawal by Population Area ..... 4-33
4-11 Alternative A: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Salable Minerals by Population Area ..... 4-33
4-12 Alternative A: Percent of GRSG Habitat and Occupied Leks Affected by ROW Exclusion or Avoidance by Population Area ..... 4-35
4-13 Alternative A: Percent of GRSG Habitat and Occupied Leks Affected by Geothermal Energy by Population Area ..... 4-36
4-14 Alternative A: Percent of GRSG Habitat and Occupied Leks Affected by Travel Management by Population Area ..... 4-36
4-15 Acres of Designated Habitat Types in the Idaho and Southwestern Montana Sub-region ..... 4-38
4-16 Acres of Priority Areas for Conservation within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-40
4-17 Alternative B: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Oil and Gas Leasing by Population Area ..... 4-44
4-18 Alternative B: Percent of GRSG Habitat and Occupied Leks Affected by Mineral Withdrawal by Population Area ..... 4-45
4-19 Alternative B: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Salable Minerals by Population Area ..... 4-46
4-20 Alternative B: Percent of GRSG Habitat and Occupied Leks Affected by ROW Exclusion or Avoidance by Population Area ..... 4-47
4-21 Alternative B: Percent of GRSG Habitat and Occupied Leks Affected by Geothermal Energy by Population Area ..... 4-48
4-22 Alternative B: Percent of GRSG Habitat and Occupied Leks Affected by Travel Management Designations by Population Area ..... 4-48

4-23 Alternative C: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Oil and Gas Leasing by Population Area ..... 4-51
4-24 Alternative C: Percent of GRSG Habitat and Occupied Leks Affected by Mineral Withdrawal by Population Area ..... 4-52
4-25 Alternative C: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Salable Minerals by Population Area ..... 4-52
4-26 Alternative C: Percent of GRSG Habitat and Occupied Leks Affected by ROW Exclusion or Avoidance by Population Area ..... 4-53
4-27 Alternative C: Percent of GRSG Habitat and Occupied Leks Affected by Travel Management Designations by Population Area ..... 4-54
4-28 Alternative D: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Oil and Gas Leasing by Population Area ..... 4-56
4-29 Alternative D: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Salable Minerals by Population Area ..... 4-56
4-30 Alternative D: Percent of GRSG Habitat and Occupied Leks Affected by ROW Exclusion or Avoidance by Population Area ..... 4-57
4-31 Alternative D: Percent of GRSG Habitat and Occupied Leks Affected by Geothermal Energy by Population Area ..... 4-58
4-32 Alternative D: Percent of GRSG Habitat and Occupied Leks Affected by Travel Management Designations by Population Area ..... 4-58
4-33 Alternative D: Percent of GRSG Habitat and Occupied Leks Affected by Adaptive Management Trigger by Population Area ..... 4-59
4-34 Alternative E: Percent of GRSG Habitat Designations and Occupied Leks within each Conservation Area ..... 4-60
4-35 Alternative E: Percent of GRSG Habitat and Occupied Leks Affected by Closure to Oil and Gas Leasing by Population Area ..... 4-62
4-36 Alternative E: Percent of GRSG Habitat and Occupied Leks Affected by ROW Exclusion or Avoidance by Population Area ..... 4-62
4-37 Alternative E: Percent of GRSG Habitat and Occupied Leks Affected by Travel Management Designations by Population Area ..... 4-63
4-38 Alternative E: Percent of GRSG Habitat and Occupied Leks Affected by Adaptive Management Trigger by Population Area ..... 4-64
4-39 Acres of Sagebrush Vegetation within ROW Avoidance Areas in the Idaho and Southwest Montana Sub-Region ..... 4-74
4-40 Acres of Sagebrush Vegetation within ROW Exclusion Areas in the Idaho and Southwest Montana Sub-Region ..... 4-75
4-41 Acres of Sagebrush Vegetation Closed to Non-energy Leasable Mineral Leasing in the Idaho and Southwest Montana Sub-Region[1] ..... 4-77
4-42 Acres of Sagebrush Vegetation Closed to Mineral Materials Disposal in the Idaho and Southwestern Montana Sub-region[1] ..... 4-78
4-43 Acres of Sagebrush Vegetation Closed to Fluid Mineral Leasing in the Idaho and Southwestern Montana Sub-region ..... 4-79

4-44 Acres of Sagebrush Vegetation Limited to Existing Roads in the Idaho and Southwest Montana Sub-Region ..... 4-80
4-45 Acres of Sagebrush Vegetation Closed to Livestock Grazing in the Idaho and Southwestern Montana Sub-region ..... 4-81
4-46 Acres of Sagebrush Vegetation within BLM ACECs in the Idaho and Southwestern Montana Sub-region[1] ..... 4-83
4-47 Acres of Annual Grassland within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-84
4-48 Acres of Conifer Encroachment within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-86
4-49 Acres of Crested Wheatgrass within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-88
4-50 Acres of Low Sagebrush within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-90
4-51 Acres of Mixed Sagebrush within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-92
4-52 Acres of Tall Sagebrush within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-94
4-53 Acres of Perennial Grassland within GRSG Analysis Areas in the Idaho and Southwestern Montana Sub-region ..... 4-96
4-54 Overview Comparison of Impacts on Range Management by Alternative within GRSG Habitat ..... 4-142
4-55 OHV Area Designations by Alternative ..... 4-155
4-56 Oil and Gas Leasing Categories in the Decision Area, Alternative A ..... 4-174
4-57 Oil and Gas Leasing Categories in the Decision Area, Alternatives B and F ..... 4-176
4-58 Oil and Gas Leasing Categories in the Decision Area, Alternative C ..... 4-178
4-59 Oil and Gas Leasing Categories in the Decision Area, Alternative D ..... 4-180
4-60 Oil and Gas Leasing Categories in the Decision Area, Alternative E ..... 4-182
4-61 Management Actions Affecting Geothermal Development ..... 4-185
4-62 Quantitative Impacts on LocaMinerals ..... 4-192
4-63 Mineral Materials by Alternative ..... 4-197
4-64 Nonenergy Solid Mineral Leasing Categories in the Decision Area, Alternatives A and E ..... 4-203
4-65 Nonenergy Solid Mineral Leasing Categories in the Decision Area, Alternative B ..... 4-204
4-66 Nonenergy Solid Mineral Leasing Categories in the Decision Area, Alternative C ..... 4-205
4-67 Nonenergy Solid Mineral Leasing Categories in the Decision Area, Alternative D ..... 4-206
4-68 Comparison of ACEC-Affecting Management Actions by Alternative ..... 4-210
4-69 Acres of Proposed ACECs within the Planning Area by Habitat Type and Alternative ..... 4-211
4-70 Acres of Allocations Potentially Affecting Lands with Wilderness Characteristics and Roadless Areas ..... 4-216
4-71 Annual Impact of Management Actions Affecting Livestock AUMs on Output, Employment, and Earnings Compared to Alternative A ..... 4-223

4-72 Average Annual Impact of Management Actions Affecting Recreation on Output, Employment, and Earnings Compared to Alternative A ..... 4-226
4-73 Average Annual Impact on Output, Employment and Earnings Compared to Alternative A (Recreation and Grazing Sectors) ..... 4-236
4-74 Environmental Justice Impacts ..... 4-241
4-75 Reasonably Foreseeable Actions ..... 4-245
4-76 Oil and Gas Development Potential in the Planning Area ..... 4-312
4-77 Projected Employment by Alternative for Primary Socioeconomic Study Area ..... 4-317
5-1 Idaho and Southwestern Montana Sub-region Scoping Open Houses ..... 5-3
5-2 Idaho and Southwestern Montana Sub-region Cooperating Agency Participation ..... 5-5
5-3 List of Preparers ..... 5-9

# Volume Three

## APPENDICES


A Custer and Owyhee County Plan Evaluation
B Reasonably Foreseeable Development Scenario for Greater Sage-Grouse Habitat in Idaho and Southwest Montana Sub-Region
C Greater Sage-Grouse Habitat Required Design Features and Best Management Practices
D State of Idaho Governor's Alternative
E Greater Sage-Grouse Draft Monitoring Framework Plan
F Regional Mitigation Strategy
G Detailed No Action Alternative
H BLM Areas of Critical Environmental Concern Evaluation and Forest Service Zoological Areas
I Greater Sage-Grouse Habitat Delineations
J Forest Service Alternative D Language
K Draft Greater Sage-Grouse Wildland Fire and Invasive Species Assessment
L Vegetation Dynamics Development Tool
M Draft Management Indicator Species Report
N Draft Wildlife and Sensitive Plant Specialists Report
O List of Wildlife Species within the BLM Dillon Field Office, Montana
P Special Status Species List
Q Detailed Employment and Earnings Data
R Economic Impact Analysis Methodology
S Non-Market Valuation Methods

This Page Intentionally Blank

# Executive Summary

This Page Intentionally Blank

# Executive Summary

## ES.1 Introduction

In March 2010, United States (US) Fish and Wildlife Service (USFWS) published its listing decision for the Greater Sage-Grouse (GRSG) *(Centrocercus urophasianus)* as "warranted but precluded" (75 *Federal Register* 13910, March 23, 2010). The BLM manages over 50 percent of GRSG habitat across 11 western states. Inadequacy of regulatory mechanisms in Land Use Plans (LUPs) was identified as a major threat in the USFWS finding on the petition to list the GRSG under the Endangered Species Act (ESA). In response to the USFWS finding and pending listing decision, the United States (US) Department of the Interior, Bureau of Land Management (BLM) and the US Department of Agriculture, Forest Service (Forest Service) have prepared this Draft LUP Amendment (LUPA) to analyze the addition of GRSG conservation measures to their existing resource management plans (RMPs)/land and land and resource management plans (Forest Plan). The Federal Land Policy and Management Act of 1976 (FLPMA) directs the BLM to develop and periodically revise or amend its RMPs, which guide management of BLM-administered lands. The National Forest Management Act of 1976 (NFMA) directs the Forest Service to develop and periodically revise or amend its Forest Plans, which guide management of Forest Service-administered lands. These two agencies' plans, which would be amended based on the analysis summarized in this document, are generically referred to as LUPs throughout the remainder of this document. The USFWS has identified conservation measures in LUPs as the principal regulatory mechanism for protecting GRSG on BLM-administered and Forest Service-administered lands. Based on the identified threats to the GRSG and the USFWS timeline for making a listing decision on this species, the BLM and Forest Service need to incorporate objectives and adequate conservation measures into LUPs to conserve and alleviate threats to GRSG . The conservation measures include both restrictions on land uses and programs that affect GRSG and measures to reduce the impacts of BLM and Forest Service programs or authorized uses. In response to the USFWS findings, the BLM and Forest Service will evaluate the adequacy of its LUPs and will address, as necessary, amendments throughout the range of the GRSG.

Consistent with national policy, the BLM and Forest Service are preparing several environmental impact statements (EISs) with associated LUPA or revisions. These documents will address a range of alternatives focused on specific conservation measures across the range of the GRSG. The amendments will be coordinated under two administrative planning regions across the entire range of the GRSG. The Rocky Mountain Region and the Great Basin Region boundaries are drawn roughly to correspond with the threats identified by USFWS in the 2010 listing decision, along with the Western Association of Fish and Wildlife Agencies management zones framework (Stiver et al. 2006).

The management zones reflect ecological and biological issues and similarities. In addition, management challenges within management zones are similar, and GRSG and their habitats are likely responding similarly to environmental factors and management actions. The Rocky Mountain Region consists of land use plans in North Dakota, South Dakota, Wyoming, and

Colorado and in portions of Montana and Utah. The Great Basin Region consists of land use plans in California, Nevada, Oregon, and Idaho and in portions of Utah and Montana.

As identified above, this direction is the result of the March 2010 publication of USFWS's *12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered*. In this document, the agency concluded that the GRSG is warranted for listing as a threatened or endangered species but precluded by higher priority listing actions ("warranted but precluded"). The USFWS reviewed the status and threats to the GRSG in relation to the five listing factors provided in Section 4(a)(1) of the ESA. It determined that Factor A, "the present or threatened destruction, modification, or curtailment of the habitat or range of the GRSG," and Factor D, "the inadequacy of existing regulatory mechanisms," both posed "a significant threat to the GRSG now and in the foreseeable future" (75 *Federal Register* 13910, March 23, 2010). Regulatory mechanisms are guidance provided by LUPs/LUPAs which are made up of specific conservation measures identified therein. This LUPA/EIS, along with the other plans cited above, addresses both listing Factors A and D and will provide consistency in managing GRSG habitat. BLM Instruction Memorandum 2012-044, BLM National Greater Sage-Grouse Land Use Planning Strategy provides direction for considering GRSG conservation measures in the land use planning process.

This LUPA/EIS addresses GRSG habitat within Idaho, southwestern Montana, and the Sawtooth National Forest within Utah. The BLM has mapped this habitat preliminarily, in coordination with the respective state wildlife agencies. GRSG habitat in the sub-region falls into one of the following categories:

**Preliminary Priority Habitat (PPH)—**Areas that have been identified as having the highest conservation value to maintaining sustainable GRSG populations; include breeding, late brood-rearing, and winter concentration areas

**Preliminary General Habitat (PGH)—**Areas of seasonal or year-round habitat outside of priority habitat

PPH and PGH are considered preliminary until a decision on this document is made, at which point they would become Priority Habitat and General Habitat.

Range-wide, approximately 52 percent of sagebrush habitat within GRSG management zones is on BLM-administered land, and approximately 8 percent is on Forest Service-administered land; within the Idaho and southwestern Montana sub-region, approximately 51 percent of sagebrush habitat is on BLM-administered and 10 percent on Forest Service-administered lands. Changes in management of GRSG habitats are needed to avoid the continued decline of populations that are anticipated across the species' range. Range-wide, adaptive management strategies will focus on areas affected by threats to GRSG habitat, such as wildfire, energy development, disease, and infrastructure development, depending on the threats within each sub-region of the Rocky Mountain and Great Basin regions. The BLM and Forest Service administer a large portion of GRSG habitat within the affected

states; because of this, changes in GRSG habitat management is anticipated to have a considerable impact on GRSG populations.

The planning area for the Idaho and Southwestern Montana GRSG LUPA/EIS is composed of land administered by the BLM, the Forest Service, state and federal agencies, as well as private lands **(Table ES-1**, Acres of GRSG Habitat by Surface Management). These areas are in Ada, Adams, Bear Lake, Bingham, Blaine, Bonneville, Butte, Camas, Caribou, Cassia, Clark, Custer, Elmore, Fremont, Gem, Gooding, Jefferson, Jerome, Lemhi, Lincoln, Madison, Minidoka, Oneida, Owyhee, Payette, Power, Twin Falls, Washington, Beaverhead, Deer Lodge, Gallatin, Madison, Silver Bow, and Box Elder Counties in Idaho, Montana, and Utah. **Figure ES-1**, Idaho and Southwestern Montana Sub-Regional Planning Area, depicts the planning area.

**Table ES-1**
**Acres of GRSG Habitat by Surface Management**

| Surface Land Management | Acres PPH | Acres PGH | Acres Outside Habitat | Total Acres |
|---|---|---|---|---|
| **BLM Total** | **7,266,502** | **1,993,711** | **3,469,923** | **12,730,136** |
| **BLM – Idaho** | 6,811,269 | 1,749,965 | 2,982,419 | 11,543,653 |
| Bruneau Field Office | 1,000,975 | 184,738 | 262,883 | 1,448,596 |
| Burley Field Office | 422,038 | 206,232 | 206,665 | 834,935 |
| Challis Field Office | 635,561 | 84,386 | 72,920 | 792,867 |
| Four Rivers Field Office | 162,179 | 190,816 | 901,410 | 1,254,405 |
| Jarbidge Field Office | 765,096 | 251,971 | 305,140 | 1,322,207 |
| Owyhee Field Office | 794,635 | 242,740 | 222,505 | 1,259,880 |
| Pocatello Field Office | 233,651 | 87,506 | 278,785 | 599,942 |
| Salmon Field Office | 311,068 | 51,666 | 131,220 | 493,954 |
| Shoshone Field Office | 1,092,382 | 262,015 | 368,782 | 1,723,179 |
| Upper Snake Field Office | 1,393,684 | 187,895 | 232,109 | 1,813,688 |
| **BLM – Montana** | 455,233 | 243,746 | 487,504 | 1,186,483 |
| Butte Field Office[1] | 0 | 25,497 | 274,062 | 299,559 |
| Dillon Field Office | 455,233 | 218,249 | 213,442 | 886,924 |
| **Forest Service Total** | 963,016 | 897,476 | 12,027,664 | 13,887,758 |
| **Forest Service - Idaho** | 800,412 | 661,830 | 9,631,958 | 11,094,200 |
| Sawtooth National Forest | 281,887 | 212,366 | 1,605,803 | 2,100,056 |
| Boise National Forest | 21,371 | 53,728 | 2,131,461 | 2,206,560 |
| Caribou-Targhee National Forest | 148,636 | 187,053 | 2,223,553 | 2,559,242 |
| Salmon-Challis National Forest | 348,518 | 208,683 | 3,671,141 | 4,228,342 |
| **Forest Service - Montana** | 162,604 | 235,646 | 2,395,706 | 2,793,558 |
| Beaverhead-Deerlodge National Forest | 162,604 | 235,646 | 2,395,706 | 2,793,558 |
| **US Fish and Wildlife Service** | 35,244 | 3,648 | 21,433 | 60,325 |
| **National Park Service** | 27,334 | 222,701 | 420,379 | 670,414 |

[1] Butte Field Office-administered lands are not included as part of the analysis in this LUPA/EIS except as required in the cumulative effects analysis.

**Table ES-1**
**Acres of GRSG Habitat by Surface Management**

| Surface Land Management | Acres PPH | Acres PGH | Acres Outside Habitat | Total Acres |
|---|---|---|---|---|
| **Department of Energy** | 378,042 | 182,455 | 1,672 | 562,169 |
| **Department of Defense** | 11,148 | 37,714 | 81,014 | 129,876 |
| **Bureau of Reclamation** | 3,171 | 22,729 | 217,720 | 243,620 |
| **Bureau of Indian Affairs** | 60,635 | 29,161 | 273,926 | 363,722 |
| **Indian Tribe** | 143,949 | 10,672 | 188,991 | 343,612 |
| **Idaho State** | 642,411 | 368,186 | 802,820 | 1,813,417 |
| **Montana State** | 221,665 | 167,455 | 431,995 | 821,115 |
| **Private** | 2,137,373 | 2,235,327 | 12,762,174 | 17,134,874 |
| **Other** | 55,621 | 29,564 | 280,985 | 366,170 |
| **Total Acres:** | **11,946,111** | **6,200,799** | **30,980,696** | **49,127,208** |

Source: BLM 2013

The planning area incorporates PPH and PGH. Though the planning area includes private lands, decisions are made only for BLM and Forest Service federal surface and federal minerals in this LUPA. Management direction and actions outlined in this LUPA/EIS apply only to these BLM-administered and Forest Service-administered lands within the planning area and to federal mineral estate under BLM administration that may lie beneath other surface ownership; this is defined as the decision area.

GRSG habitat in the Idaho and southwestern Montana sub-region consists of approximately 12 million acres of PPH and 6 million acres of PGH regardless of land ownership.

## ES.2 Purpose of and Need for the Land Use Plan Amendments

The purpose of the LUPA is to identify and incorporate appropriate conservation measures into LUPs to conserve, enhance, and restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat. The BLM will consider such measures in the context of its multiple-use mandate under the FLPMA. Because the BLM and Forest Service administer a large portion of the GRSG habitat within the affected states, changes in BLM and Forest Service management of GRSG habitats are anticipated to have a considerable beneficial impact on present and future GRSG populations.

These plan amendments will focus on areas affected by threats to the GRSG habitat identified by the USFWS in the 2010 Finding. Within the Idaho and southwestern Montana sub-region the primary threats to GRSG include habitat loss and fragmentation due to increased occurrence of wildfire, expansion of invasive species, human development and infrastructure. **Table ES-2**, Identified Threats to Greater Sage-Grouse (from greatest to least), lists the threats that have been identified generally across the GRSG range and specifically within Idaho and Montana.

**Figure ES-1**
**Idaho and Southwestern Montana GRSG EIS Planning Area Boundaries**

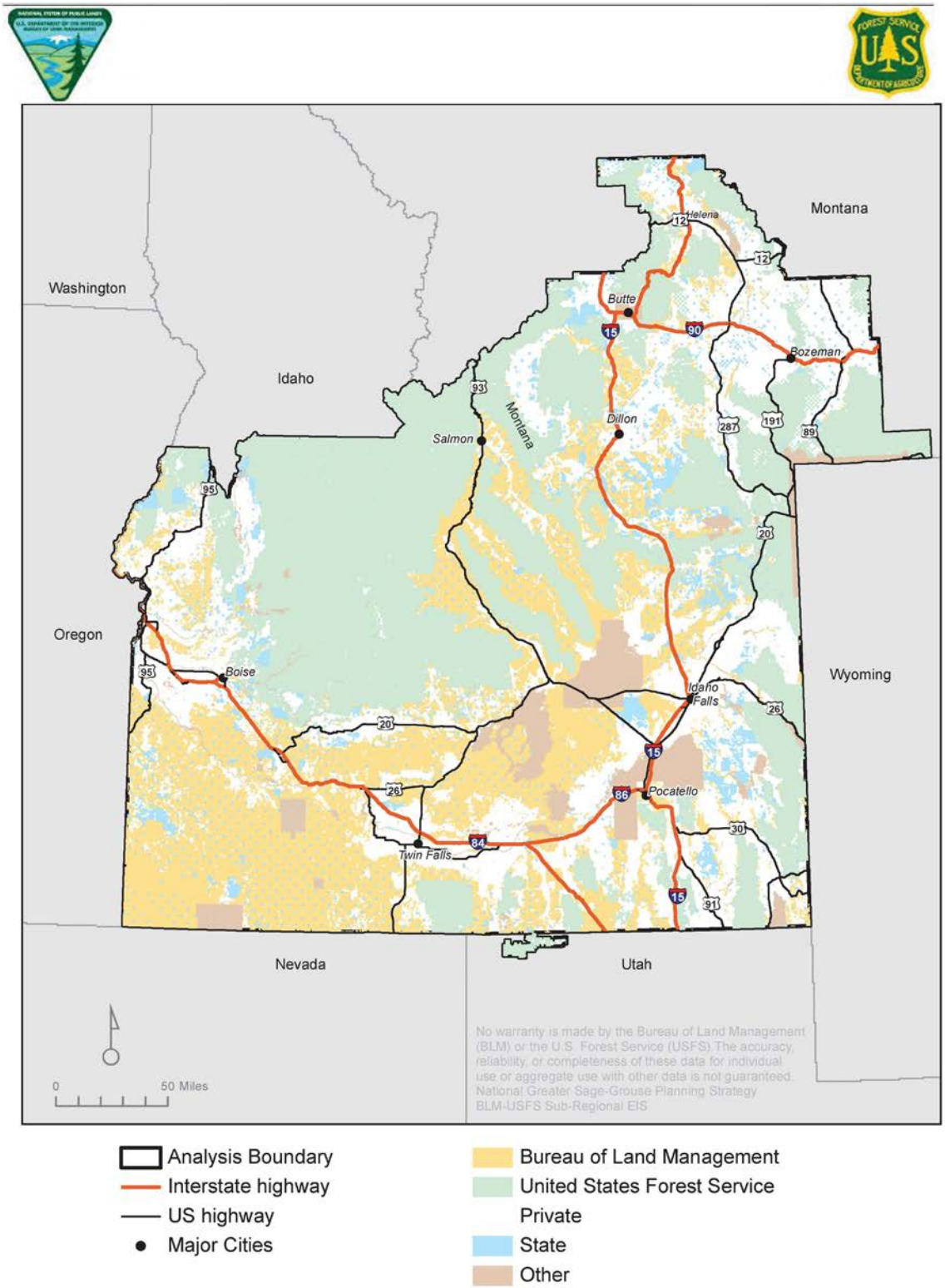


**Table ES-2**
**Identified Threats to Greater Sage-Grouse**
**(from greatest to least)**

| USFWS 2010 Finding | 2006 Idaho GRSG Conservation Plan | 2005 Montana GRSG Management Plan |
|---|---|---|
| Invasive Species | Wildfire | Fire |
| Infrastructure | Infrastructure | Harvest management |
| Fire | Annual Grassland | Livestock grazing management |
| Agriculture | Livestock Impacts | Noxious weed management |
| Grazing | Human Disturbance | Mining and energy development |
| Oil and Gas | West Nile Virus | Outreach, education, and implementation; |
| Urbanization | Prescribed Fire | Power lines and generation facilities |
| Mining | Seeded Perennial Grassland | Predation |
| Conifer Invasion | Climate Change | Recreational disturbance of GRSG |
| Predation | Conifer Encroachment | Roads and motorized vehicles |
| Disease | Isolated Populations | Vegetation |
| Water Development | Predation | Other wildlife |
| Hunting | Urban/Exurban Development | |
| Climate Change | Sagebrush Control | |
| | Insecticides | |
| | Agricultural Expansion | |
| | Sport Hunting | |
| | Mines/Landfills/Gravel Pits | |
| | Falconry | |

Source: USFWS 2010a; Idaho Sage-Grouse Advisory Committee 2006; Montana Sage-Grouse Work Group 2005

## ES.3 Scoping

Scoping is an early and open process for determining the scope, or range, of issues to be addressed and for identifying the significant issues to consider in the planning process. Scoping is designed to be consistent with the public involvement requirements of FLPMA, NFMA, and NEPA. It identifies the public and agency concerns. It defines the relevant issues and alternatives that will be examined in detail in the LUPA/EIS. A planning issue is defined by the BLM as a major controversy or dispute regarding management or uses on BLM-administered and Forest Service-administered lands that can be addressed through a range of alternatives.

A 60-day public scoping period began on December 9, 2011, with the publication in the Federal Register of a notice of intent to begin preparing an EIS. The scoping period was extended through a notice of extension, published February 10, 2012; the scoping period ended on March 23, 2012.

This cooperative process included soliciting input from interested state and local governments, tribal governments, other federal agencies and organizations, and individuals to identify the scope of issues to be addressed in the LUPA/EIS and to assist in formulating

reasonable alternatives. The scoping process was a method for opening dialogue between the BLM, Forest Service, state and local governments, and the general public about management of GRSG and their habitats on BLM- and Forest Service-administered lands and for identifying the issues and concerns of those who have an interest in this subject and in the GRSG habitats. As part of the scoping process, the BLM and Forest Service also requested that the public submit nominations for potential Areas of Critical Environmental Concern (ACECs) for GRSG and their habitat.

Scoping included six open house meetings in Boise, Idaho Falls, Salmon, Twin Falls, and Pocatello, Idaho and Dillon, Montana, in January 2012. In addition, news releases notified the public of the scoping period and invited them to provide written comments. Public comments were used to define the relevant issues that would be addressed by a reasonable range of alternatives in the Idaho and Southwestern Montana GRSG LUPA/EIS.

The National Greater Sage-Grouse Planning Strategy LUPAs and EISs Scoping Summary Report (BLM and Forest Service 2012) is available on the project website for the national conservation effort: http://www.blm.gov/wo/st/en/prog/more/sagegrouse.html. The discussion below provides an overview of the scoping results, both range-wide and specific to the Idaho and southwestern Montana sub-region.

## ES.4 Issues

Issues to be addressed in the Idaho and Southwestern Montana GRSG LUPA/EIS were identified by the public and the agencies during the scoping process for range-wide planning. The issues identified in the Scoping Summary Report (BLM and Forest Service 2012), and other resource and use issues identified in the BLM Land Use Planning Handbook (H-1601-1), were considered in developing the alternatives brought forward for analysis. Issues identified in the Scoping Summary Report that are applicable for the Idaho and southwestern Montana sub-region are included in **Table ES-3**, Planning Issues.

**Table ES-3**
**Planning Issues**

| Planning Issue Category | Planning Issue |
|---|---|
| Wildfire | What measures should be undertaken to manage fuels and wildland fires, while protecting GRSG habitat?<br><br>How would the BLM and Forest Service evaluate, authorize, and implement program activities to reduce the threat to GRSG habitat from wildland and prescribed fire? |
| Vegetation – Invasive Species, Conifer Encroachment | How will the BLM and Forest Service address the potential expansion of nonnative annual grasses (i.e., cheatgrass) and associated loss of sagebrush habitats as a result of climate change?<br><br>How would the BLM and Forest Service conserve, enhance, or restore GRSG habitat such as sagebrush communities and minimize or prevent the introduction or spread of noxious weeds and invasive species?<br><br>How would the BLM and Forest Service evaluate, authorize, and implement |

**Table ES-3**
**Planning Issues**

| Planning Issue Category | Planning Issue |
|---|---|
| | program activities to reduce the threat (habitat loss and fragmentation) to GRSG habitat from conifer encroachment and spread of noxious and invasive species? |
| Infrastructure | How would the BLM and Forest Service manage program activities to reduce the threat to GRSG habitat from additional infrastructure development and management of ongoing infrastructure development while recognizing valid existing authorizations?<br><br>How would the BLM and Forest Service manage existing and proposed infrastructure development to reduce resulting mortality of GRSG? |
| Human Disturbance | How would the BLM and Forest Service evaluate, authorize, and implement program activities to reduce the threat (loss of productivity) to GRSG habitat from human presence?<br><br>How would the BLM and Forest Service evaluate, authorize, and implement program activities to reduce the threat (habitat loss and fragmentation) to GRSG habitat from recreation and travel management activities?<br><br>How would motorized, nonmotorized, and mechanized travel be managed to provide access to federal lands and a variety of recreation opportunities while protecting GRSG and their habitat? |
| Livestock Grazing | How would the BLM and Forest Service evaluate, authorize, and implement grazing management activities (grazing, water developments, fences, and structures) to reduce the threat (habitat loss, fragmentation, productivity, disease vector production) to GRSG and their habitat?<br><br>What measures would the BLM and Forest Service put in place to protect and improve GRSG habitat while maintaining livestock grazing privileges?<br><br>What measures would be put in place to manage habitat for other wildlife species and reduce conflicts with GRSG?<br><br>What measures would the BLM and Forest Service put in place to reduce the impacts of wild horses and burros on GRSG habitat? |
| Management and Monitoring | How would the BLM and Forest Service use the best available science to designate priority and general habitat categories for GRSG habitat within the planning area?<br><br>How would the BLM and Forest Service accurately monitor the impact of land uses on GRSG and its habitat? |
| Urbanization and Agricultural Conversion | What opportunities exist to adjust public land ownership that would increase management efficiency for GRSG and their habitat?<br><br>How would the BLM and Forest Service manage lands and realty decisions to reduce habitat fragmentation and conversion of GRSG habitat?<br><br>How would the BLM and Forest Service evaluate, authorize, and implement |

**Table ES-3**
**Planning Issues**

| Planning Issue Category | Planning Issue |
|---|---|
| | land tenure adjustments to reduce the conversion of (habitat loss and fragmentation) GRSG habitat to agricultural or urbanization uses? |
| Social and Economic Concerns | How could the BLM and Forest Service promote or maintain activities that provide social and economic benefit to local communities while providing protection for GRSG habitat? |
| Special Management Designations | What areas would be designated by the BLM or Forest Service to benefit the maintenance, enhancement, and restoration of GRSG and GRSG habitat? |

## ES.5 Planning Criteria

Planning criteria are based on appropriate laws, regulations, BLM and Forest Service Manual and Handbook sections, and other applicable policy directives, as well as on public participation and coordination with cooperating agencies, other federal agencies, state and local governments, and Native American tribes. Planning criteria are the standards, rules, and factors used as a framework to resolve issues and develop alternatives. Planning criteria are prepared to ensure decision making is tailored to the issues and to ensure that the BLM and Forest Service avoid unnecessary data collection and analysis.

## ES.6 Management Alternatives

Alternatives development is the heart of the LUPA and EIS process. Land use planning regulations and NEPA require the BLM and Forest Service to develop a range of reasonable alternatives during the planning process. Alternatives must also fall within the established planning criteria (43 CFR Section 1610).

The basic goal of alternative development is to produce feasible, distinct, implementable and potential management scenarios that:

- Address the identified major planning issues
- Explore opportunities to enhance management of resources and resource uses
- Resolve conflicts between resources and resource uses
- Meet the purpose of and need for the LUPA

The BLM and Forest Service implemented the first four steps of the BLM's planning process (see **Section 1.4.1**, BLM Planning Process) in developing a range of reasonable alternatives: identification of issues, development of planning criteria, inventory data and information collection. The issue identification and current management assessment processes began in 2011 with an extensive review by the BLM and Forest Service interdisciplinary team of current land management decisions and direction from the 29 LUPs

being amended by this LUPA/EIS. From this, the BLM and Forest Service identified preliminary planning issues that could be addressed in an LUP amendment.

Between May and September 2012, the planning team (BLM, Forest Service, and cooperating agencies) met to develop management goals and to identify objectives and actions to address the goals. The various groups met numerous times throughout this period to refine their work. As outcomes of this process, the planning team:

1. Developed one No Action Alternative (Alternative A) and three preliminary action alternatives. The first action alternative (Alternative B) is based on *A Report on National Greater Sage-Grouse Conservation Measures* (NTT 2011), and the two additional action alternatives (Alternative C and F) are based on proposed alternatives submitted by various conservation groups.
2. Customized the objectives and actions from the NTT-based alternative (Alternative B) to develop a third action alternative (Alternative D) that strives for balance among competing interests.
3. Incorporated proposed GRSG protection measures recommended by state governments as a fifth alternative (Alternative E).

Each of the preliminary action alternatives was designed to:

- Address the 13 planning issues (identified in **Section 1.5.3**, Planning Issues)
- Fulfill the purpose and need for the LUPA
- Meet the multiple use mandates of the FLPMA (43 USC 1716)

The five resulting action alternatives (Alternatives B, C, D, E and F) offer a range of possible management approaches for responding to planning issues and concerns identified through public scoping, and to maintain, enhance or restore GRSG abundance and distribution in the planning area. While the goal is the same across alternatives, each alternative contains a discrete set of objectives and management actions and constitutes a separate LUPA with the potential for different long-range outcomes and conditions. The five action alternatives describe proposed changes to current management as well as any existing management that would be carried forward. These alternatives provide a range of choices for resolving the planning issues identified above.

The BLM and Forest Service recognize that social, economic, and environmental issues cross land ownership lines and that extensive cooperation is needed to actively address issues of mutual concern. To the extent possible, these alternatives were developed utilizing input from public scoping comments and cooperating agencies.

The relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs.

The alternatives are also directed toward responding to USFWS-identified issues and threats to GRSG and their habitat. All of the action alternatives were developed to reduce or alleviate USFWS-identified threats to GRSG. A complete description of all decisions proposed for each alternative is in **Chapter 2**, Alternatives. Summaries of the alternatives are presented below.

### ES.6.1 Alternative A: No Action

The No Action Alternative (Alternative A) represents the continuation of current management direction in the 21 BLM and 9 Forest Service approved LUPs and associated program-specific plans or amendments developed between 1976 and 2009; it proposes no new plan or management actions. This alternative is required by CEQ regulations and provides a baseline for comparison of the other alternatives and their impacts to resources and resource values (CEQ 1981).

The LUPs and their associated amendments, activity and implementation level plans and other management decision documents, collectively provide a varying range of goals, objectives, plan decisions and allocations for resources and resource uses that reflect the issues at the time of their development. Direction contained in existing statutes, regulations and policies would also continue to be implemented and may at times supplement existing LUPs.

Under the No Action Alternative, goals and objectives for BLM and Forest Service-administered lands and mineral estate would not change, and Priority and General Habitats would not be designated. Appropriate and allowable uses and restrictions pertaining to activities such as mineral leasing and development, recreation, construction of utilities or other BLM- and/or Forest Service-authorized actions, and livestock grazing would also remain the same. The BLM and Forest Service would not modify existing or establish additional criteria to guide the identification of site-specific use levels for implementation activities. Existing ACECs would continue to be managed, but no new ACECs would be designated. Management for GRSG would occur largely on a case-by-case basis and management would not be consistent across the planning area.

### ES.6.2 Elements Common to Alternatives B, C, D, E, and F

Each action alternative is composed of several integral parts: 1) a description of the GRSG habitat designations; 2) goals, objectives and management actions to be applied to those designations; and 3) required design features, stipulations or best management practices associated with various management action.

Allowable uses and management actions from existing LUPs that remain valid and do not require amending have been carried forward to all of the proposed alternatives. All action alternatives include direction contained in IM 2013-128 - Sage-Grouse Conservation in Fire Operations and Fuels Management, Forest Service Washington Office letter 5100 dated July 3, 2013, Sage-grouse Conservation Methods 2013, and also a monitoring strategy.

Although each action alternative emphasizes a slightly different mix of resources and resource uses, all five action alternatives, and portions of Alternative A, strive to achieve the follow goals:

- Conserve, enhance, and restore the sagebrush ecosystem upon which GRSG populations depend in an effort to maintain and/or increase their abundance and distribution, in cooperation with other conservation partners.
- Protect GRSG habitats from disturbances that will reduce distributions or abundance of Greater Sage-Grouse.

### *Monitoring Strategy*

Monitoring strategies for GRSG habitat and populations must be collaborative, as habitat occurs across jurisdictional boundaries (52 percent BLM, 31 percent private, 8 percent Forest Service, 5 percent state, 4 percent tribal and other Federal; 75 FR 13910), and because state fish and wildlife agencies have primary responsibility for population level management of wildlife, including population monitoring on all lands (including federal). Therefore, population efforts will continue to be conducted in partnership with state fish and wildlife agencies. The BLM and Forest Service are currently in the process of finalizing a Monitoring Framework which will be included in the Proposed LUP Amendment/FEIS; the major components of this Monitoring Framework can be found in Appendix E of this Draft EIS. The Monitoring Framework will describe the process that the BLM and Forest Service will use to monitor implementation and effectiveness of LUP decisions and will include: methods, data standards, and intervals of monitoring at broad and mid scales; consistent indicators to measure and metric descriptions for each of the scales (see Habitat Assessment Framework (HAF) and Assessment, Inventory and Monitoring core indicators); analysis and reporting methods; and the incorporation of monitoring results into adaptive management. The need for fine and site-scale specific habitat monitoring may vary by area depending on existing conditions, habitat variability, threats, and land health. Indicators at the fine and site scales will be consistent with the HAF; however the values for the indicators could be adjusted for regional conditions. The major components of the Monitoring Framework can be found in **Appendix E** of this LUPA/EIS.

The monitoring data will provide the indicator estimates for adaptive management. The BLM and the Forest Service will adjust management decisions through an adaptive management process.

### *Adaptive Management*

Adaptive Management is a decision process that promotes flexible resource management decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps with adjusting resource management directions as part of an iterative learning process. Adaptive management also recognizes the importance of natural variability in contributing to ecological resilience and productivity. In relation to the BLM and Forest Service's National Greater Sage-grouse Planning Strategy, adaptive management will help ensure GRSG conservation measures

presented in this EIS contain the needed level of certainty for effectiveness. If principles of adaptive management are incorporated into the conservation measure in the plan (to ameliorate threats to a species), then there is a greater likelihood that a conservation measure or plan will be effective in reducing threats to that species. Adaptive management is a component of each action alternative, though the guidance for adaptive management varies by alternative.

### *Delineated GRSG Management Areas*

Due to differences in state-level mapping efforts in Idaho and Montana, there is currently no consistent designation of specific GRSG seasonal habitat or vegetation across the sub-region. Each of the action alternatives identifies GRSG management areas, but the criteria and acreage of such management areas vary between the alternatives (**Table ES-4**).

**Table ES-4**
**GRSG Management Areas by Alternative**

| GRSG Management Area | Alternative B | Alternative C | Alternative D | Alternative E | Alternative F |
|---|---|---|---|---|---|
| Preliminary Priority Management Area | 8,229,500 | 11,119,900 | 6,819,100 | 71,800 | 8,229,900 |
| Preliminary General Management Area | 3,094,600 | 2,890,400 | -- | 2,934,100 | 3,516,300 |
| Preliminary Medial Management Area | | | 1,348,100 | | |
| Preliminary Restoration Management Area | | | | | 500,200 |
| Core Habitat Zone | | | | 4,824,900 | |
| Important Habitat Zone | | | | 2,743,400 | |
| General Habitat Zone | | | | 3,516,300 | |
| **Total Acres:** | **11,119,900** | **11,119,900** | **11,101,300** | **10,206,000** | **11,621,600** |

Source: BLM 2013

Required Design Features (RDFs) are a suite of features that would establish the minimum specifications for certain activities (i.e., water developments, fluid mineral development, and fire and fuels management) to help mitigate adverse impacts. RDFs are incorporated under each action alternative, though they vary by alternative. In general, RDFs are accepted practices that are known to be effective when implemented properly at the project level. However, their applicability and overall effectiveness cannot be fully assessed until the project level when the project location and design are known. Because of site-specific circumstances, some features may not apply to some projects (e.g., a resource is not present on a given site) and/or may require slight variations (e.g., a larger or smaller protective area). All variations in design features would require appropriate analysis and disclosure as part of future project authorizations. Additional mitigation measures may be identified and required during individual project development and environmental review, and it is not possible to list them all at the planning level.

In general, the RDFs are accepted practices that are known to be effective when implemented properly at the project level. However, their applicability and overall effectiveness cannot be fully assessed, except at the project-specific level, when the project location and design are known. Because of site-specific circumstances, some features may not apply to some projects (e.g., a resource is not present on a given site) or may require slight variations from what is described in the LUPA/EIS (e.g., a larger or smaller protective area). All variations in design features would require appropriate analysis and disclosure as part of future project decisions and authorizations. Additional mitigation measures may be identified and required during individual project development and environmental review. The RDFs proposed under Alternatives B, C, D, and F are presented in **Appendix C**.

### ES.6.3 Alternative B

BLM and Forest Service management actions, in concert with other state and federal agencies and private landowners, play a critical role in the future trends of GRSG populations. The BLM National Policy Team, as part of the National Greater Sage-Grouse Planning Strategy, established the National Technical Team (NTT) in August 2011. The NTT's mission was to develop and describe conservation measures to be considered while new or revised range-wide and long term conservation measures were developed through LUPAs to conserve, enhance, and restore the portions of GRSG habitat on BLM- and Forest Service-administered lands. The BLM and Forest Service used GRSG conservation measures in *A Report on National Greater Sage-Grouse Conservation Measures* (Sage-Grouse National Technical Team 2011, also referred to as the NTT Report) to form management direction under Alternative B. Conservation measures under Alternative B are focused on preliminary priority management areas (PPMAs, areas that have the highest conservation value to maintaining or increasing GRSG populations) and on Great Basin-wide concerns for GRSG. GRSG preliminary general management areas (PGMAs) are also identified, encompassing seasonal or year-round habitat (**Table ES-4**).

In summary, management under Alternative B would focus on restrictions on resource uses and protection for and enhancement of existing sagebrush habitat. BLM and Forest Service would apply a three percent surface disturbance cap to anthropogenic disturbances in PPMAs.

### ES.6.4 Alternative C

During scoping for this LUPA/EIS, individuals and conservation groups submitted management direction recommendations for protecting and conserving GRSG and habitat range-wide. The recommendations, in conjunction with resource allocation opportunities and internal sub-regional BLM and Forest Service input, were reviewed in order to develop BLM and Forest Service management direction for GRSG under Alternative C. Management actions in Alternative C are applied to PPMA, which encompasses all occupied habitat (**Table ES-4**). Like Alternative B, Alternative C includes a three percent surface disturbance cap to anthropogenic disturbances in PPMAs.

Management under Alternative C would focus on complete removal of livestock grazing from all occupied sage-grouse habitat on BLM- and Forest Service-administered lands to conserve and enhance GRSG habitat. Other management actions include identifying occupied habitats and BLM ACECs as ROW exclusion areas and closing all occupied habitat to fluid mineral leasing. Under Alternative C, the BLM would designate 39 new ACECs. Other management would be similar to Alternative A.

### ES.6.5 Alternative D

Alternative D is the Idaho/southwestern Montana sub-regional alternative, which describes conservation measures to conserve, enhance, and restore GRSG habitat on BLM- and Forest Service-administered lands, while balancing resources and resource use among competing human interests, land uses, and the conservation of natural and cultural resource values, and sustaining and enhancing ecological integrity across the landscape, including plant, wildlife, and fish habitat. This alternative incorporates local adjustments to *A Report on National Greater Sage-Grouse Conservation Measures* (NTT 2011) and habitat boundaries to provide a balanced level of protection, restoration, enhancement, and use of resources and services to meet ongoing programs and land uses. Conservation measures under Alternative D apply to three GRSG management areas – PPMA, PGMA, and preliminary medial management area (PMMA) (**Table ES-4**). PPMAs contain the most important and relatively intact habitats and potential restoration areas for conserving GRSG, PMMAs have some level of development or disturbance that reduces the effective character for GRSG but still provides better quality habitat than PGMAs. PGMAs represent the remaining occupied or potentially occupied habitat outside of PPMAs and PMMAs.

Under Alternative D, habitat restoration and vegetation management would be similar to Alternative B, though with additional measures to prioritize vegetation rehabilitation, incorporate design features that would improve the success of rehabilitation projects, and strategically plan for wildfire suppression. Under Alternative D, the BLM and Forest Service would require no net unmitigated loss of PPMAs instead of a disturbance cap.

### ES.6.6 Alternative E

The Idaho Governor's Alternative (Governor's Alternative), which provides the basis for Alternative E in this EIS, was developed from recommendations from the State of Idaho's GRSG Task Force and provides recommendations and policies to aid the State of Idaho in developing a conservation plan specifically adapted to Idaho GRSG populations (Idaho Governor's Task Force 2012). Lands in Montana would be managed under Alternative A for this alternative. Occupied habitat in Idaho would be delineated into three management categories: Core Habitat Zone (CHZ), Important Habitat Zone (IHZ), and General Habitat Zone (GHZ) (**Table ES-4**). The three proposed habitat zones represent a management continuum that includes at one end, a relatively restrictive approach aimed at providing a high level of protection to the most important CHZ, and on the other end, a relatively flexible approach for GHZ allowing for more multiple-use activities. While the IHZ contemplates greater management flexibility than in the CHZ, the overall quality and ecological importance of most of the habitat within this theme is more closely aligned with

the habitat in the CHZ than in the GHZ. For the portion of the sub-region within Utah, PPMA and PGMA would be delineated, with the same definitions as under Alternative B.

Alternative E focuses primarily on management for the threats of wildfire, invasive species, and large infrastructure projects, and secondarily on management for the threats of improper livestock grazing management and related infrastructure, West Nile Virus, and recreation. It recommends use of an adaptive management approach and implementation of triggers or thresholds that adjust zone criteria. There would be a 5 percent disturbance cap associated with fluid mineral development under Alternative E.

Habitat restoration and vegetation management under Alternative E would focus on prioritizing conifer removal and restoring sagebrush and perennial grasslands. Native vegetation would be used for restoration to the extent practicable. In addition, invasive species would be controlled for three years after wildfire treatments. Alternative E provides guidance to reduce wildfire response time, create fuel breaks, and improve the wildfire suppression baseline. Targeted grazing would be allowed in all habitat management zones to reduce fine fuels and mitigate for the risk of wildfire.

This alternative emphasizes the need for livestock permittees to achieve the Idaho Rangeland Health Standards, while also achieving flexibility and management predictability through the use of the state's adaptive management plan.

### ES.6.7 Alternative F

Similar to Alternative C, Alternative F was derived from individual and conservation group scoping comments. This alternative contains a mixture of management actions from *A Report on National Greater Sage-Grouse Conservation Measures* as well as additional restrictions on resource uses and increased resource protection. As such, Alternative F provides greater restrictions on allowable uses and less resource management flexibility than Alternative B. Conservation measures in Alternative F are focused on PPMAs, PGMAs, and preliminary restoration management areas (PRMAs) (**Table ES-4**). Alternative F also proposes that BLM and Forest Service designate a system of ACECs and Sagebrush CAs to serve as refugia for sage-grouse and other species. Alternative F includes a three percent surface disturbance cap, including fire, in PPMAs.

## ES.7 Environmental Consequences

The purpose of the environmental consequences analysis in this LUPA/EIS is to determine the potential for significant impacts of the federal action on the human environment. CEQ regulations for implementing NEPA state that the human environment is interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment (40 CFR, Part 1508.14). The federal action is the BLM and Forest Service selection of a LUPA that will provide a consistent framework for its management of the GRSG and its habitat on BLM-administered and Forest Service-administered lands. This would be in concert with its allocation of resources, in accordance with the multiple-use and sustained yield mandates of FLPMA.

# Chapter 2

# Maps

This Page Intentionally Blank

**Figure 2-1**
**Alternative A: Existing Habitat with Preliminary Priority and General Habitat**

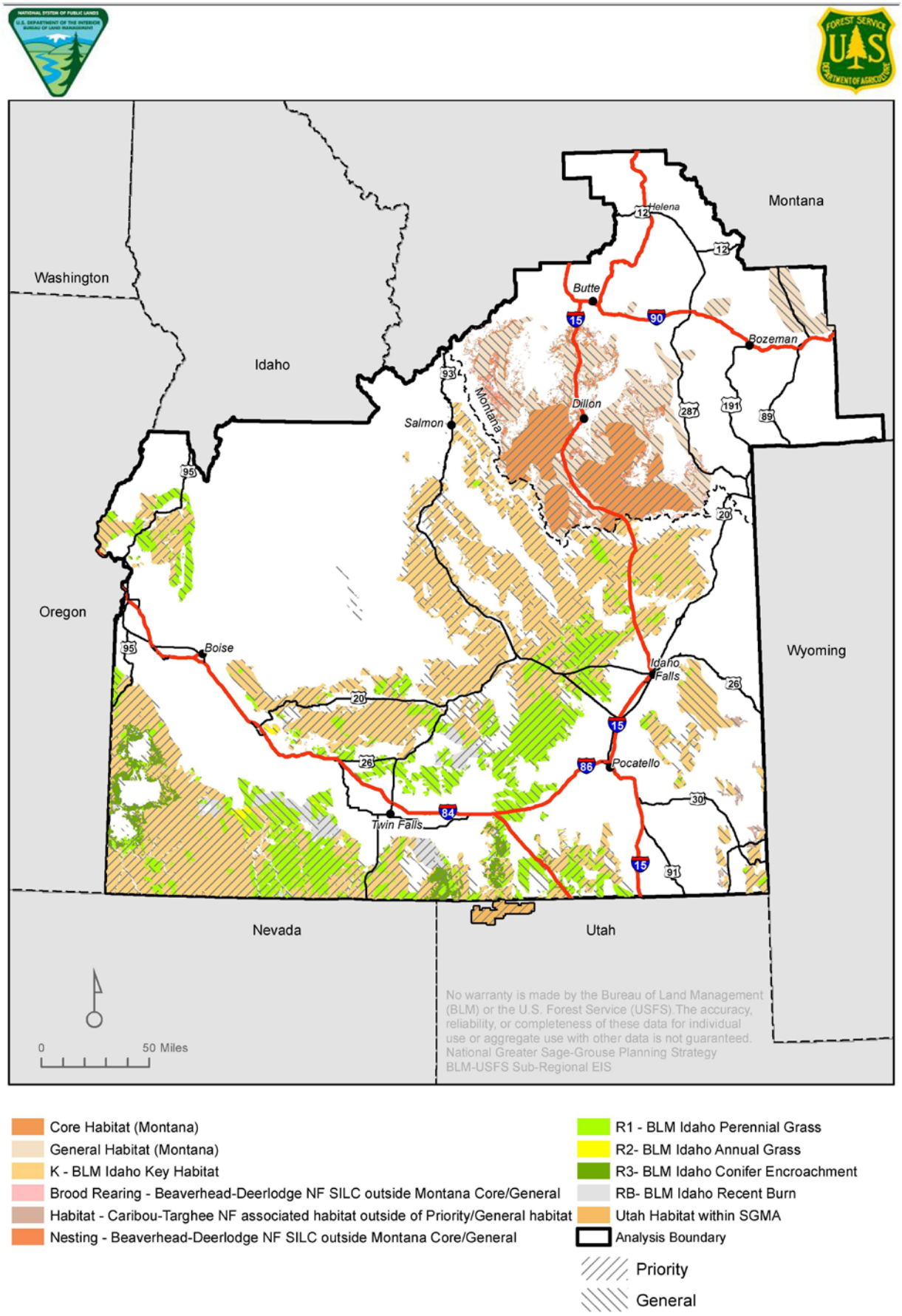
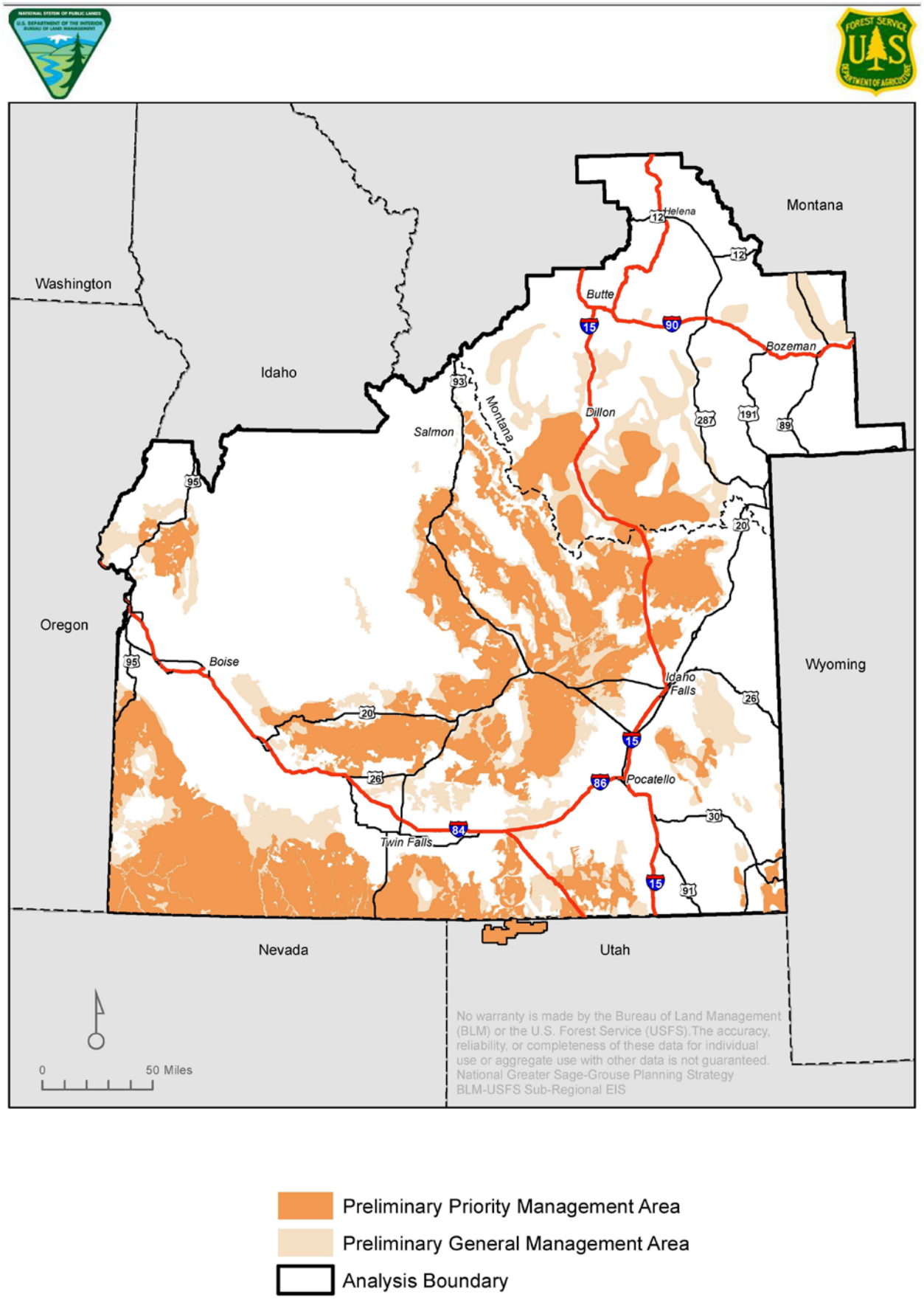


**Figure 2-2**
**Alternative B: Preliminary Priority and General Management Areas**

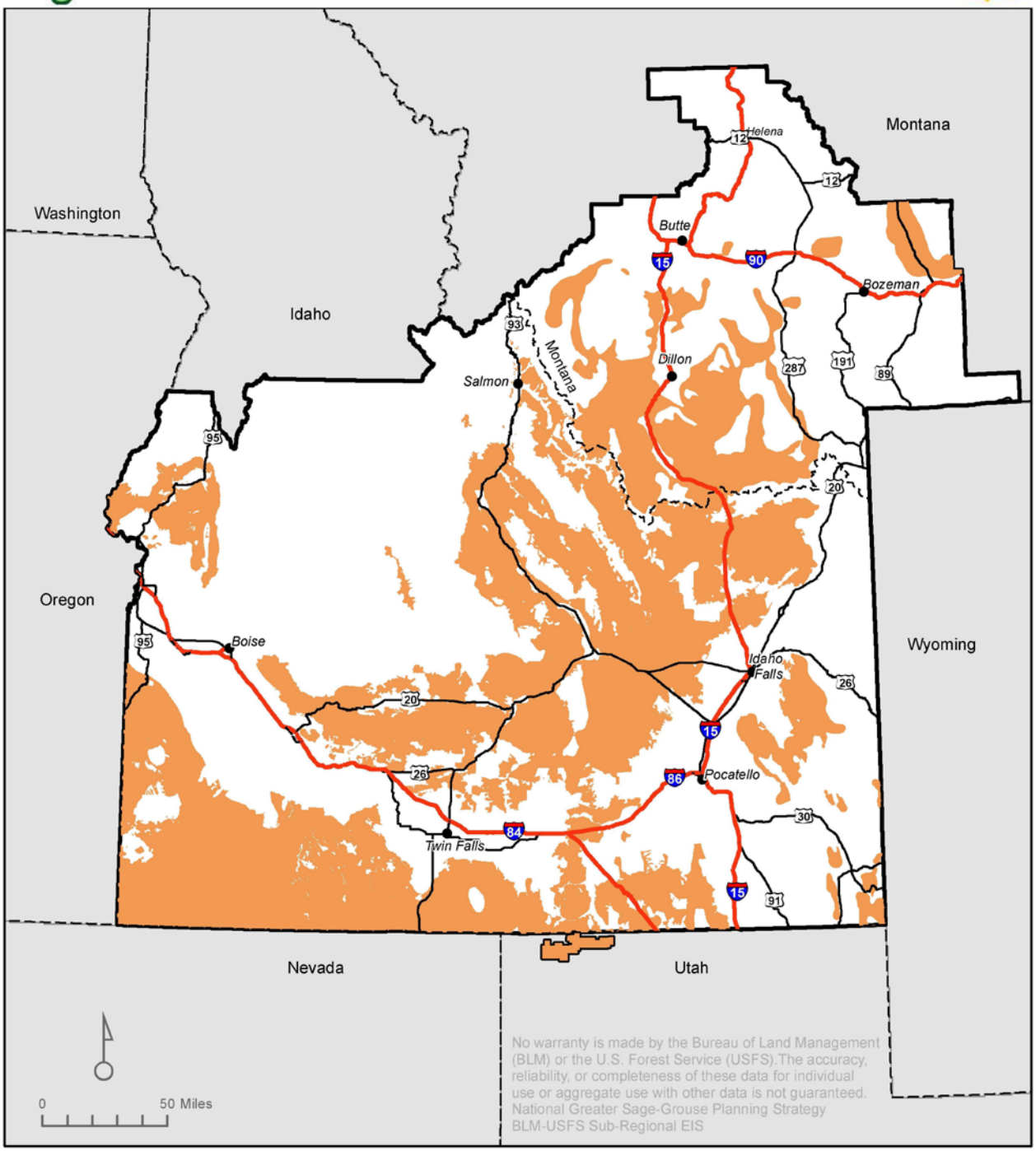



Preliminary Priority Management Area

Preliminary General Management Area

Analysis Boundary

**Figure 2-3**
**Alternative C: Preliminary Priority Management Area**




Preliminary Priority Management Area

Analysis Boundary

**Figure 2-4**
**Alternative D: Preliminary Priority, Medial, and General Management Areas**

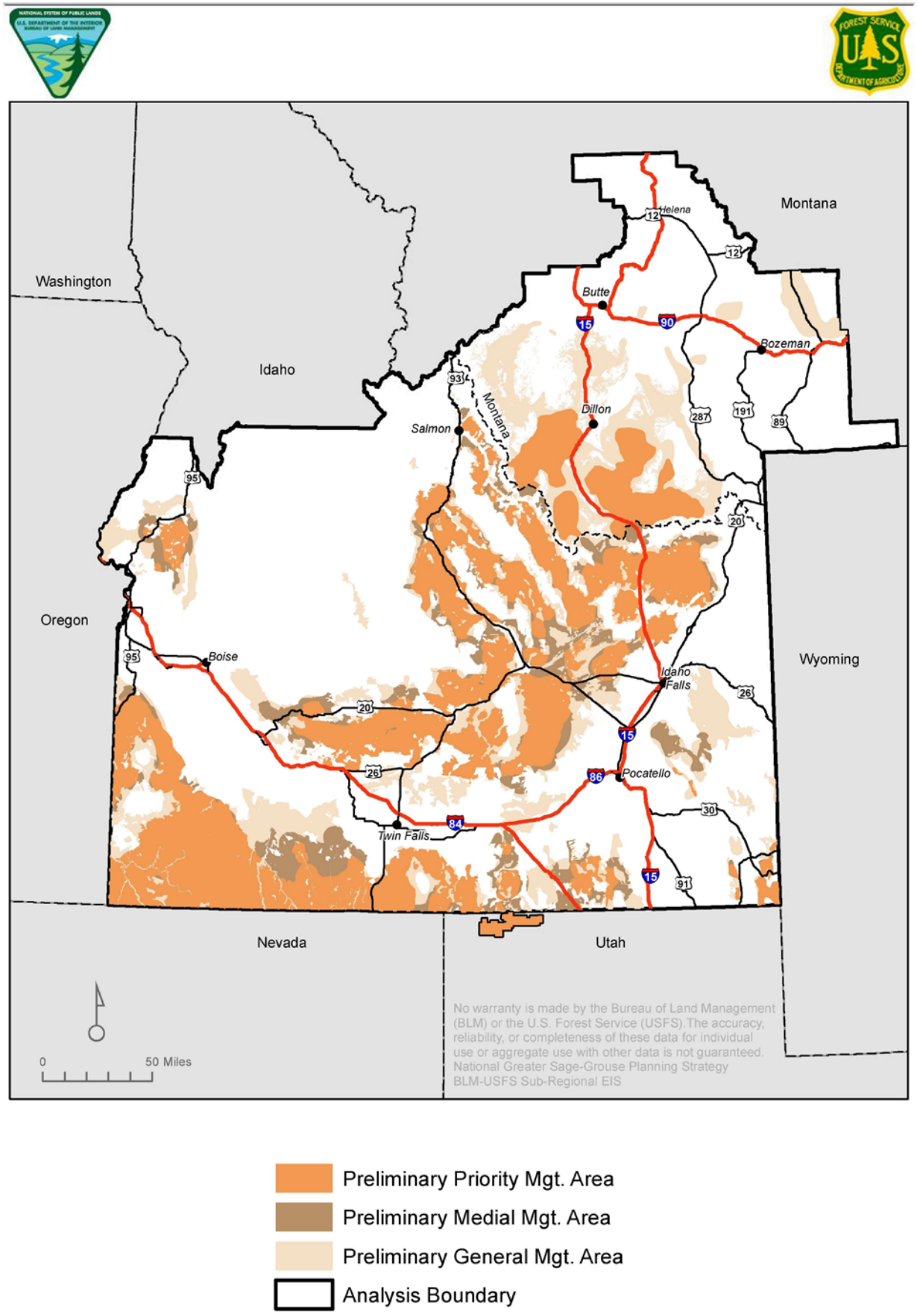
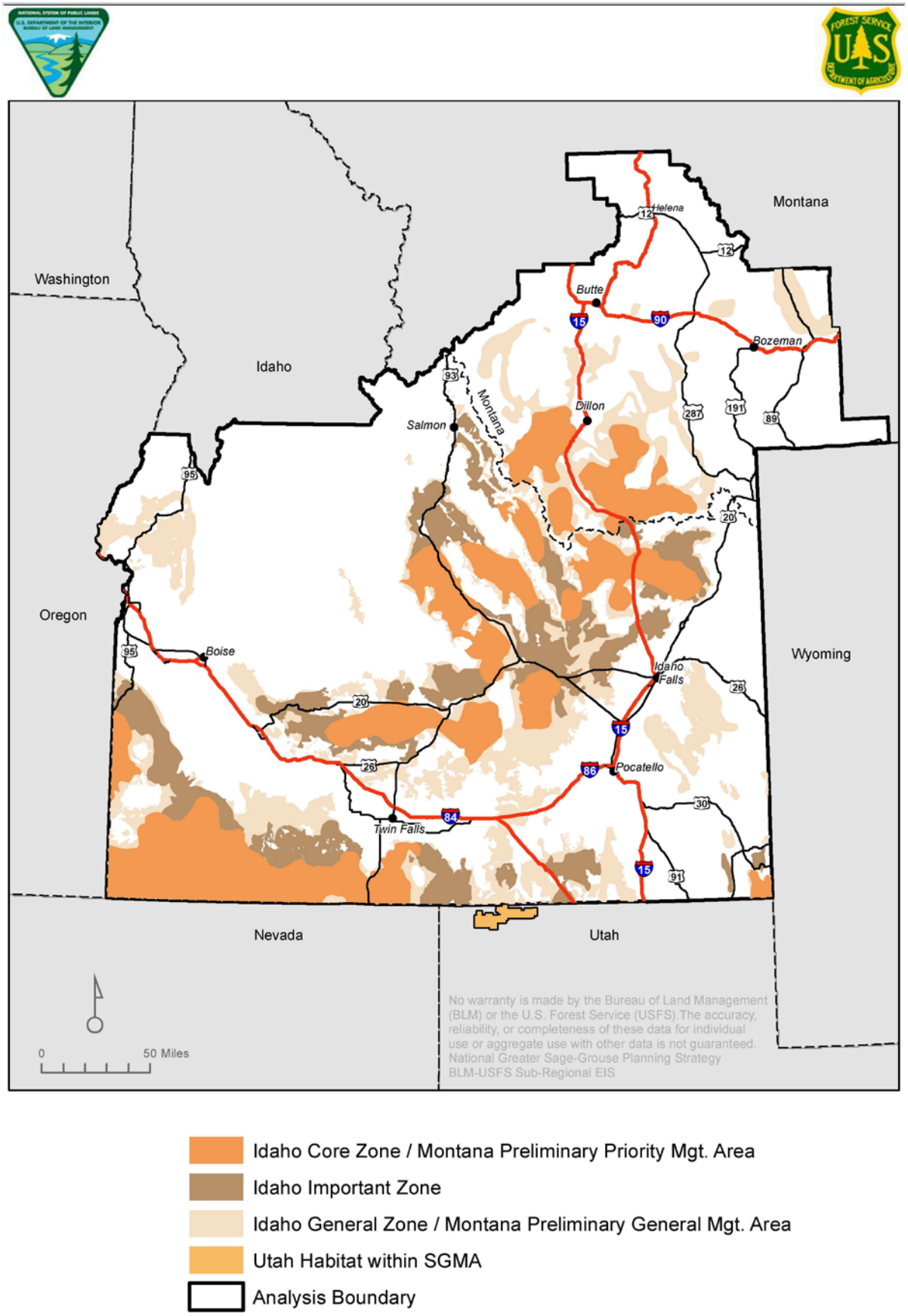


**Figure 2-5**
**Alternative E: Idaho Core, Important, and General Habitat Zones, Montana Preliminary Priority and General Management Areas, and Utah SGMA**




Idaho Core Zone / Montana Preliminary Priority Mgt. Area
Idaho Important Zone
Idaho General Zone / Montana Preliminary General Mgt. Area
Utah Habitat within SGMA
Analysis Boundary

**Figure 2-6**
**Alternative F: Preliminary Priority, General, and Restoration Management Areas**

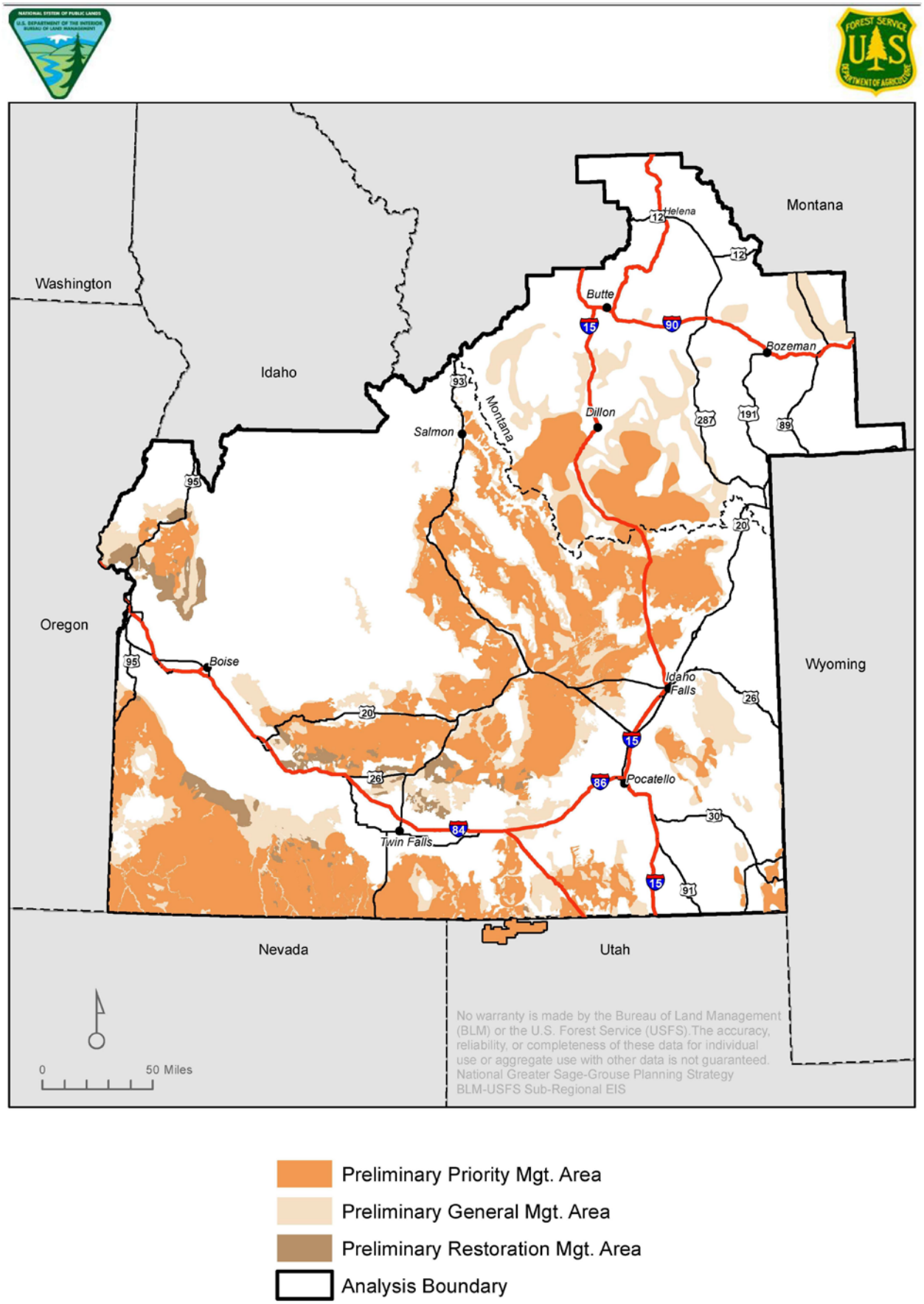
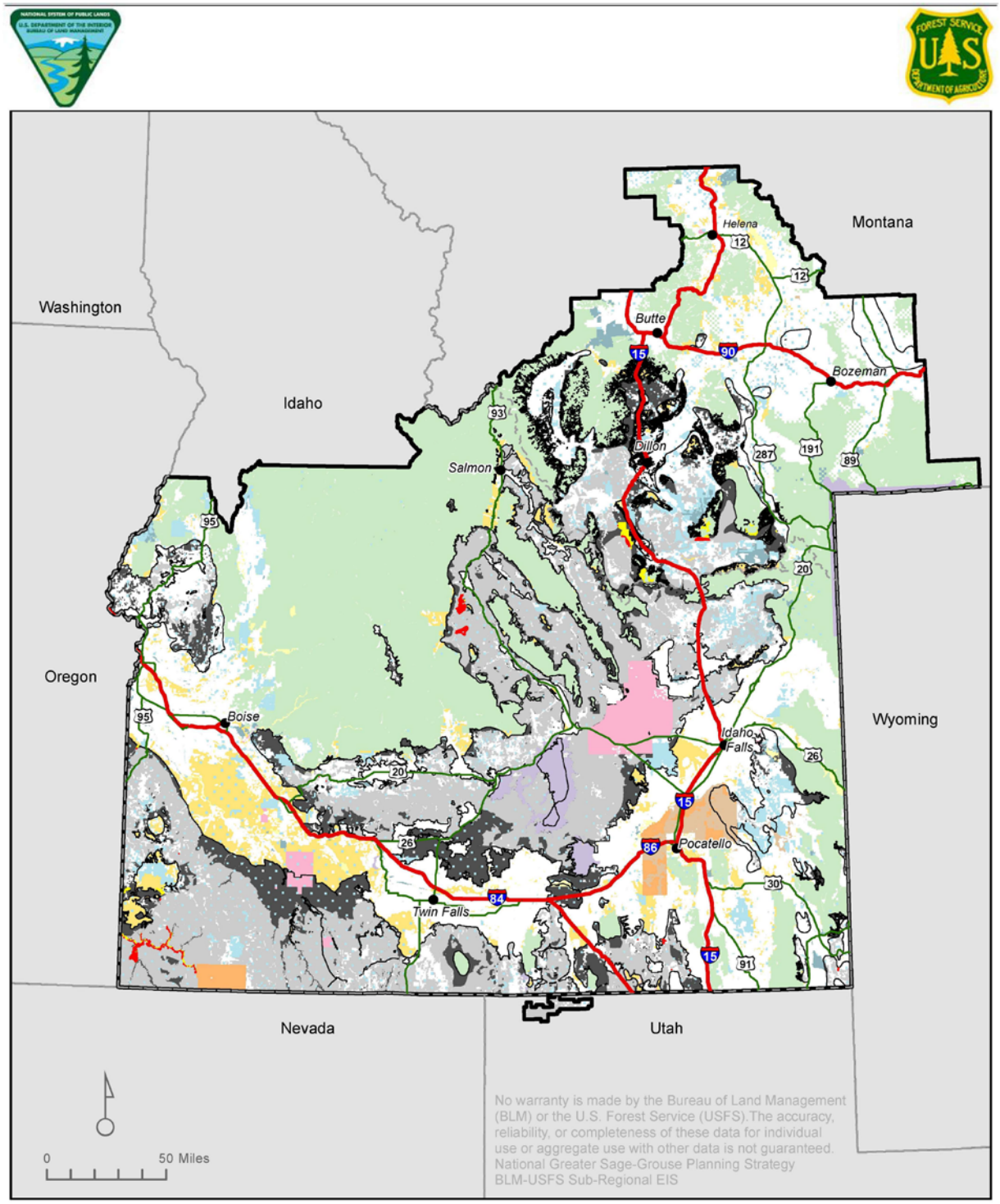


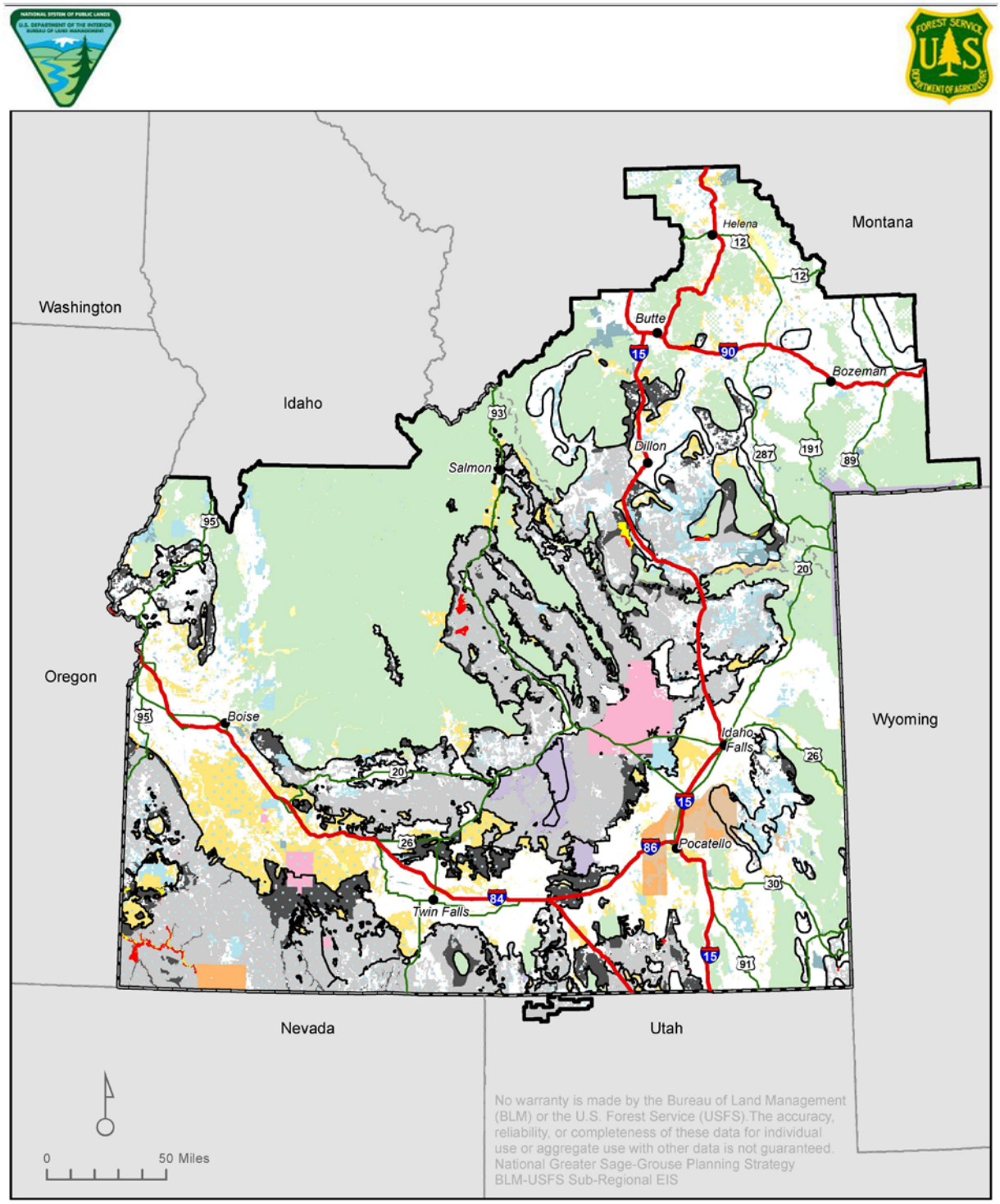
**Figure 2-7**
**Alternative A: Open and Closed to Grazing**




Alternative A Boundary
BLM and USFS Preliminary Priority Habitat Closed to Grazing
BLM and USFS Preliminary General Habitat Closed to Grazing
BLM and USFS Preliminary Priority Habitat Open to Grazing
BLM and USFS Preliminary General Habitat Open to Grazing
Analysis Boundary

**Surface Management Agency**
Bureau of Land Management (BLM)
Private
US Forest Service (USFS)
State
State, County, City; Wildlife, Park and Outdoor Recreation Areas
Bureau of Reclamation
Military Reservations and Corps of Engineers; Department of Energy
Indian Reservation (IR)
National Park Service (NPS)
National Wildlife Refuge
Bankhead-Jones Land Use Lands (Administered by DOI)
National Grass Lands (Administered by USDA)
Other Federal

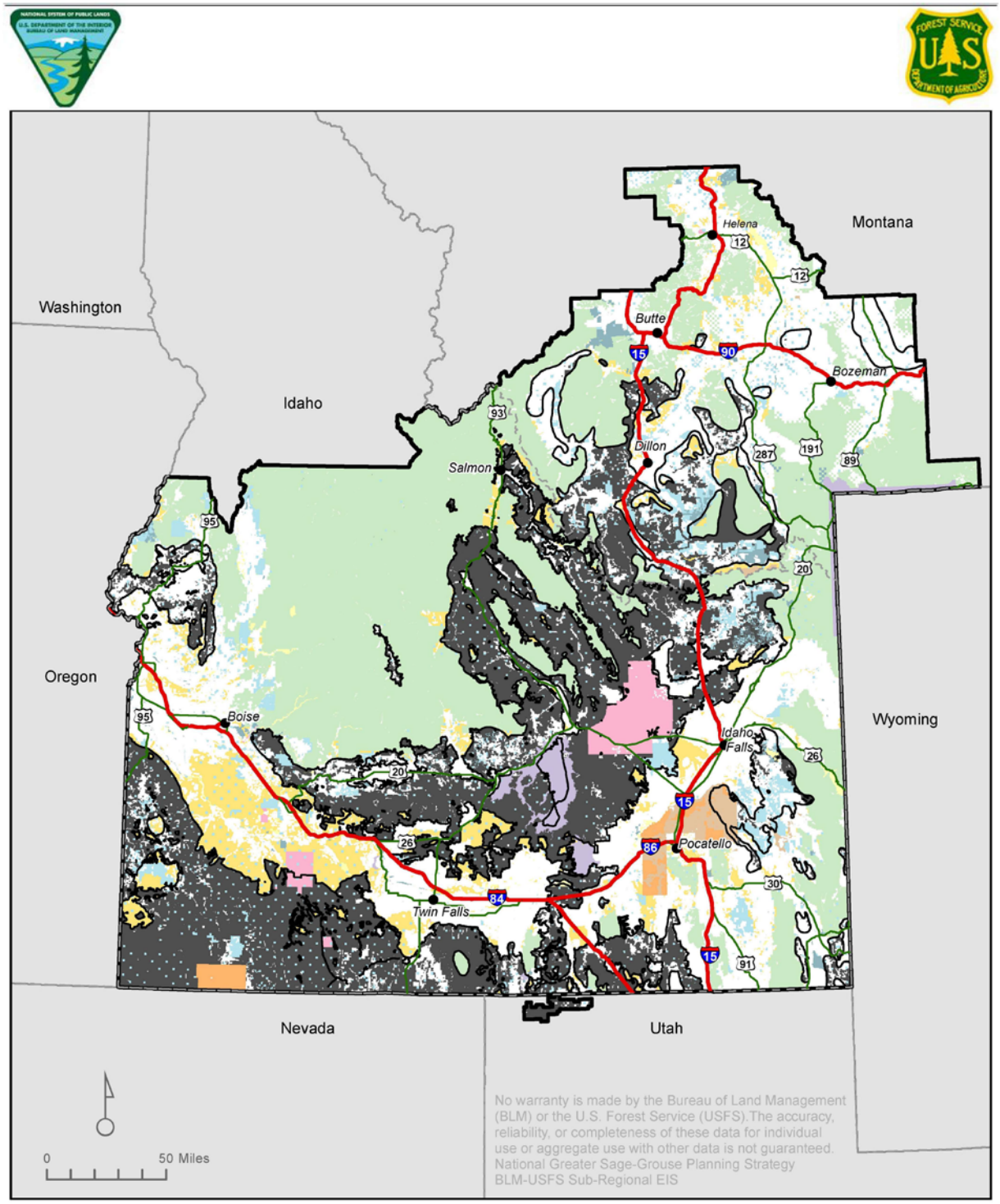
**Figure 2-8**
**Alternative B: Open and Closed to Grazing**




Alternative B Boundary
BLM and USFS Preliminary Priority Management Area Closed to Grazing
BLM and USFS Preliminary General Management Area Closed to Grazing
BLM and USFS Preliminary Priority Management Area Open to Grazing
BLM and USFS Preliminary General Management Area Open to Grazing
Analysis Boundary

**Surface Management Agency**
Bureau of Land Management (BLM)
Private
US Forest Service (USFS)
State
State, County, City; Wildlife, Park and Outdoor Recreation Areas
Bureau of Reclamation
Military Reservations and Corps of Engineers; Department of Energy
Indian Reservation (IR)
National Park Service (NPS)
National Wildlife Refuge
Bankhead-Jones Land Use Lands (Administered by DOI)
National Grass Lands (Administered by USDA)
Other Federal

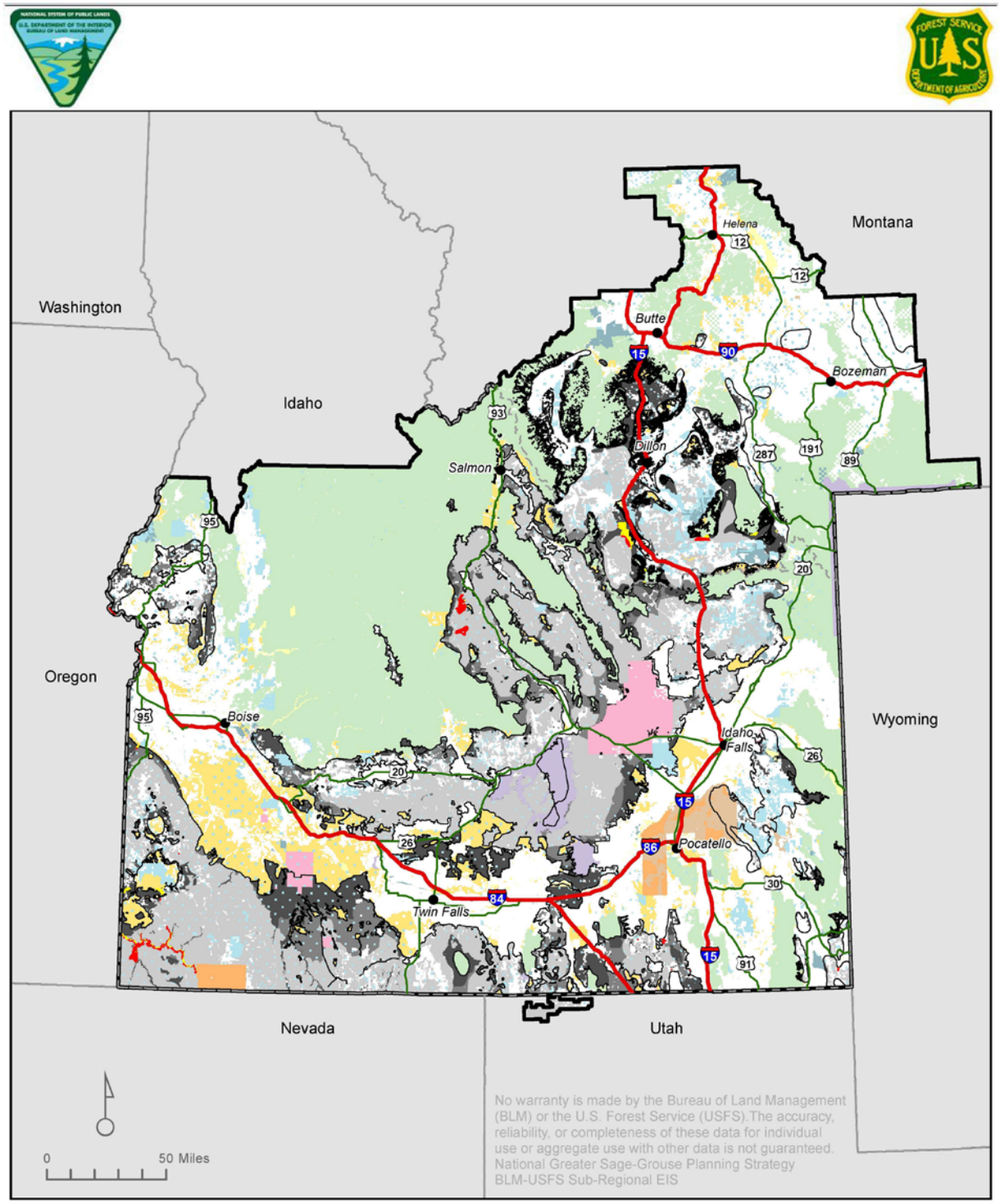
**Figure 2-9**
**Alternative C: Open and Closed to Grazing**




Alternative C Boundary
BLM and USFS Preliminary Priority Management Area Closed to Grazing
Analysis Boundary

**Surface Management Agency**
Bureau of Land Management (BLM)
Private
US Forest Service (USFS)
State
State, County, City; Wildlife, Park and Outdoor Recreation Areas
Bureau of Reclamation
Military Reservations and Corps of Engineers; Department of Energy
Indian Reservation (IR)
National Park Service (NPS)
National Wildlife Refuge
Bankhead-Jones Land Use Lands (Administered by DOI)
National Grass Lands (Administered by USDA)
Other Federal

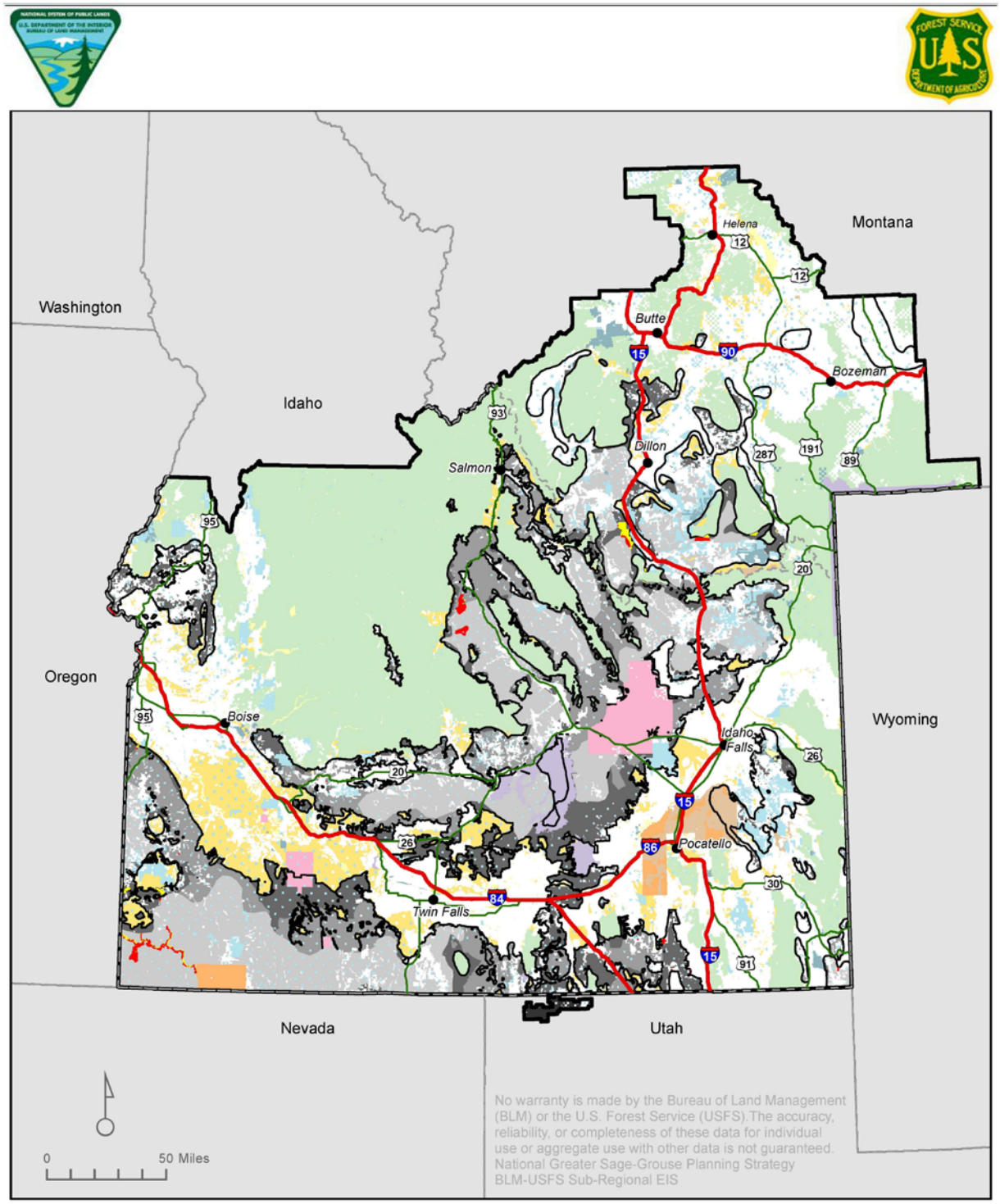
**Figure 2-10**
**Alternative D: Open and Closed to Grazing**




Alternative D Boundary
BLM and USFS Preliminary Priority Management Area Closed to Grazing
BLM and USFS Preliminary General Management Area Closed to Grazing
BLM and USFS Preliminary Priority Management Area Open to Grazing
BLM and USFS Preliminary Medial Management Area Open to Grazing
BLM and USFS Preliminary General Management Area Open to Grazing
Analysis Boundary

**Surface Management Agency**
Bureau of Land Management (BLM)
Private
US Forest Service (USFS)
State
State, County, City; Wildlife, Park and Outdoor Recreation Areas
Bureau of Reclamation
Military Reservations and Corps of Engineers; Department of Energy
Indian Reservation (IR)
National Park Service (NPS)
National Wildlife Refuge
Bankhead-Jones Land Use Lands (Administered by DOI)
National Grass Lands (Administered by USDA)
Other Federal

**Figure 2-11**
**Alternative E: Open and Closed to Grazing**

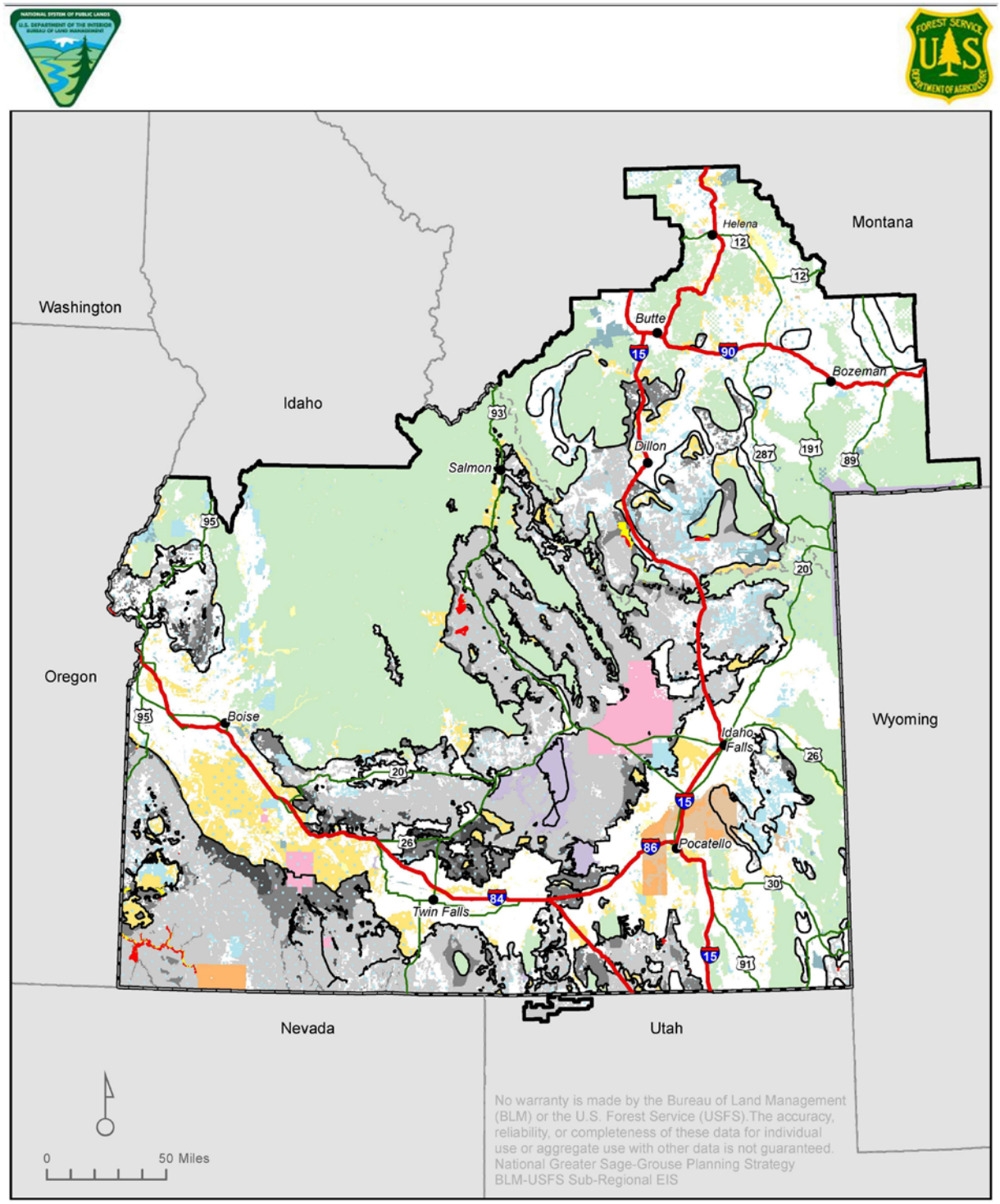



- Alternative E Boundary
- BLM and USFS Preliminary Priority Management Area Closed to Grazing
- BLM and USFS Preliminary General Management Area Closed to Grazing
- Idaho Core Zone / Montana Preliminary Priority Mgt. Area Open to Grazing
- Idaho Important Zone Open to Grazing
- Idaho General Zone / Montana Preliminary General Mgt. Area Open to Grazing
- Utah Habitat within SGMA Open to Grazing
- Analysis Boundary

**Surface Management Agency**

- Bureau of Land Management (BLM)
- Private
- US Forest Service (USFS)
- State
- State, County, City; Wildlife, Park and Outdoor Recreation Areas
- Bureau of Reclamation
- Military Reservations and Corps of Engineers; Department of Energy
- Indian Reservation (IR)
- National Park Service (NPS)
- National Wildlife Refuge
- Bankhead-Jones Land Use Lands (Administered by DOI)
- National Grass Lands (Administered by USDA)
- Other Federal

**Figure 2-12**
**Alternative F: Open and Closed to Grazing**




Alternative F Boundary
BLM and USFS Preliminary Priority Management Area Closed to Grazing
BLM and USFS Preliminary General Management Area Closed to Grazing
BLM and USFS Preliminary Priority Management Area Open to Grazing
BLM and USFS Preliminary General Management Area Open to Grazing
BLM and USFS Preliminary Restoration Management Area Open to Grazing
Analysis Boundary

**Surface Management Agency**
Bureau of Land Management (BLM)
Private
US Forest Service (USFS)
State
State, County, City; Wildlife, Park and Outdoor Recreation Areas
Bureau of Reclamation
Military Reservations and Corps of Engineers; Department of Energy
Indian Reservation (IR)
National Park Service (NPS)
National Wildlife Refuge
Bankhead-Jones Land Use Lands (Administered by DOI)
National Grass Lands (Administered by USDA)
Other Federal

**Figure 2-13**
**Alternative A: Travel and Transportation**

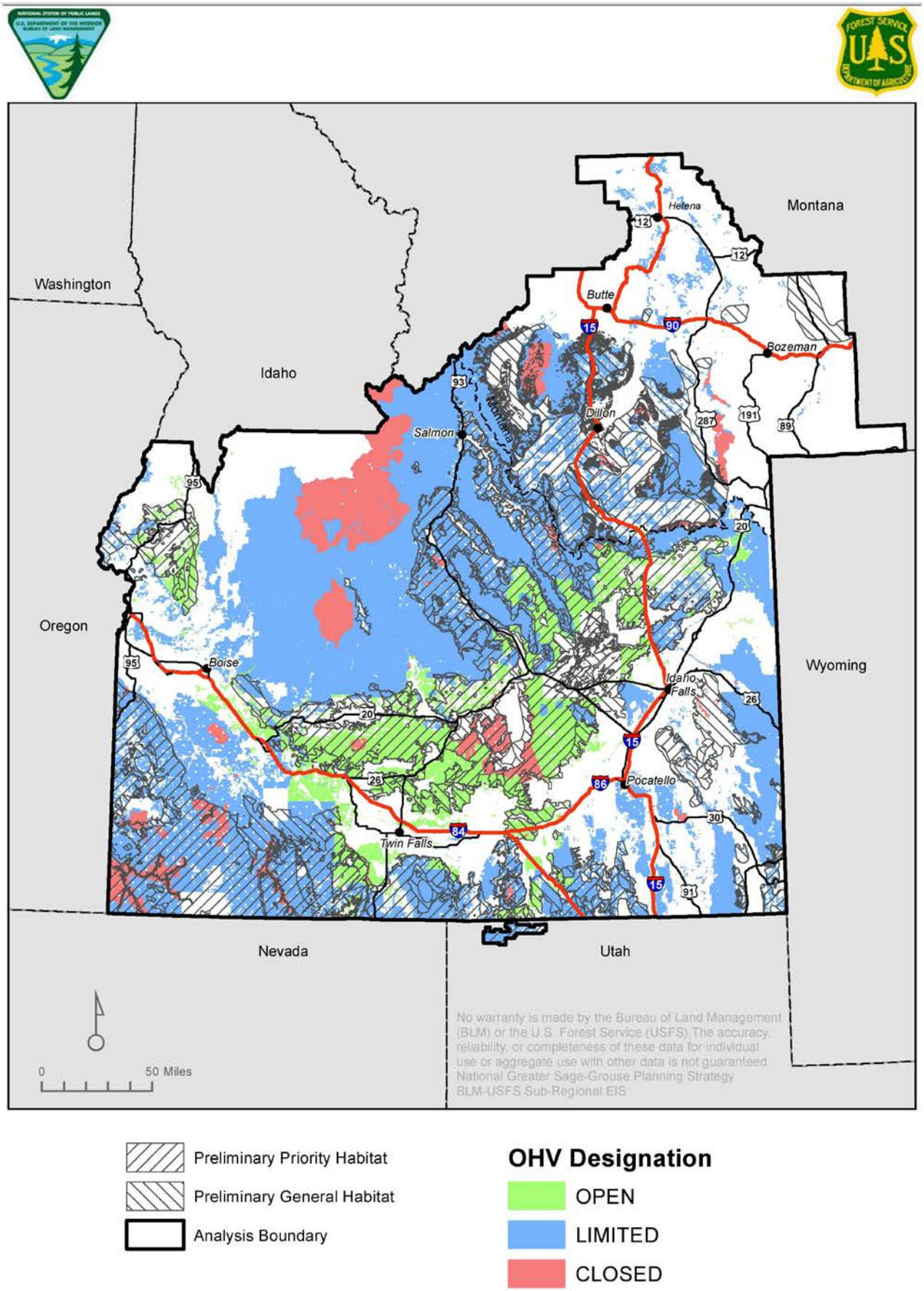
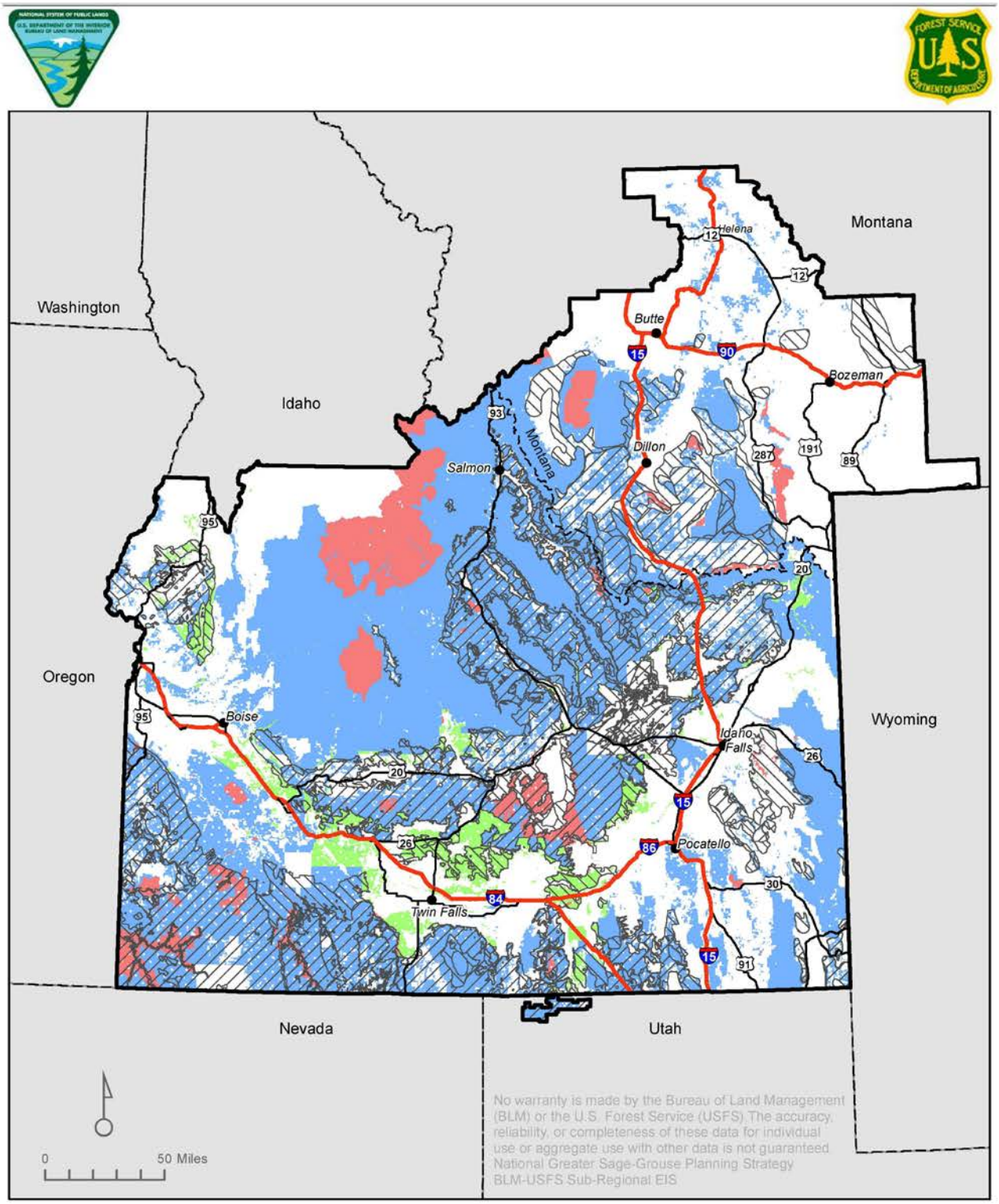


**Figure 2-14**
**Alternative B: Travel and Transportation**




Preliminary Priority Management Area
Preliminary General Management Area
Analysis Boundary

**OHV Designation**
OPEN
LIMITED
CLOSED

**Figure 2-15**
**Alternative C: Travel and Transportation**

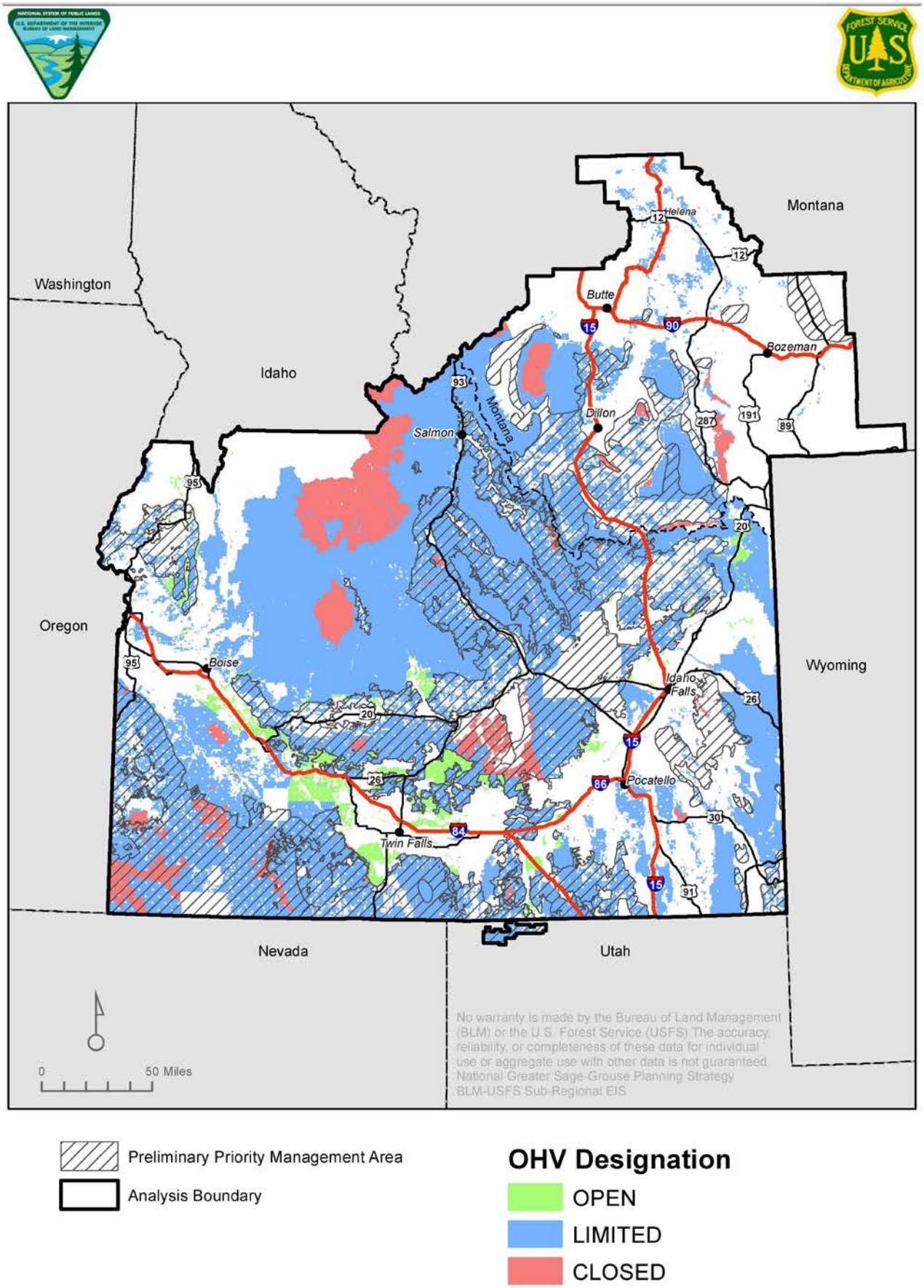


**Figure 2-16**
**Alternative D: Travel and Transportation**

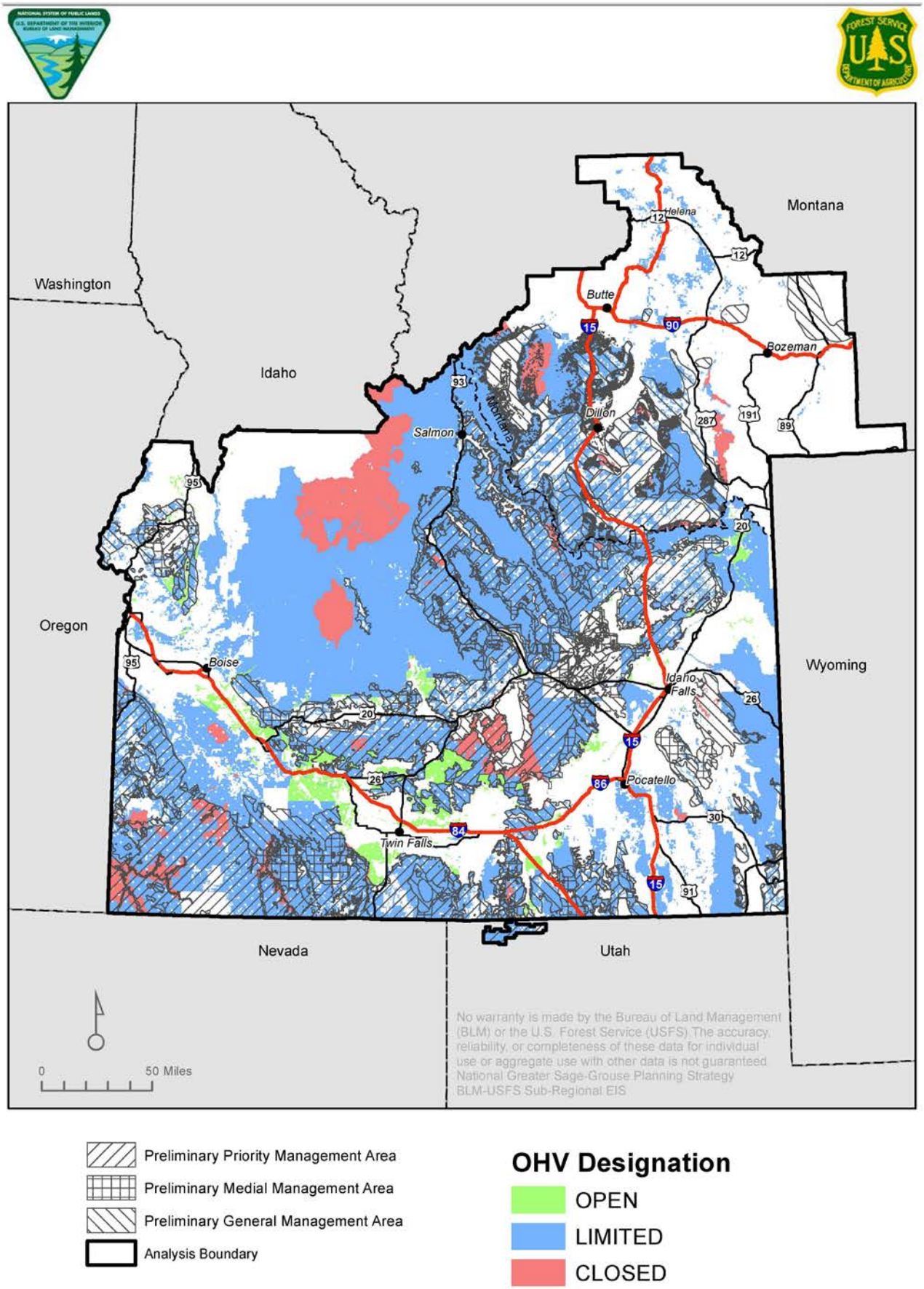
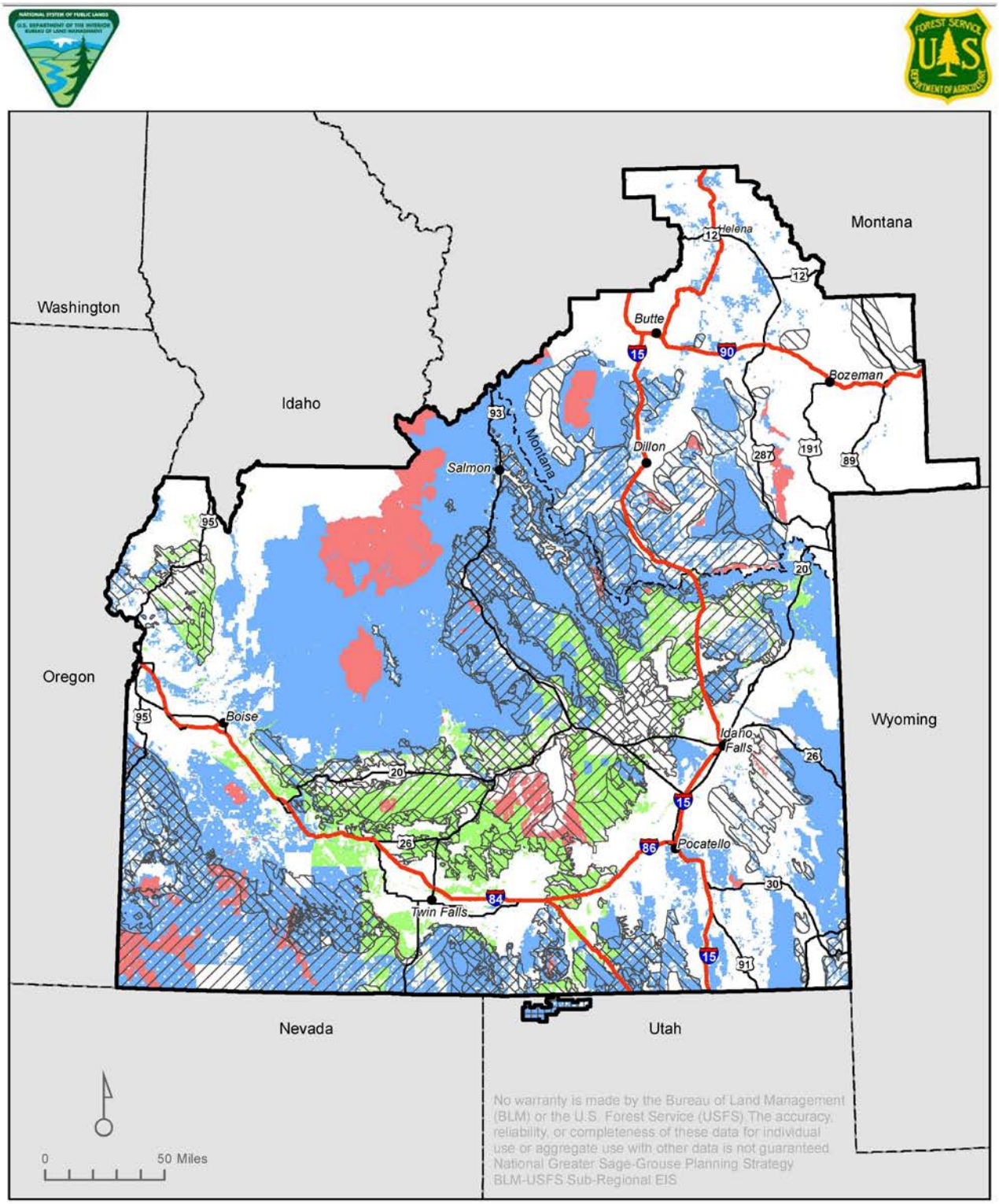


**Figure 2-17**
**Alternative E: Travel and Transportation**




Idaho Core Zone/ Montana Preliminary Priority Mgt. Area
Idaho Important Zone
Idaho General Zone/ Montana Preliminary General Mgt. Area
Utah Habitat within SGMA
Analysis Boundary

**OHV Designation**

OPEN
LIMITED
CLOSED

**Figure 2-18**
**Alternative F: Travel and Transportation**

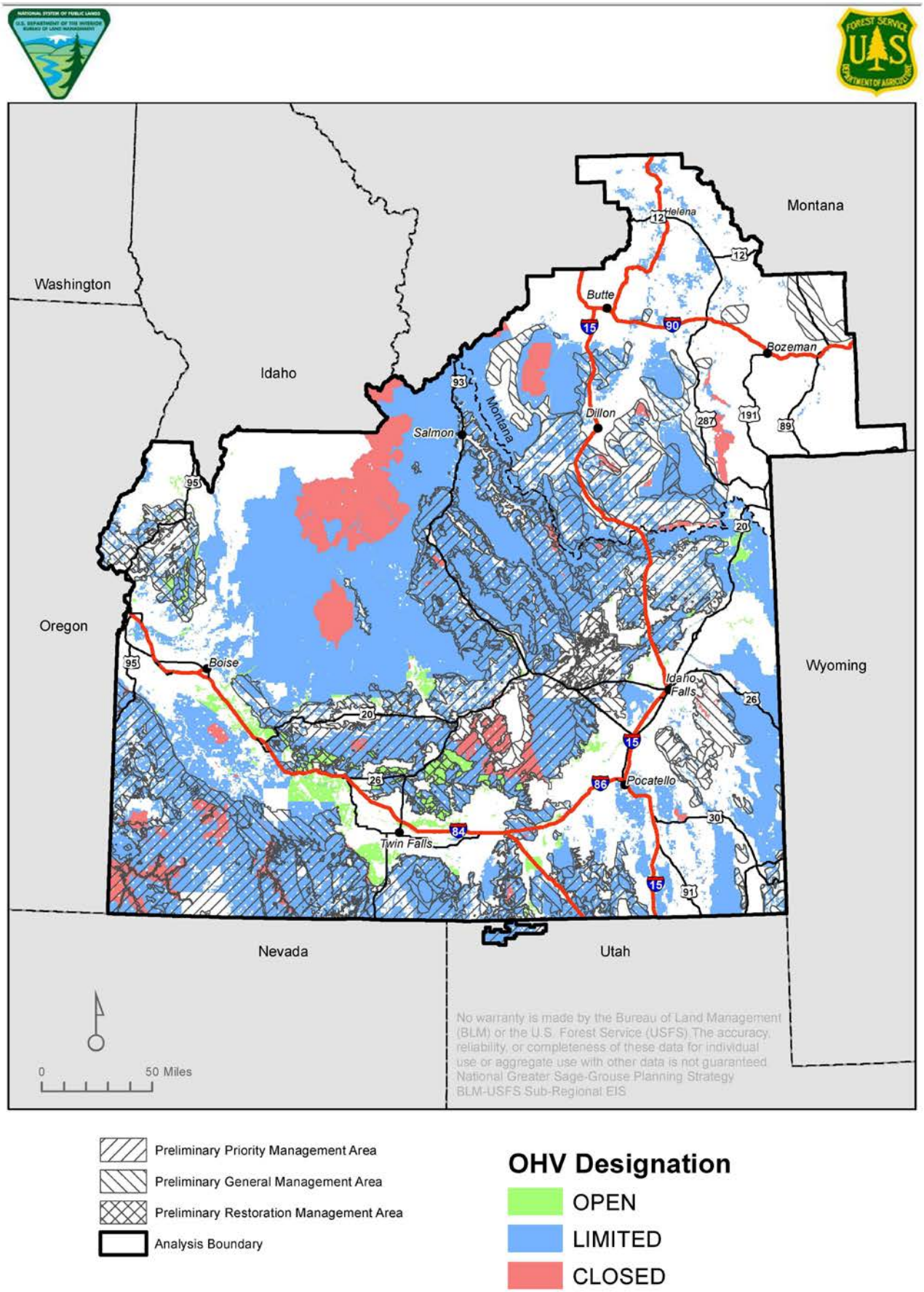


**Figure 2-19**
**Alternative A: Right-of-way Exclusion and Avoidance**

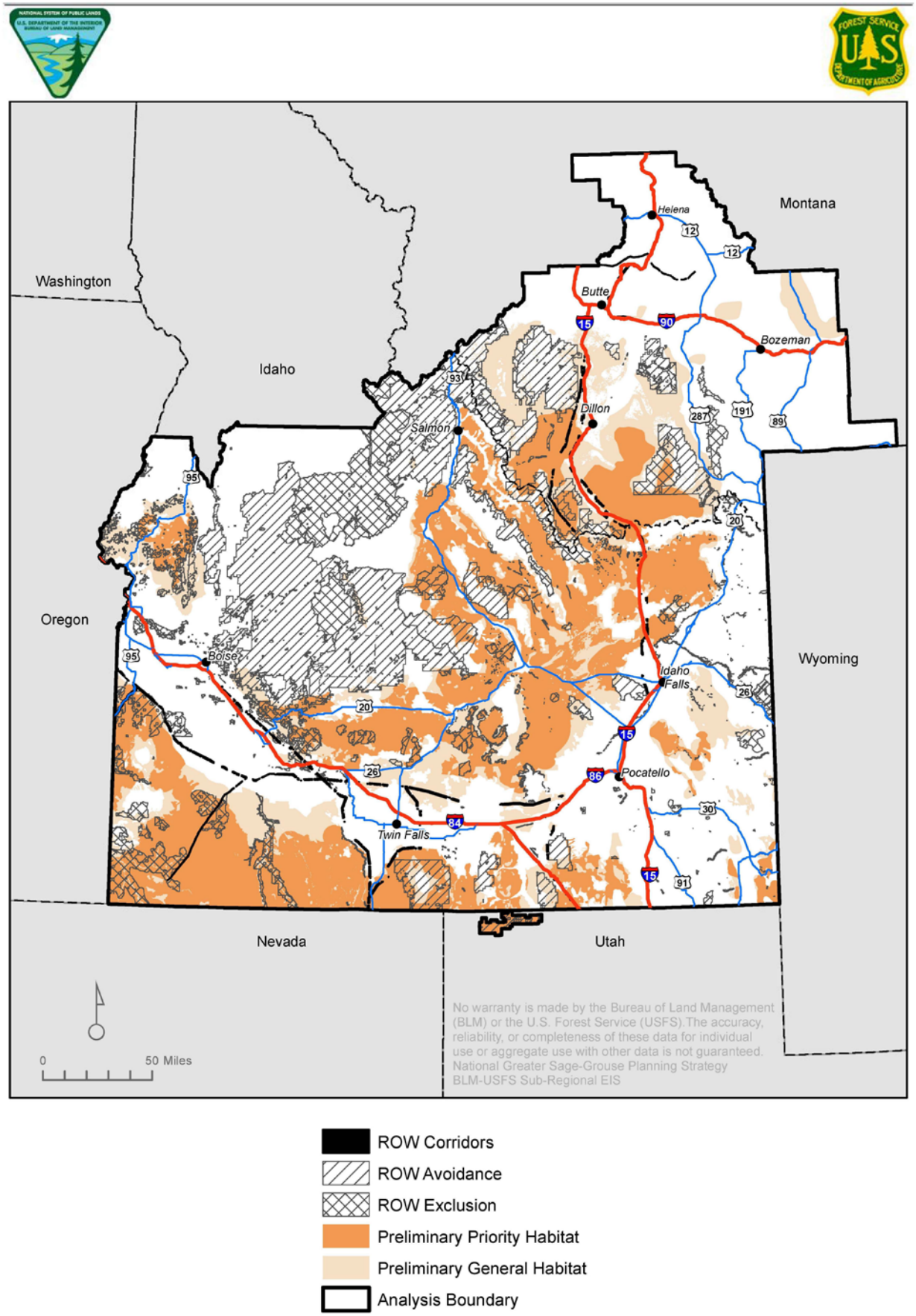


**Figure 2-20**
**Alternative B: Right-of-way Exclusion and Avoidance**

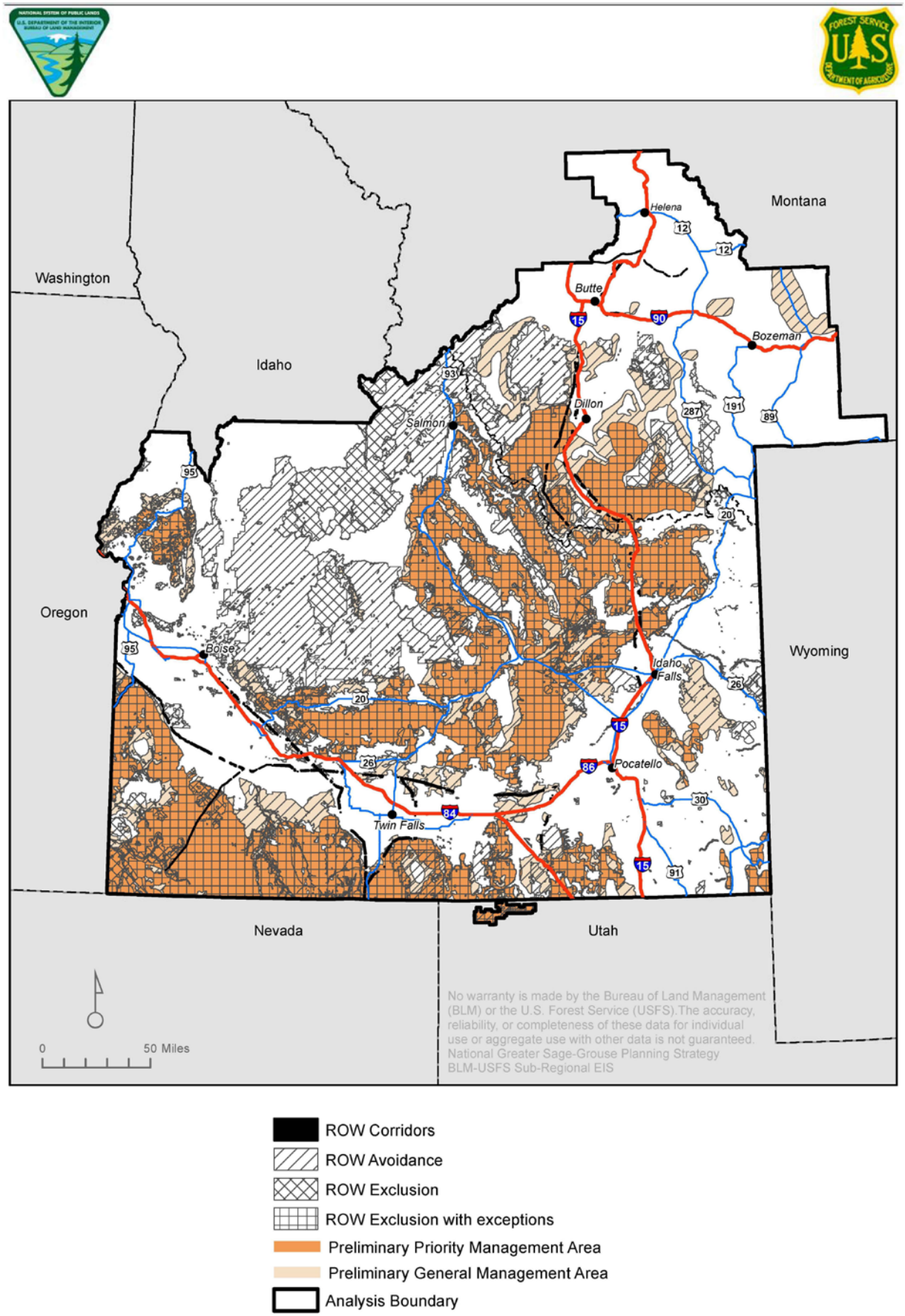


**Figure 2-21**
**Alternative C: Right-of-way Exclusion and Avoidance**

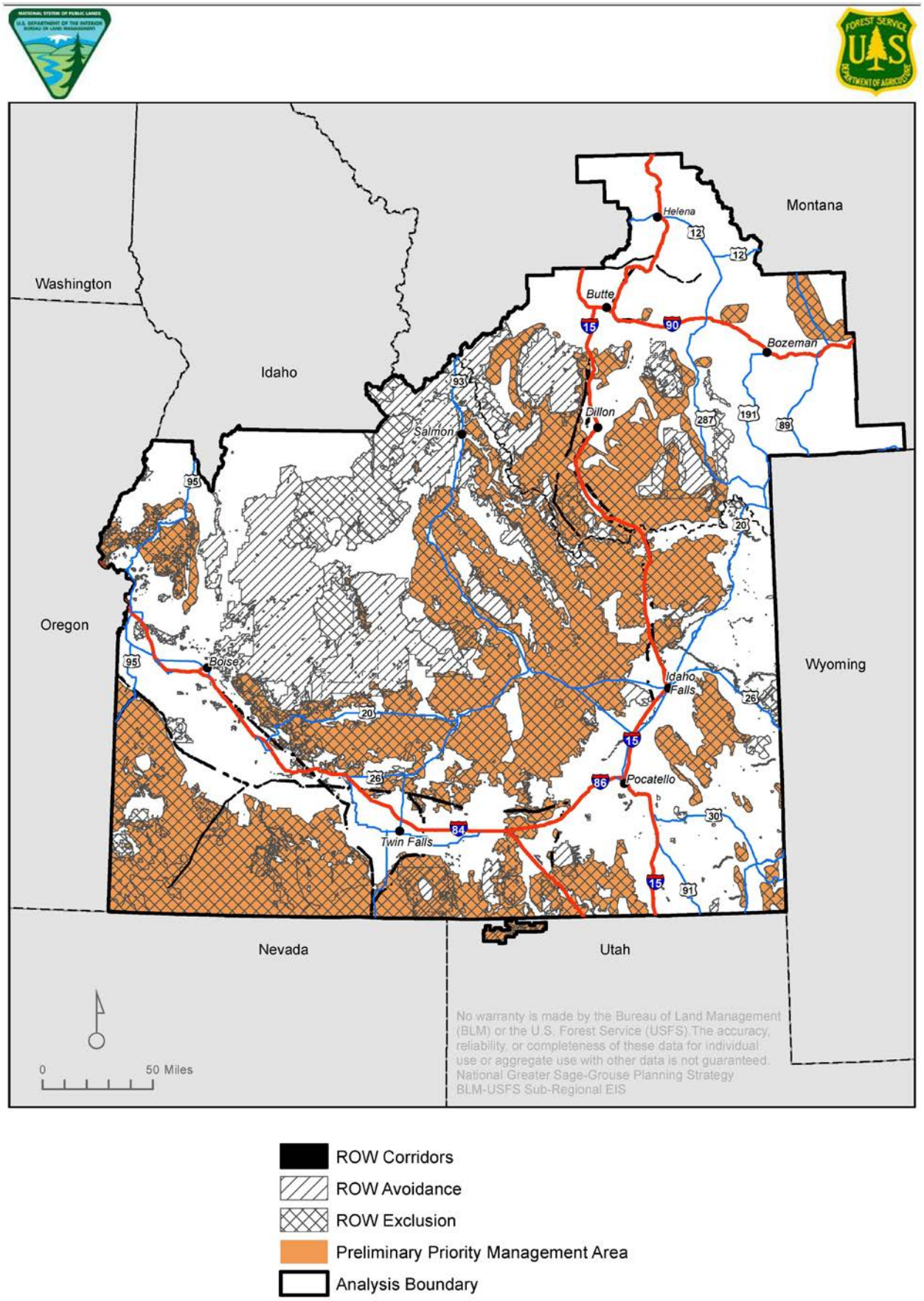


**Figure 2-22**
**Alternative D: Right-of-way Exclusion and Avoidance**

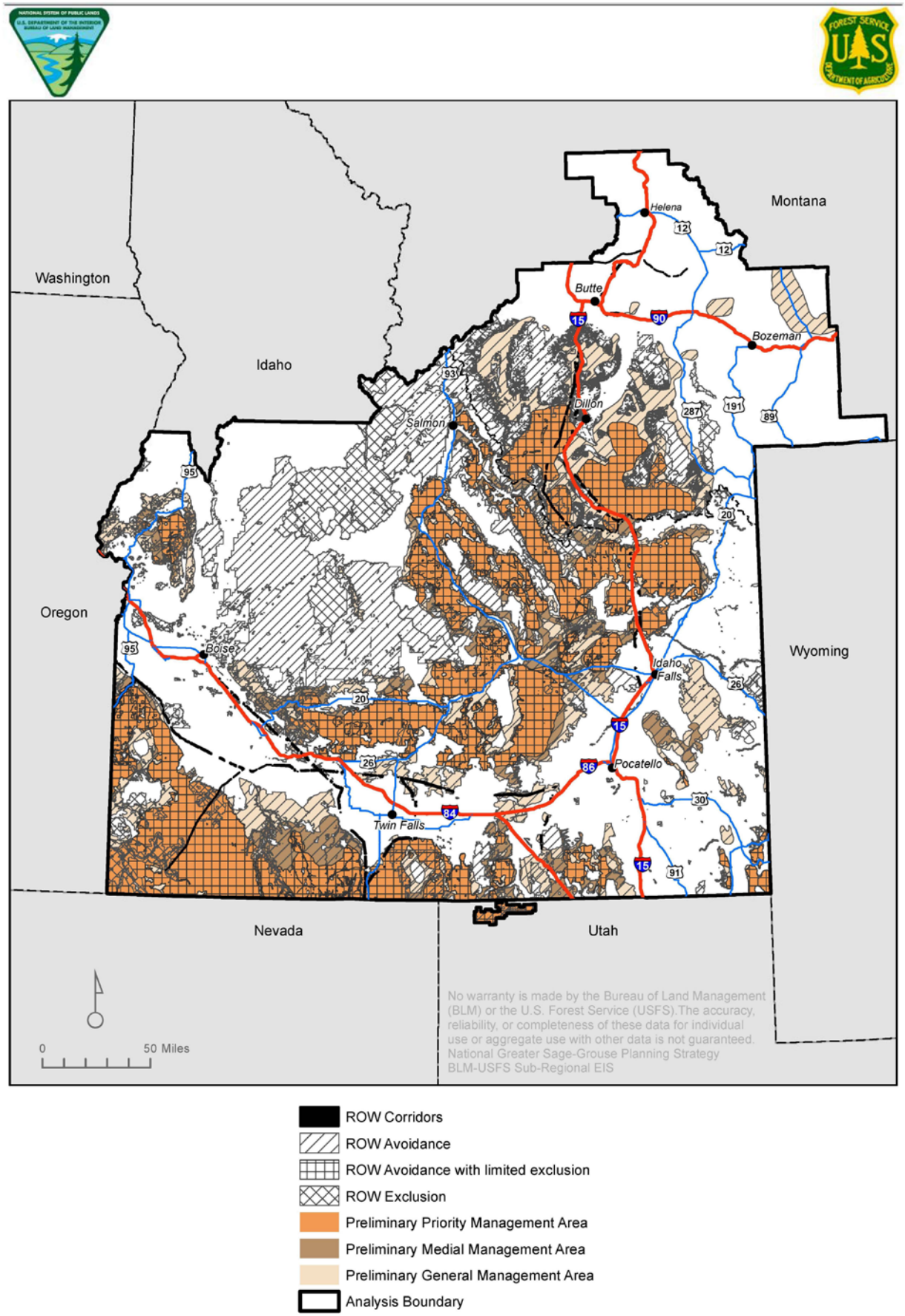


**Figure 2-23**
**Alternative E: Right-of-way Exclusion and Avoidance**

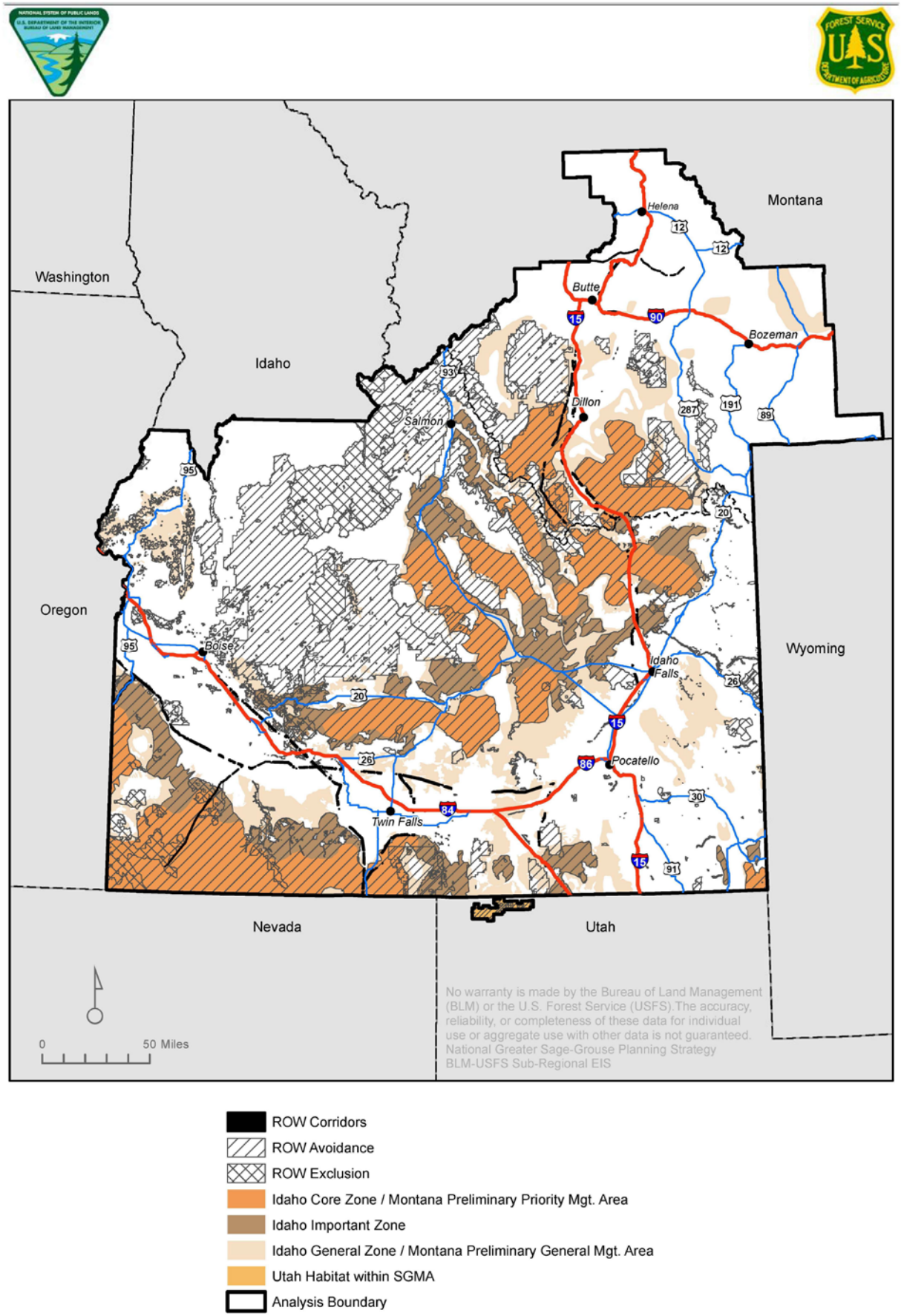


**Figure 2-24**
**Alternative F: Right-of-way Exclusion and Avoidance**

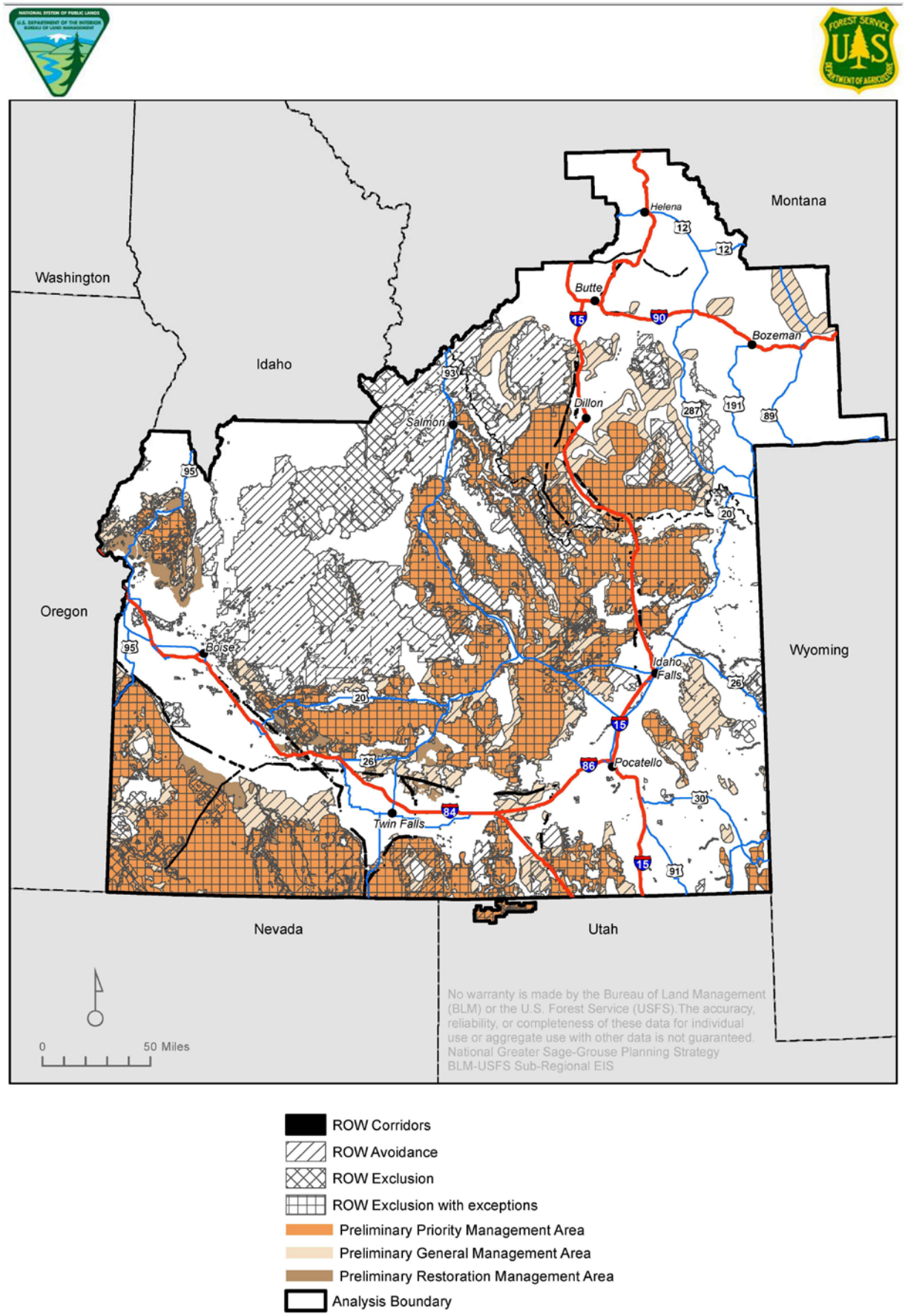


**Figure 2-25**
**Alternative A: Areas Withdrawn from Locatable Mineral Entry**

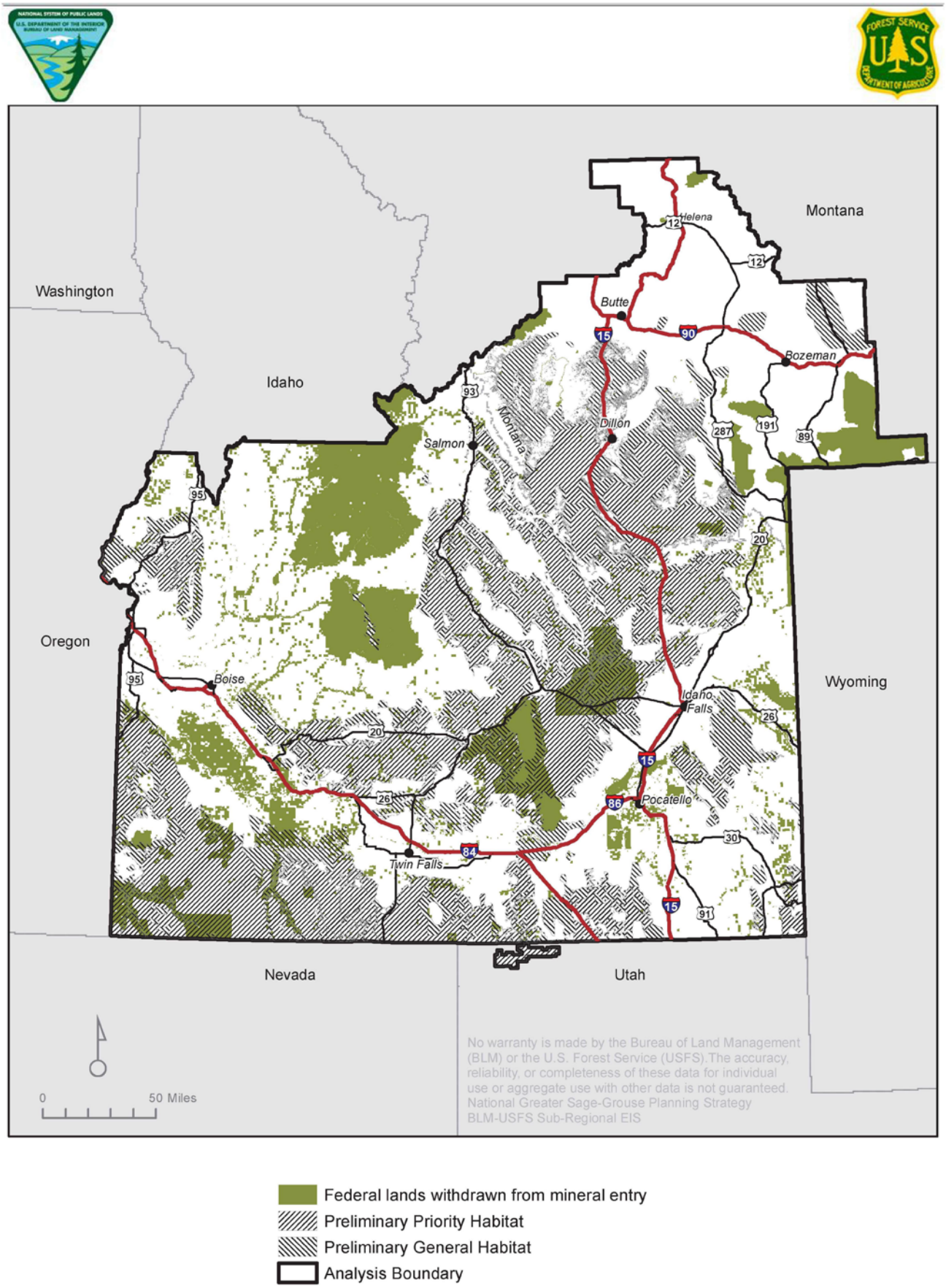


**Figure 2-26**
**Alternative B: Areas Withdrawn from Locatable Mineral Entry**

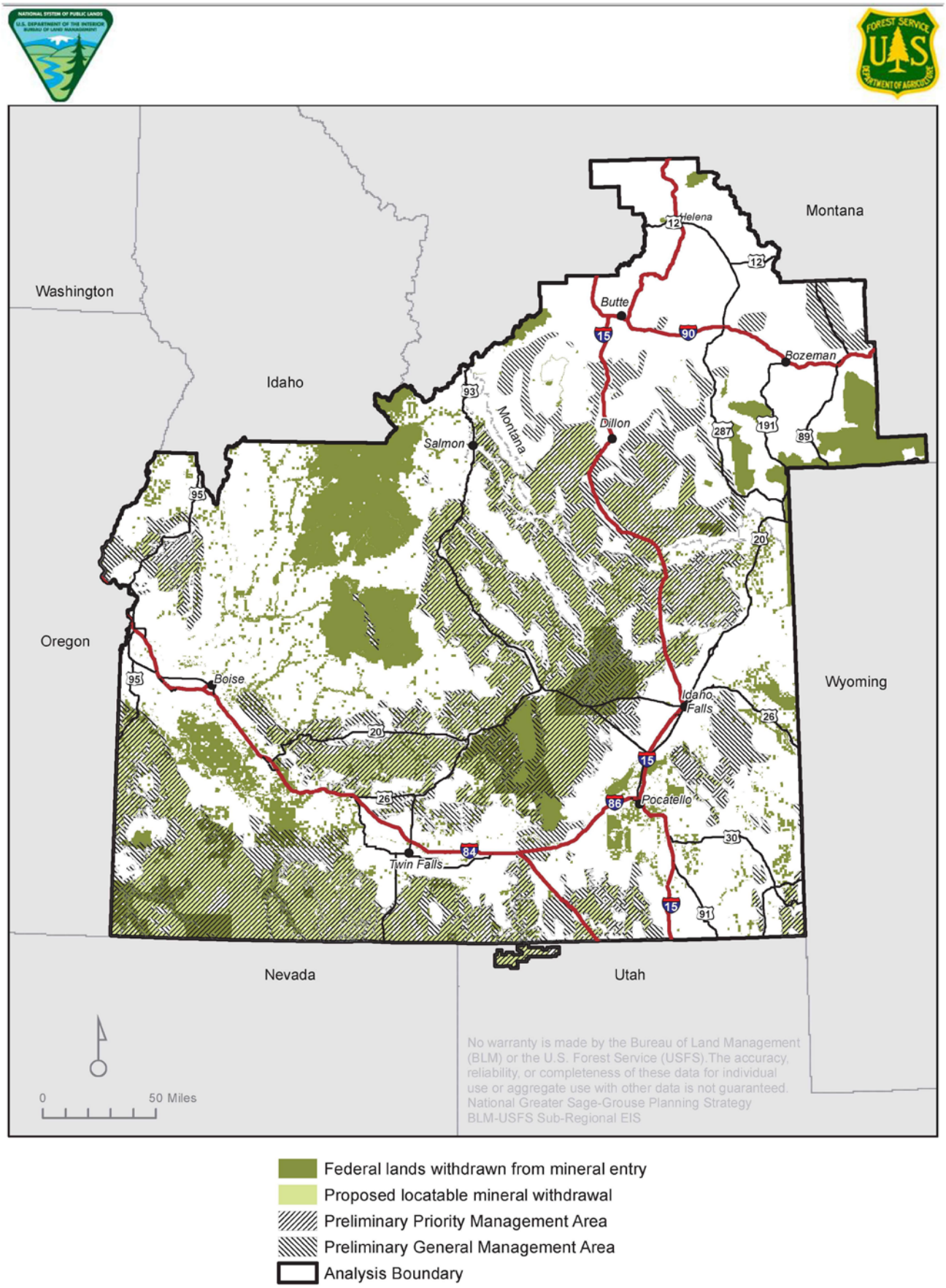
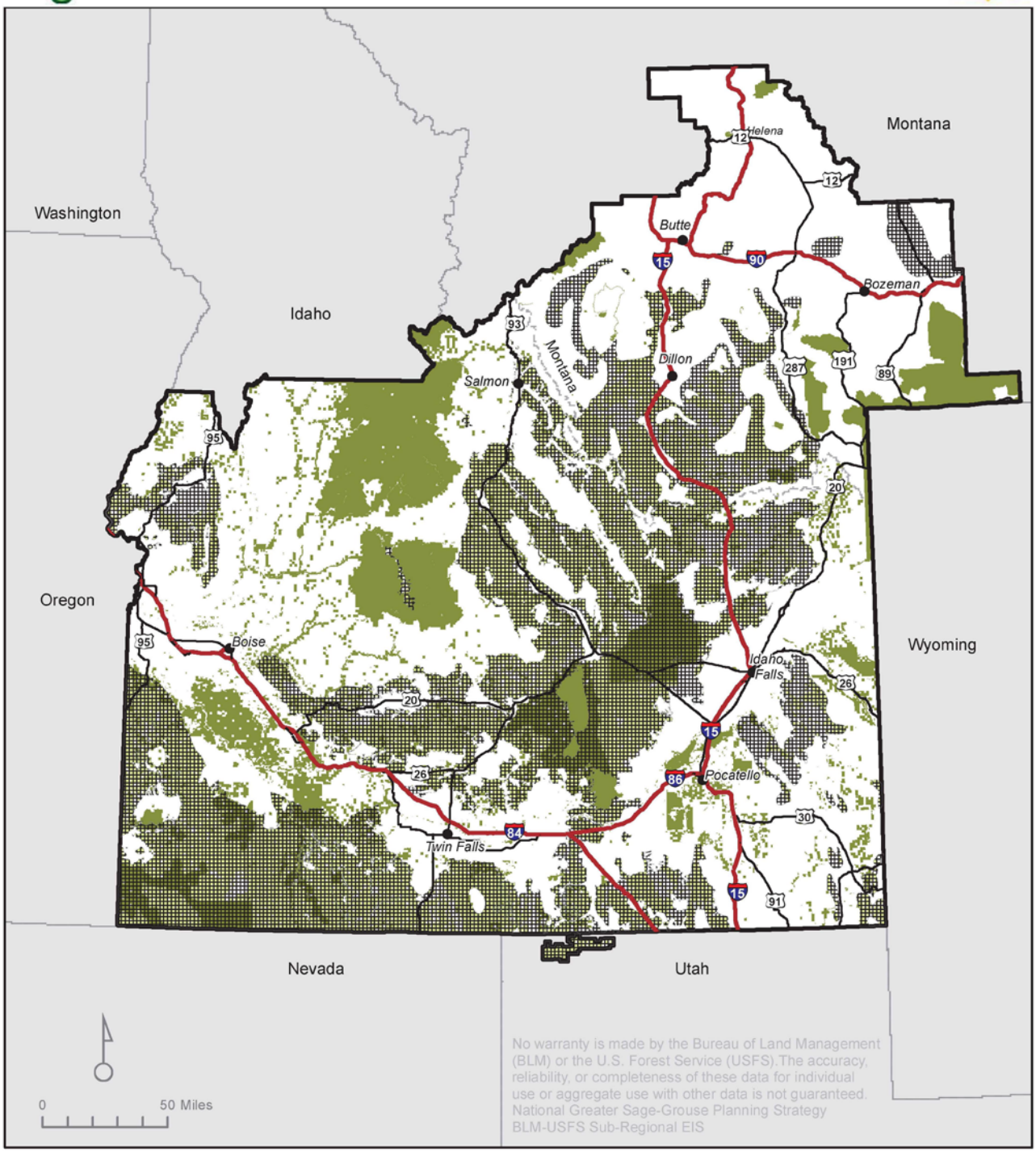


**Figure 2-27**
**Alternative C: Areas Withdrawn from Locatable Mineral Entry**




Federal lands withdrawn from mineral entry
Proposed locatable mineral withdrawal
Preliminary Priority Management Area
Analysis Boundary

**Figure 2-28**
**Alternative D: Areas Withdrawn from Locatable Mineral Entry**

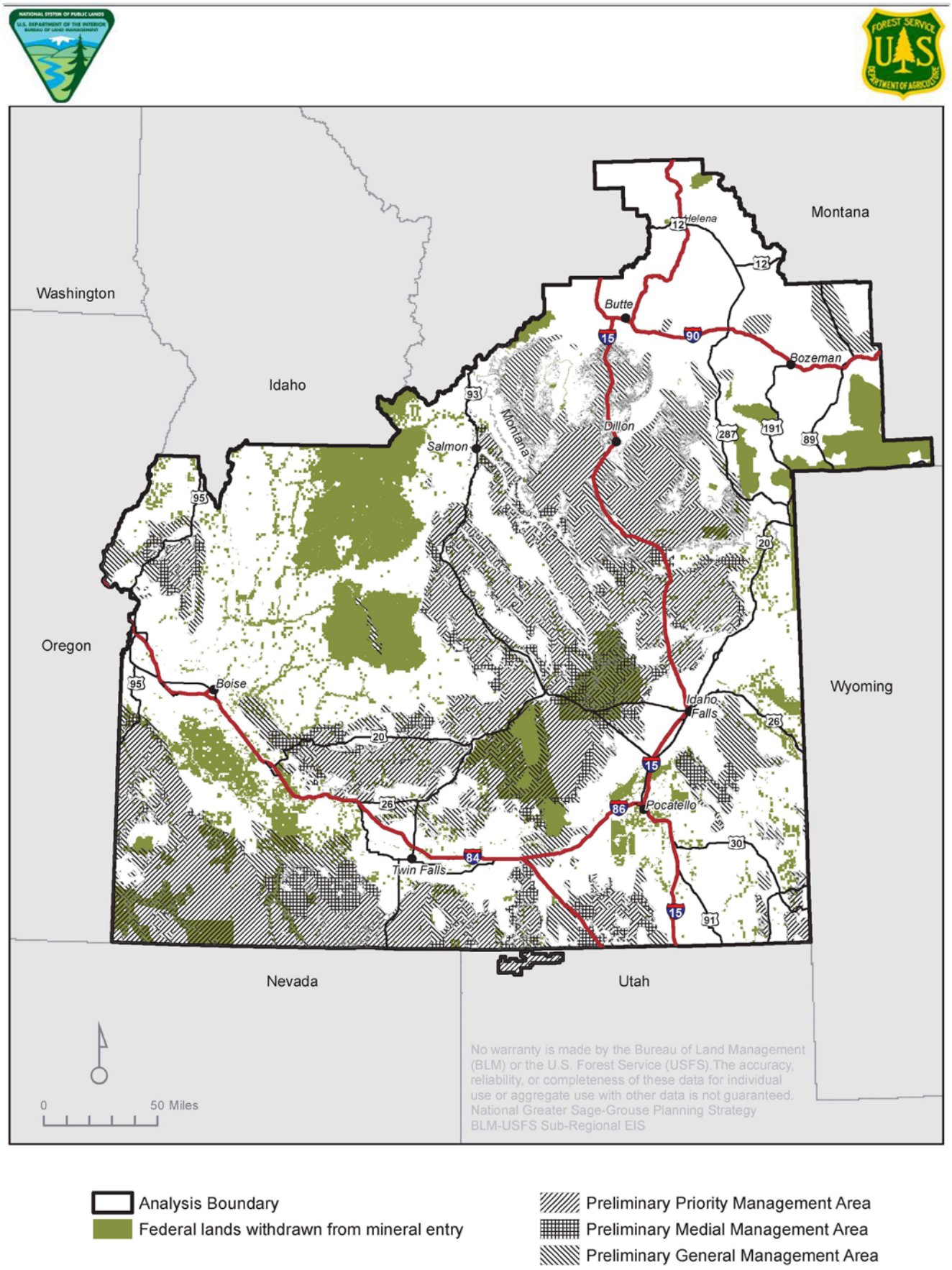


**Figure 2-29**
**Alternative E: Areas Withdrawn from Locatable Mineral Entry**

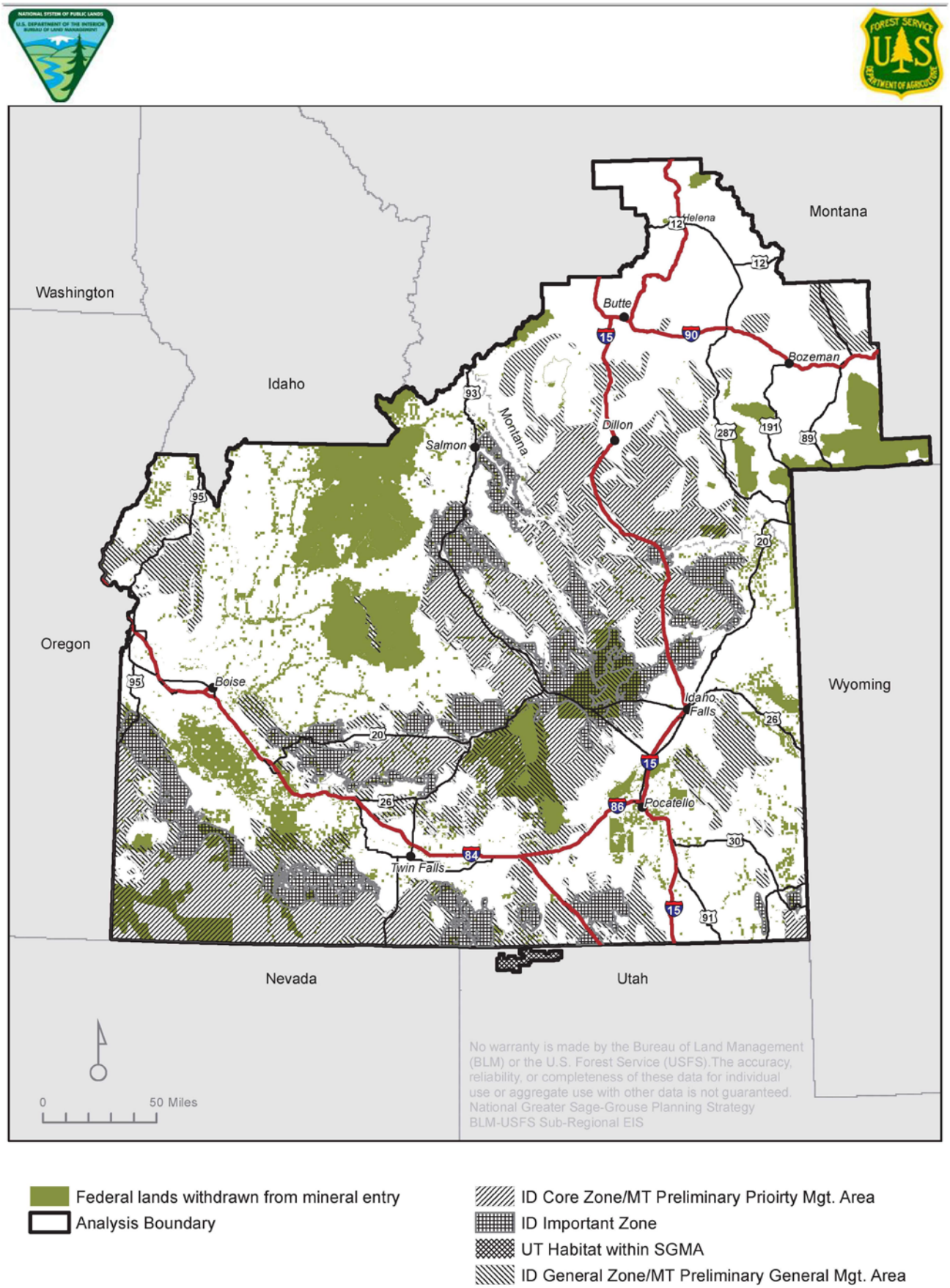


**Figure 2-30**
**Alternative F: Areas Withdrawn from Locatable Mineral Entry**

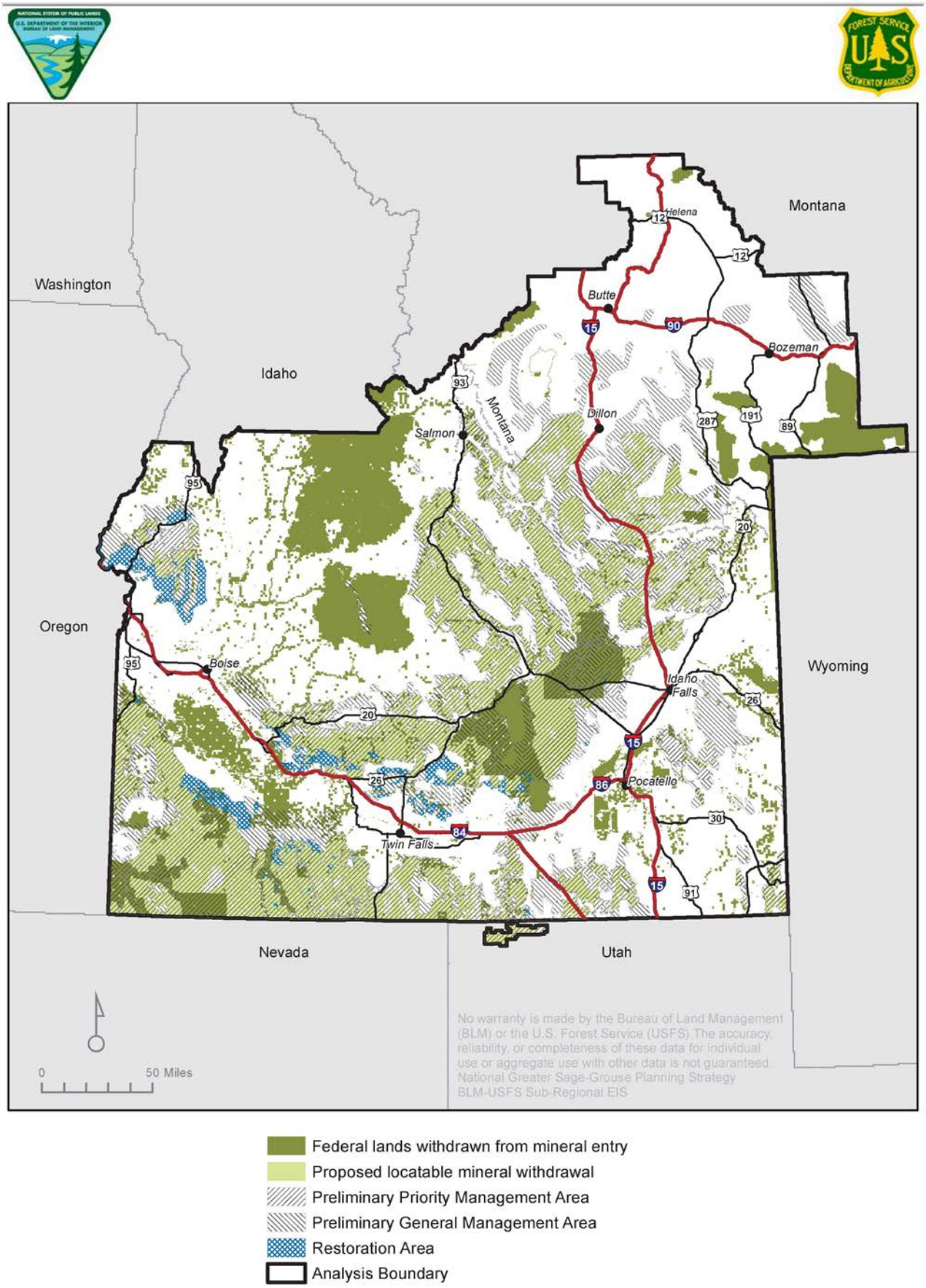


**Figure 2-31**
**Alternative A: Open, Closed, or Stipulations to Nonenergy Leasing**

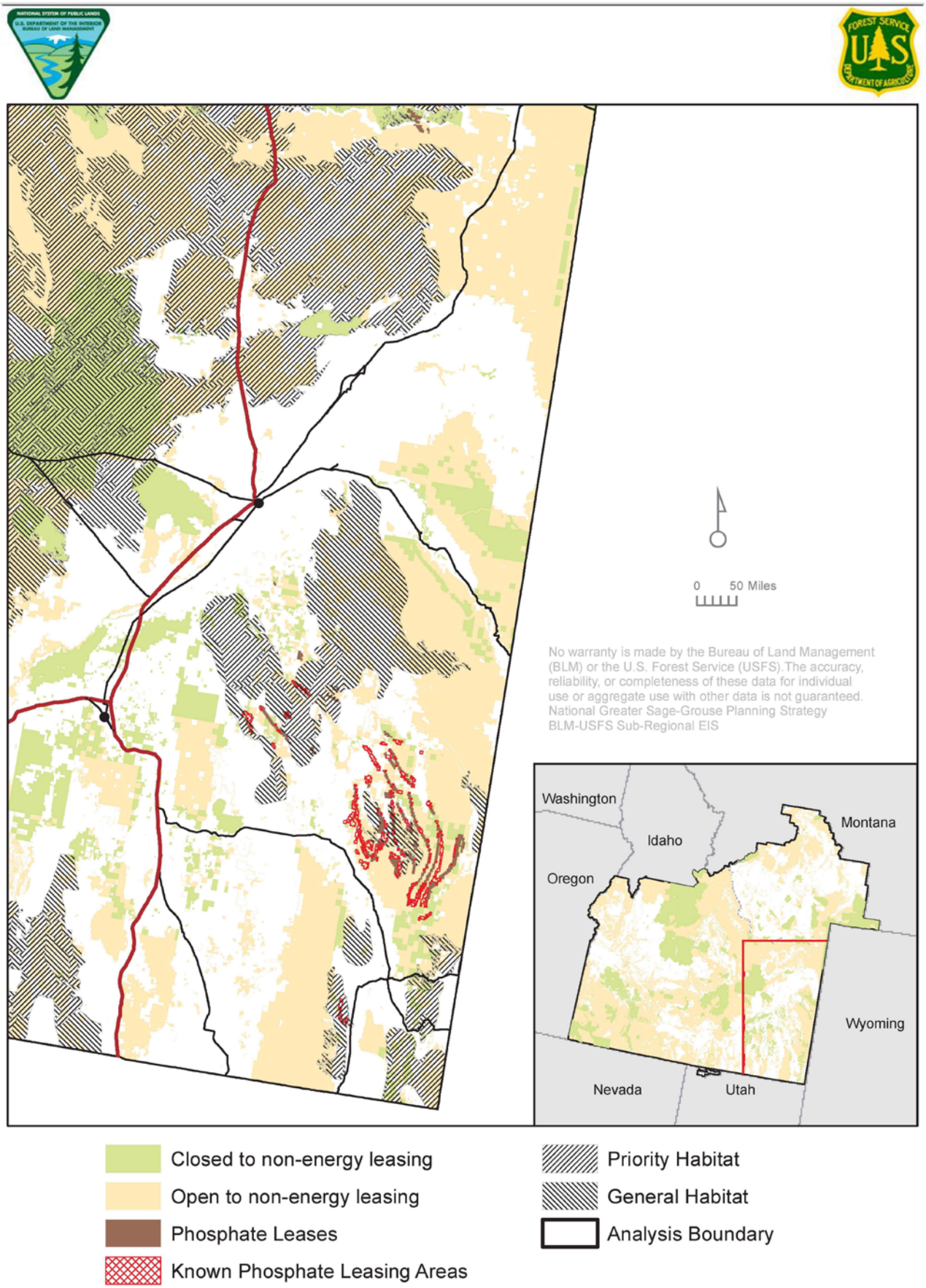


**Figure 2-32**
**Alternative B: Open, Closed, or Stipulations to Nonenergy Leasing**

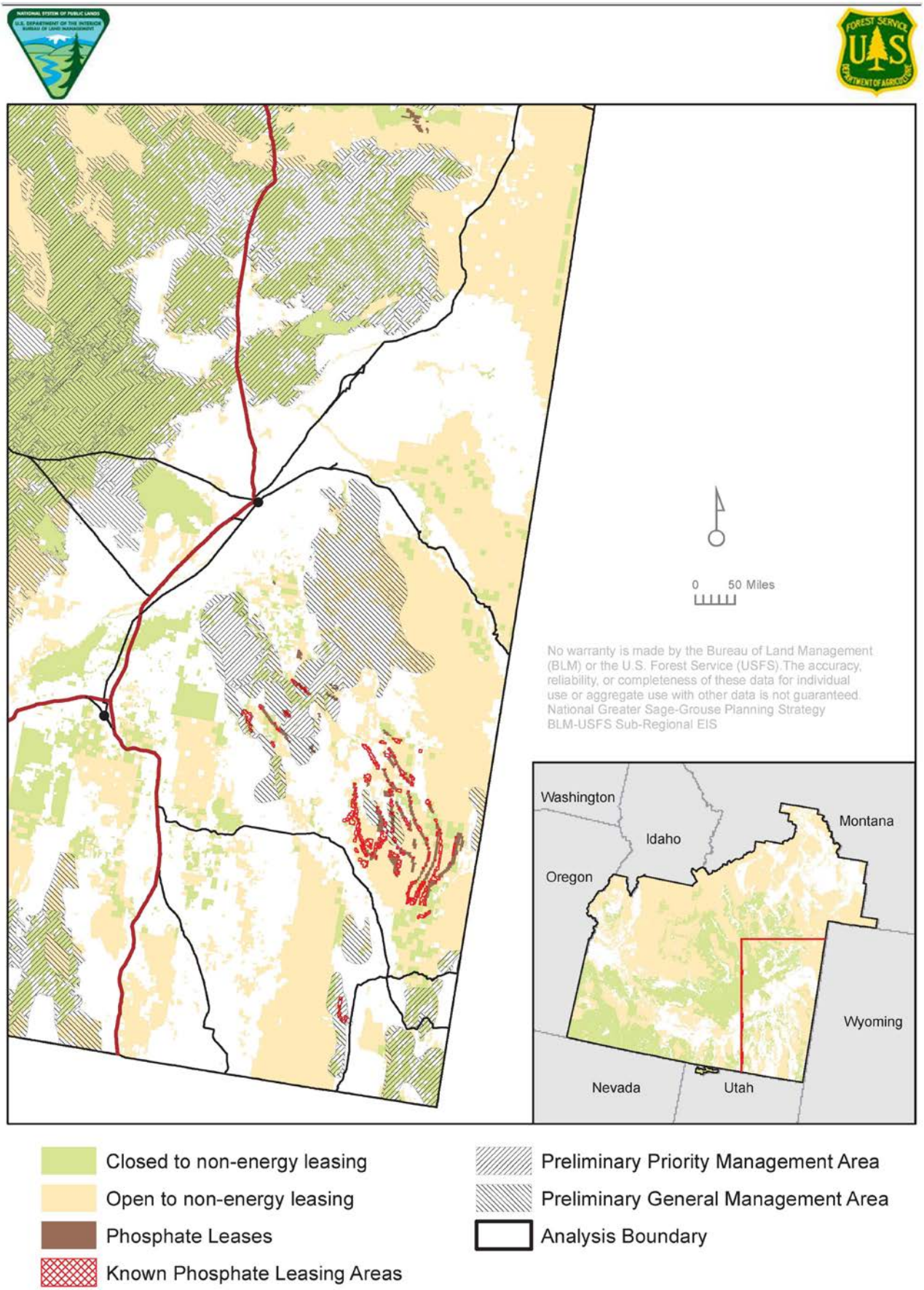


**Figure 2-33**
**Alternative C: Open, Closed, or Stipulations to Nonenergy Leasing**

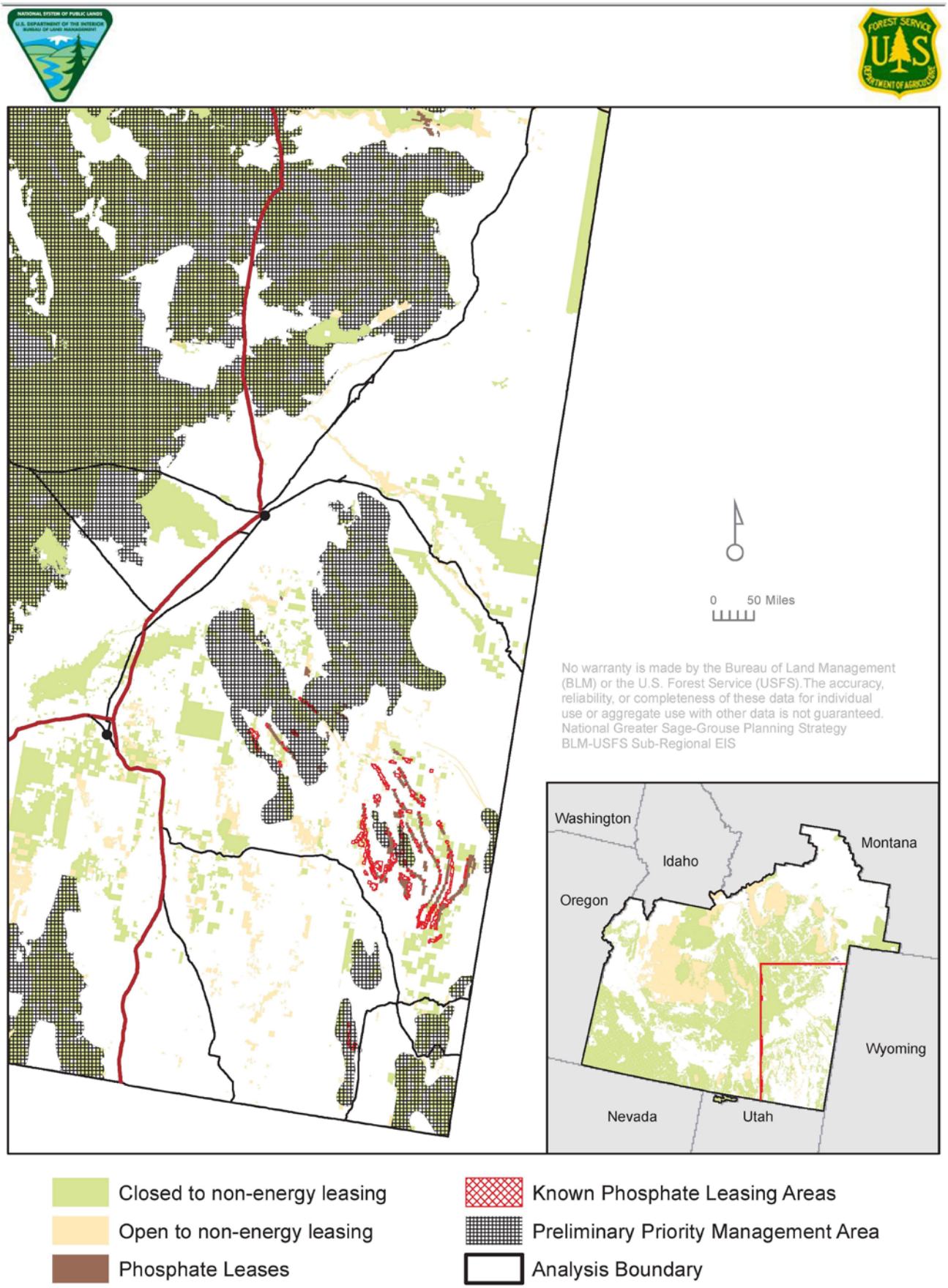
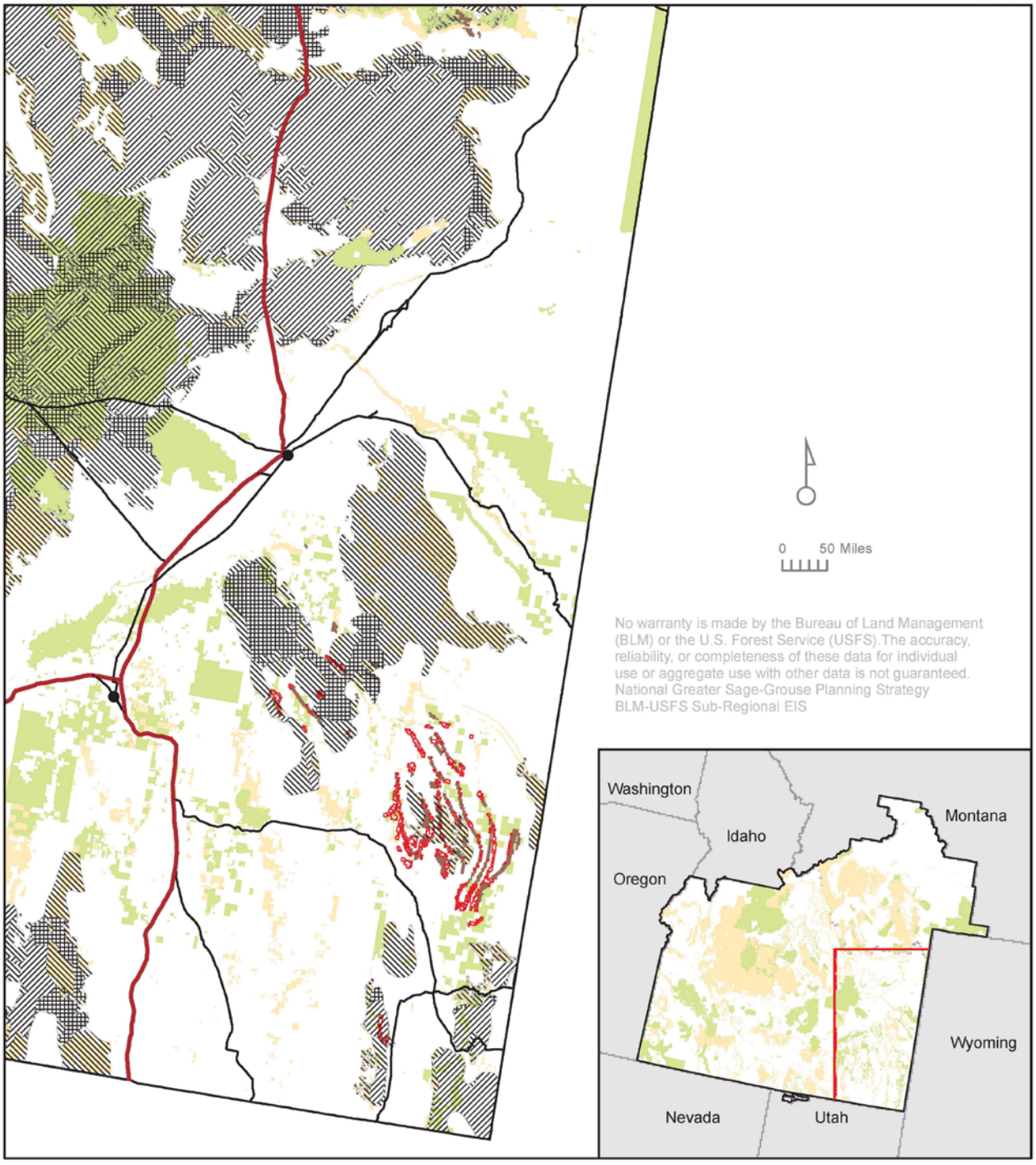


**Figure 2-34**
**Alternative D: Open, Closed, or Stipulations to Nonenergy Leasing**




Closed to non-energy leasing
Open to non-energy leasing
Phosphate Leases
Known Phosphate Leasing Areas
Preliminary Priority Management Area
Preliminary Medial Habitat Management Area
Preliminary General Habitat Management Area
Analysis Boundary

**Figure 2-35**
**Alternative E: Open, Closed, or Stipulations to Nonenergy Leasing**

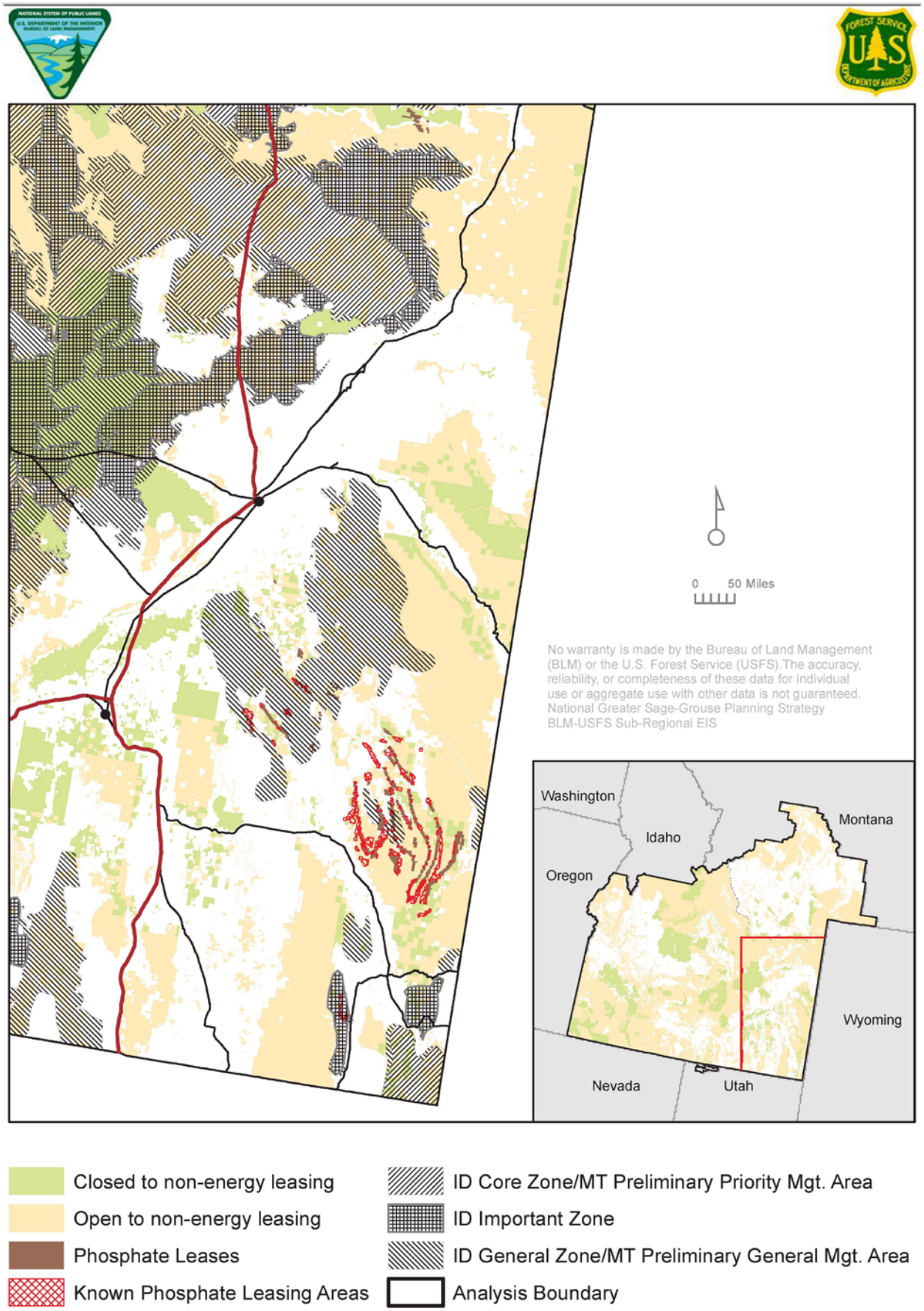


**Figure 2-36**
**Alternative F: Open, Closed, or Stipulations to Nonenergy Leasing**

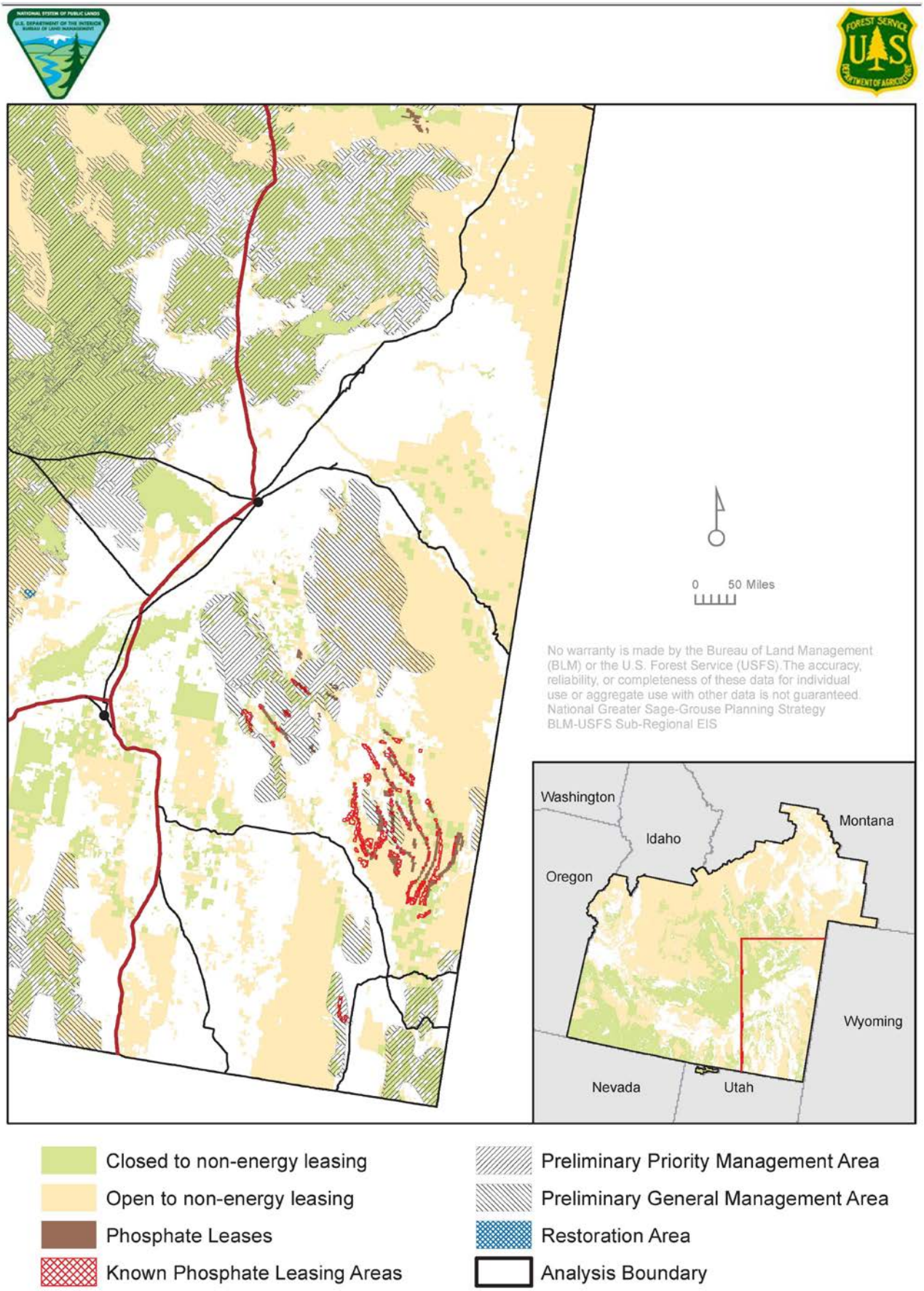
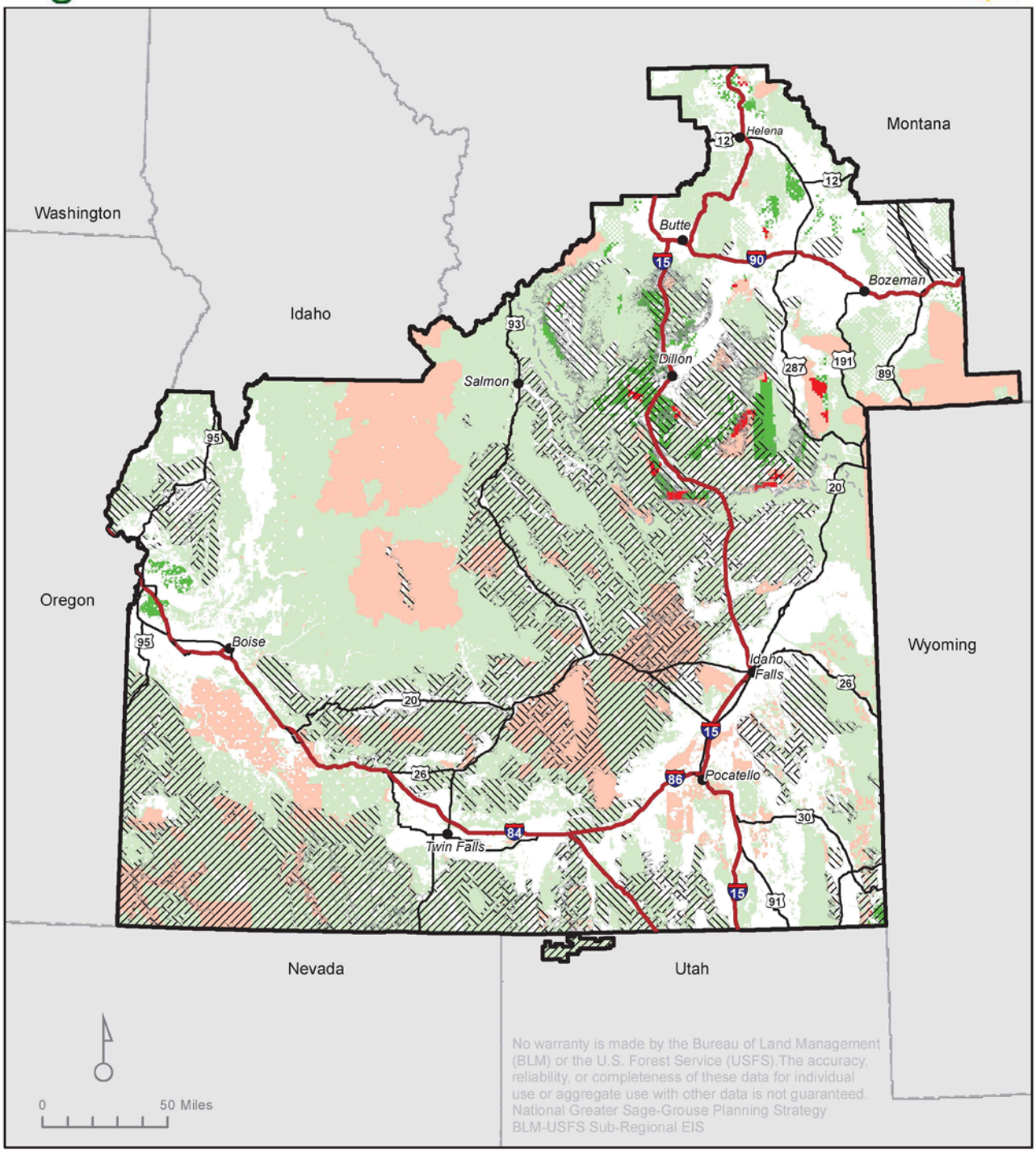


**Figure 2-37**
**Alternative A: Oil and Gas Potential Constraints**




Preliminary Priority Habitat
Preliminary General Habitat
Analysis Boundary

Potential/Constraints — Medium — Low
Closed to Leasing
Open to Leasing

**Figure 2-38**
**Alternative B: Oil and Gas Potential Constraints**

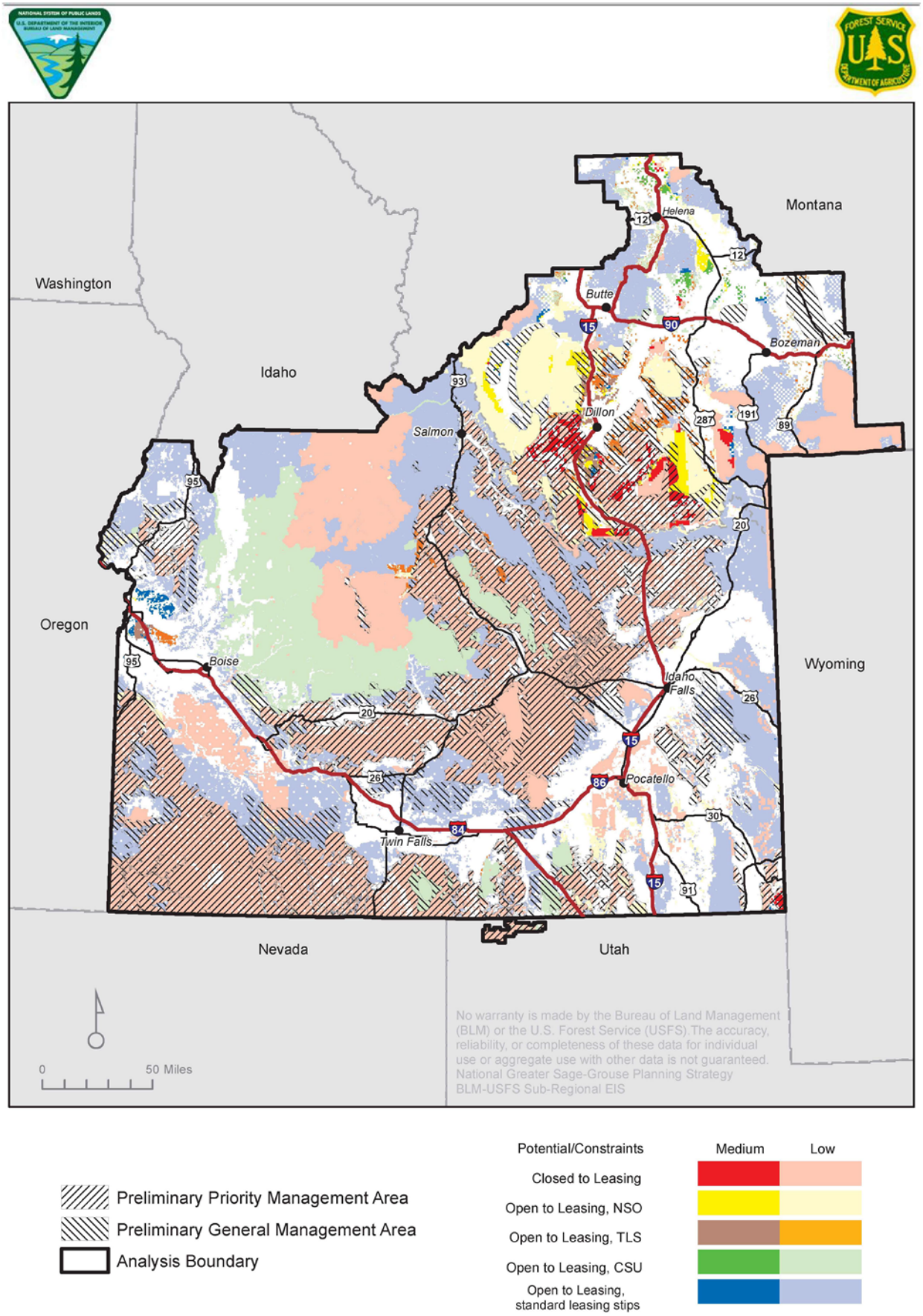


**Figure 2-39**
**Alternative C: Oil and Gas Potential Constraints**

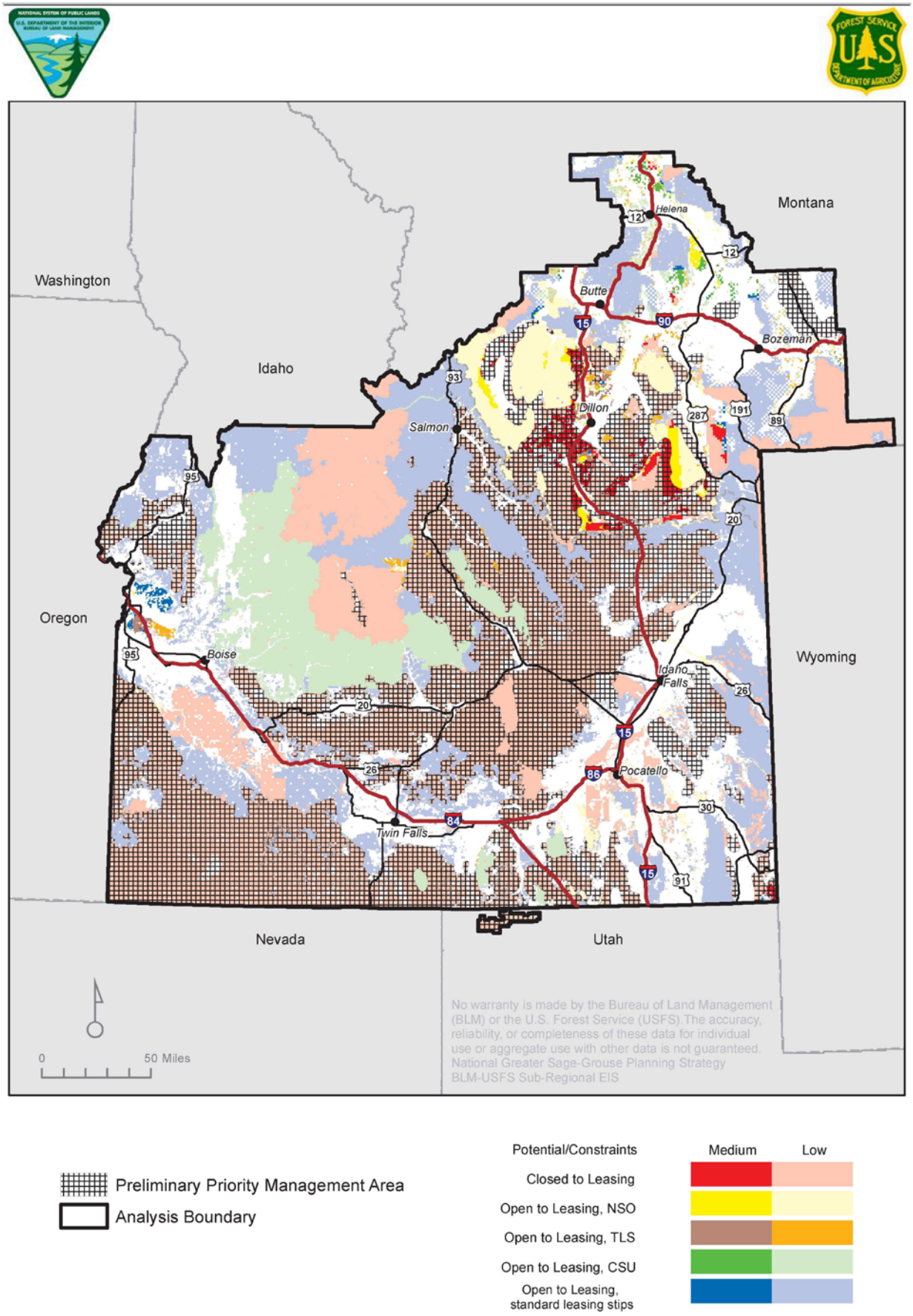


**Figure 2-40**
**Alternative D: Oil and Gas Potential Constraints**

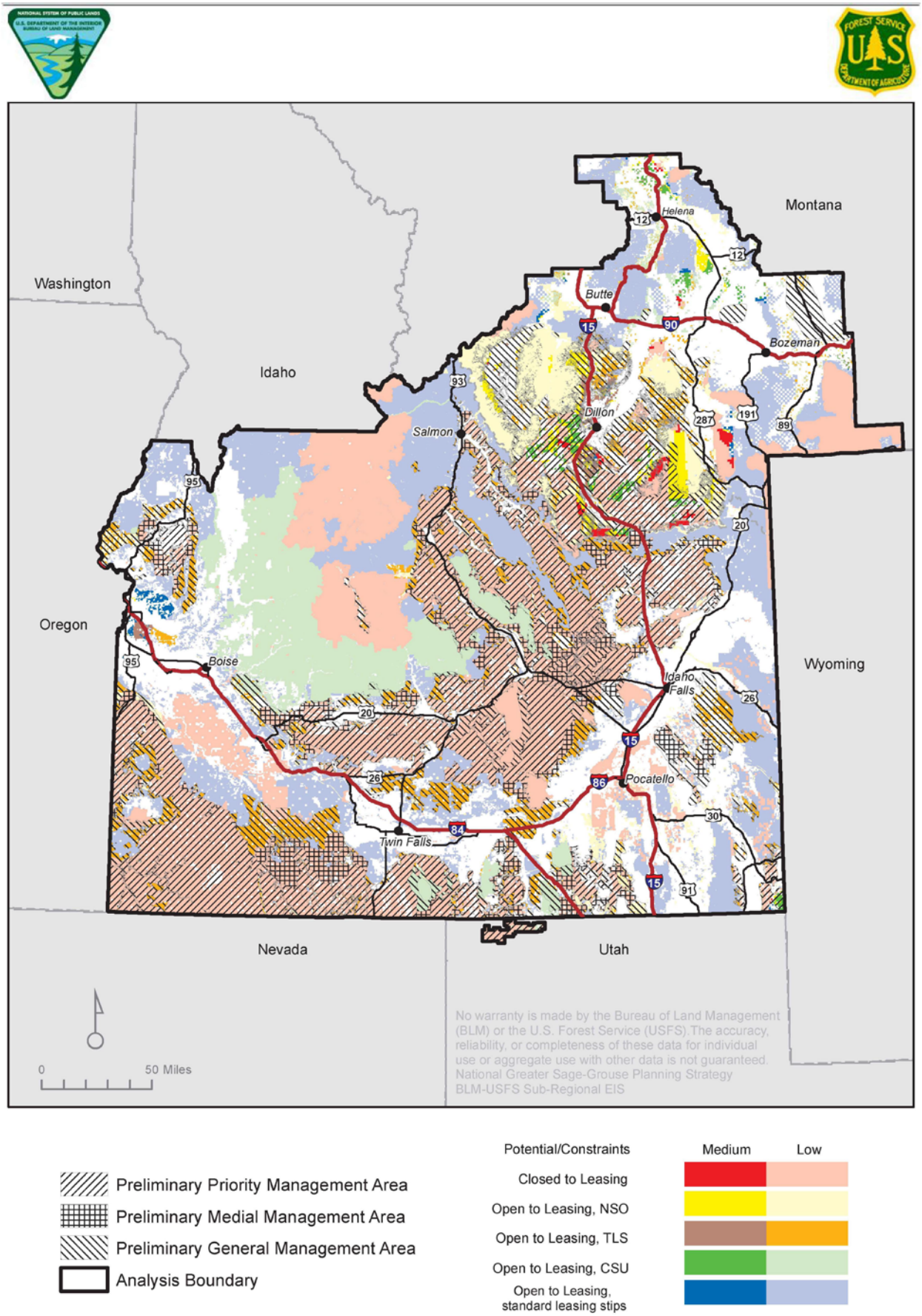


**Figure 2-41**
**Alternative E: Oil and Gas Potential Constraints**

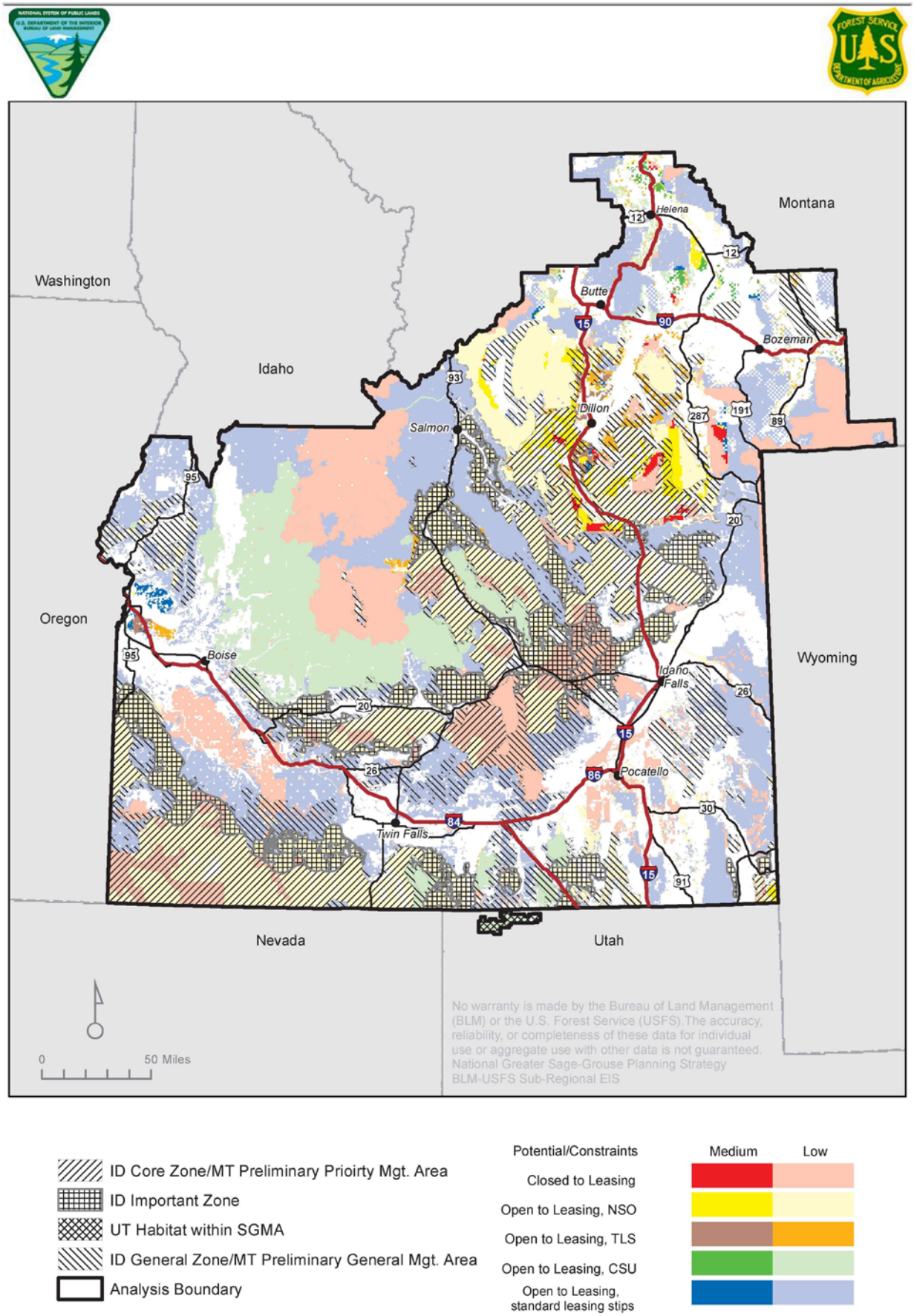


**Figure 2-42**
**Alternative F: Oil and Gas Potential Constraints**

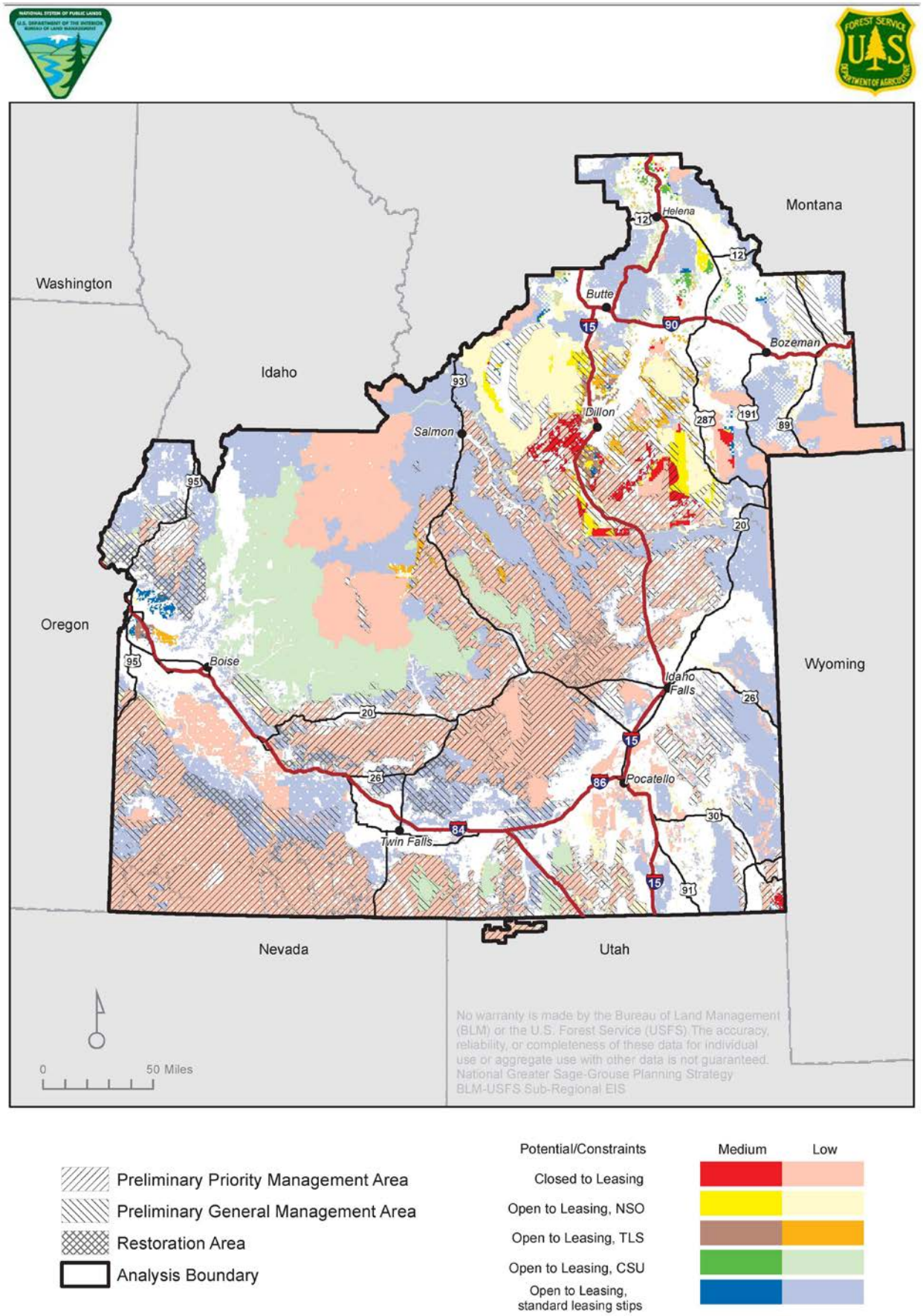


**Figure 2-43**
**Alternative A: BLM Areas of Critical Environmental Concern**

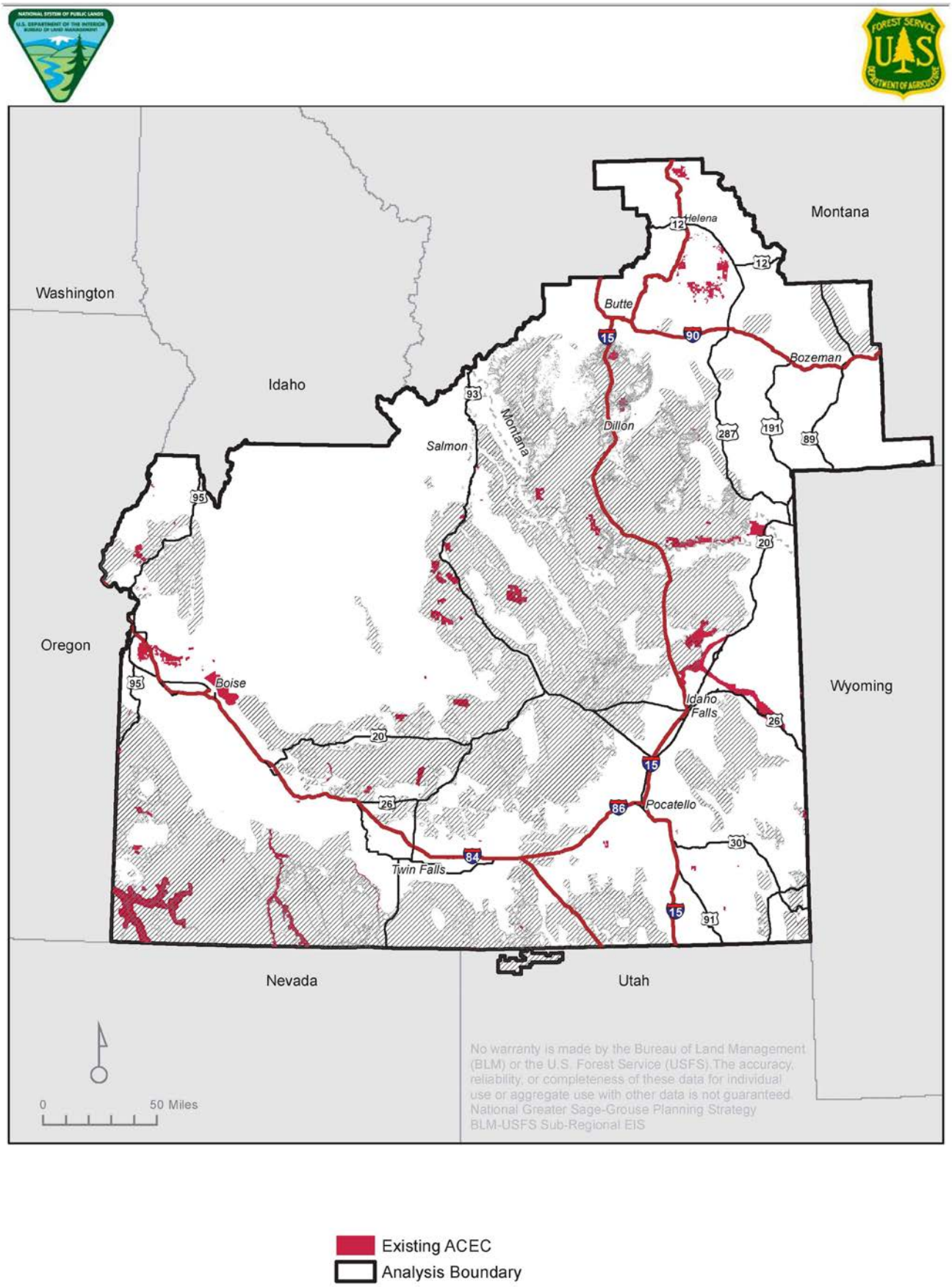
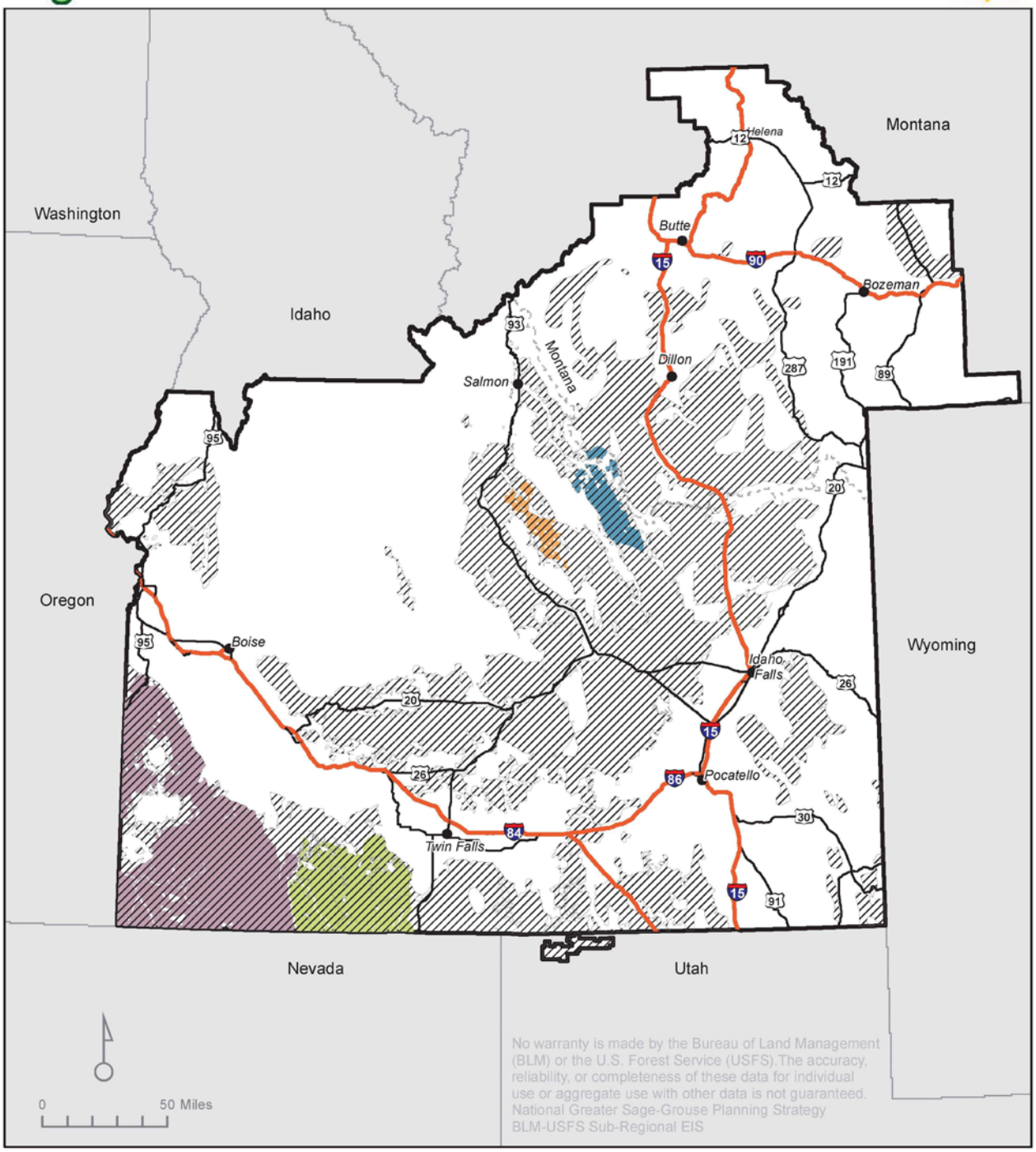


**Figure 2-44**
**Alternative C: BLM Areas of Critical Environmental Concern**




ID-01 ID-OR Borderlands and Owyhee Front
ID-02 Sagebrush Sea
ID-03 Pahsimeroi
ID-04 Canyon\Big Timber Project & Birch Creek Watershed
Preliminary Priority Management Area
Analysis Boundary

**Figure 2-45**
**Alternative F: BLM Areas of Critical Environmental Concern**

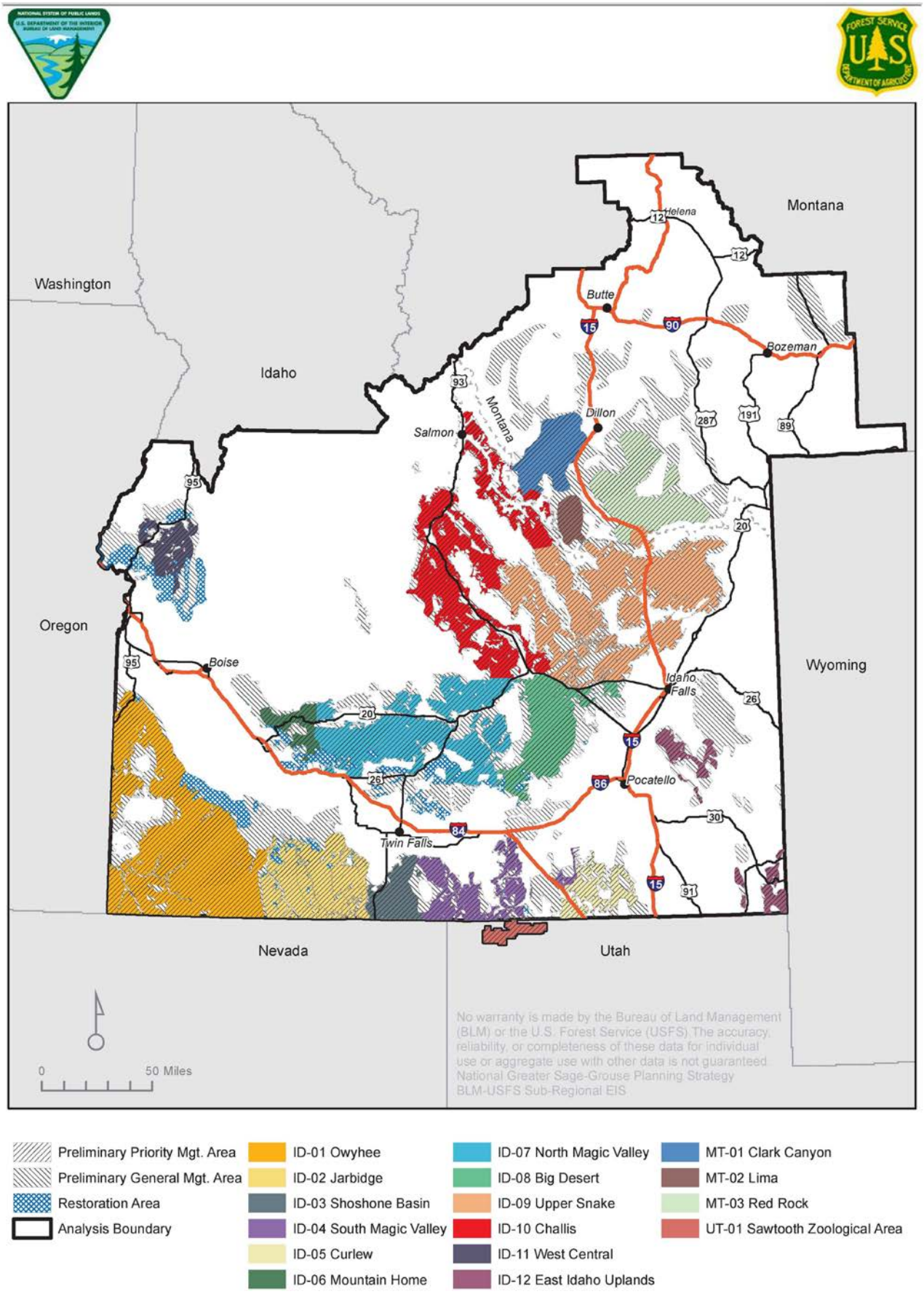


**Figure 2-46**
**Alternative F: BLM Areas of Critical Environmental Concern and Forest Service Zoological Areas**

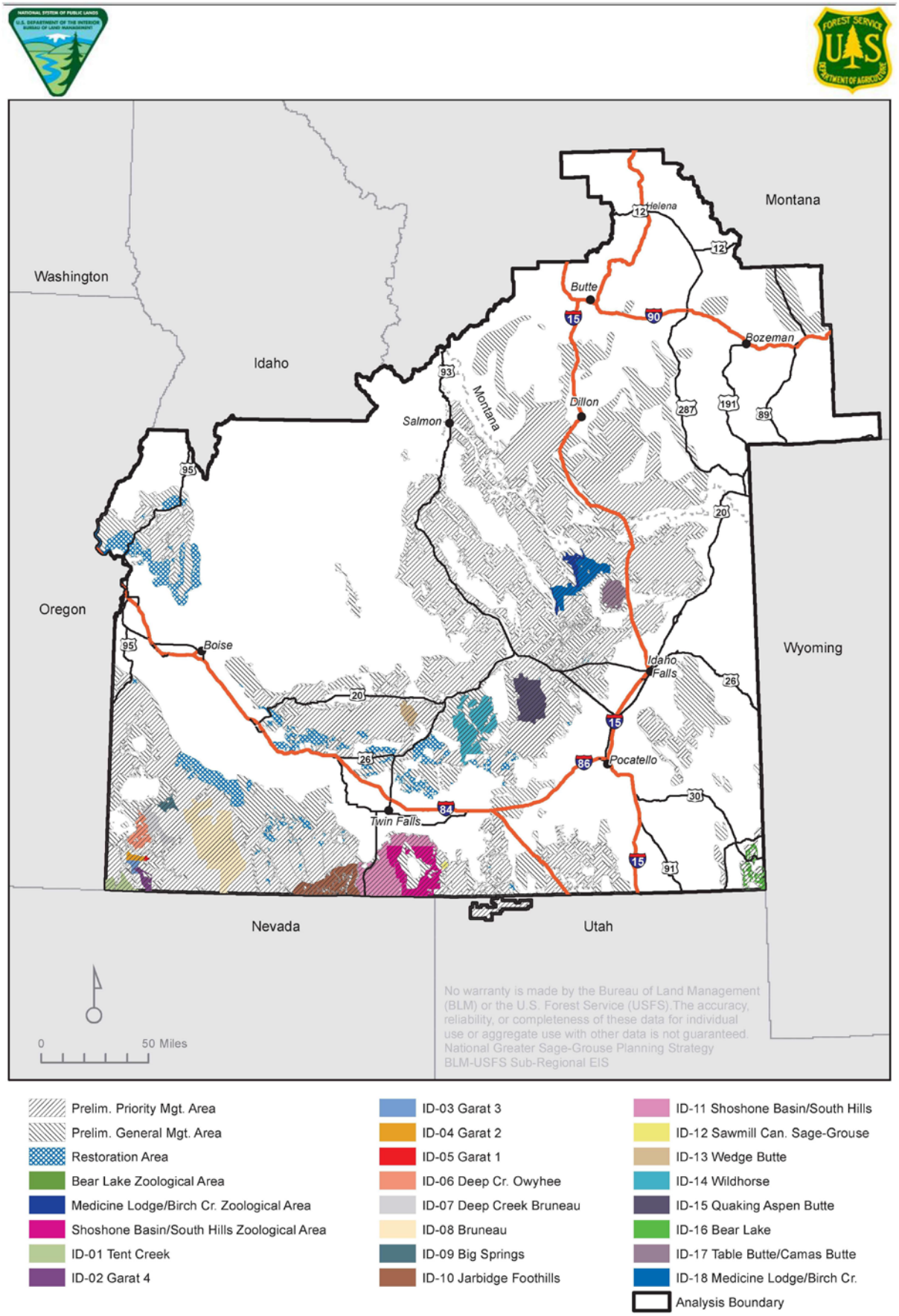


**Figure 2-47**
**Alternative A: Open and Closed to Geothermal Leasing**

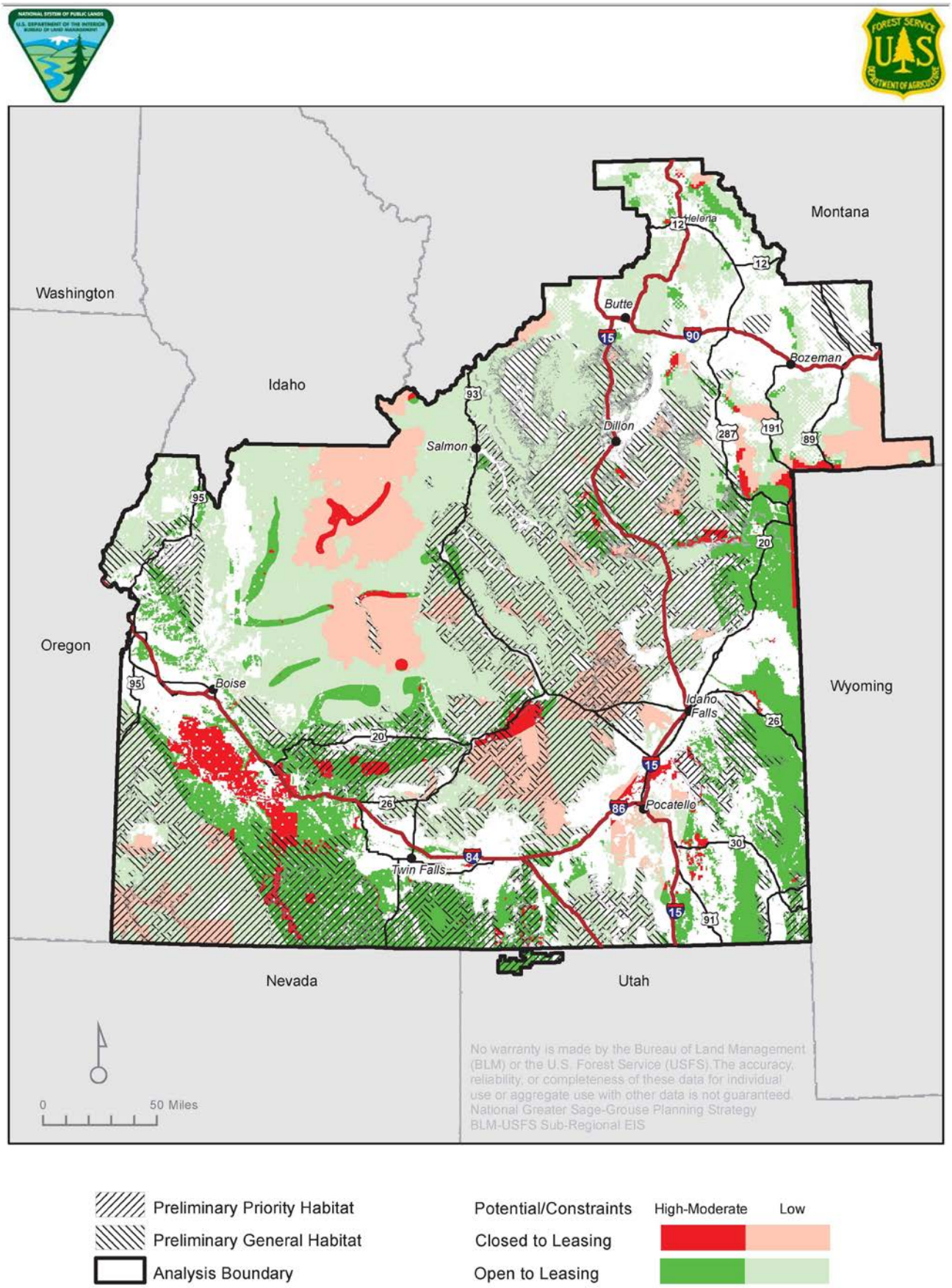


**Figure 2-48**
**Alternative B: Open and Closed to Geothermal Leasing**

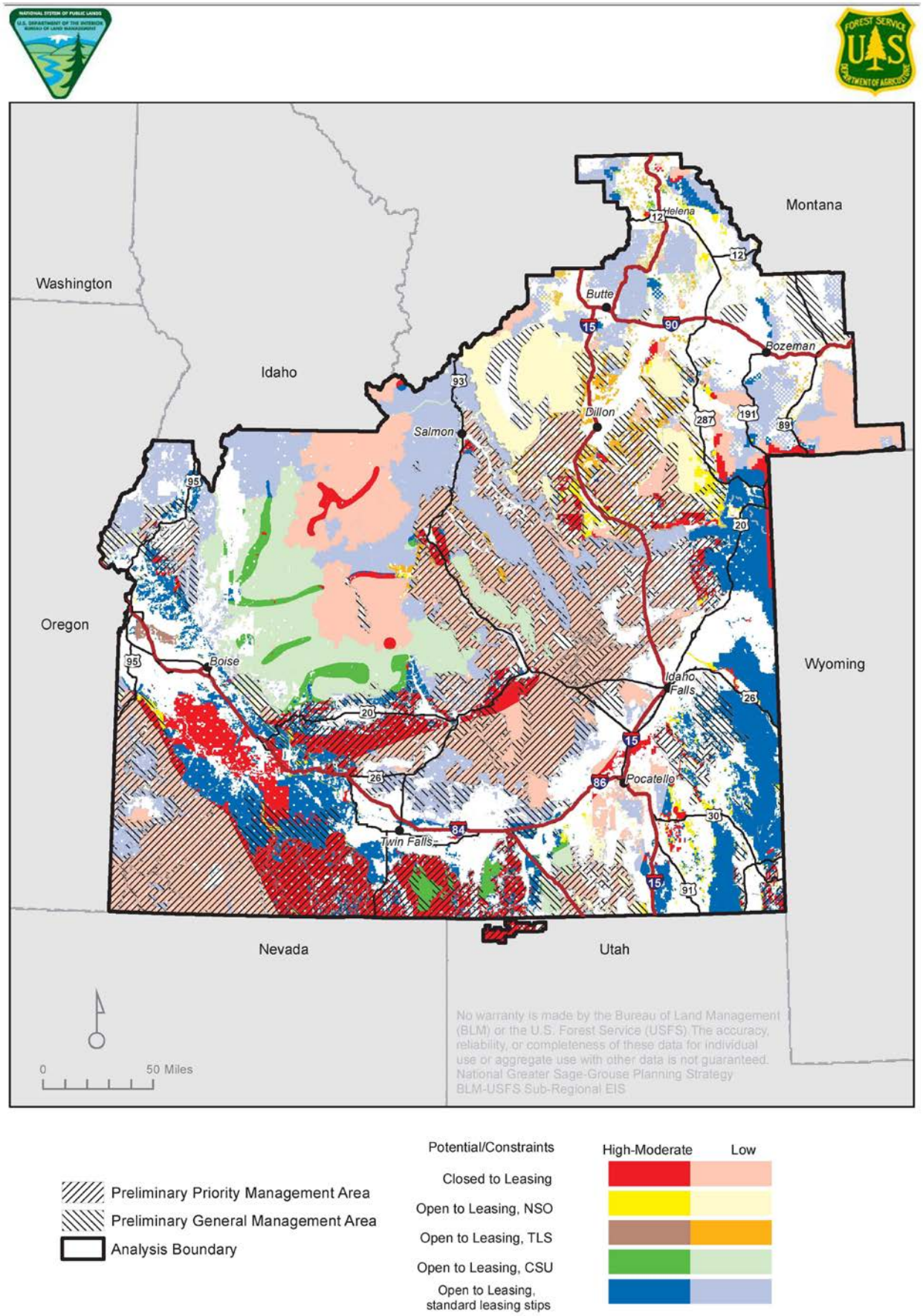


**Figure 2-49**
**Alternative C: Open and Closed to Geothermal Leasing**

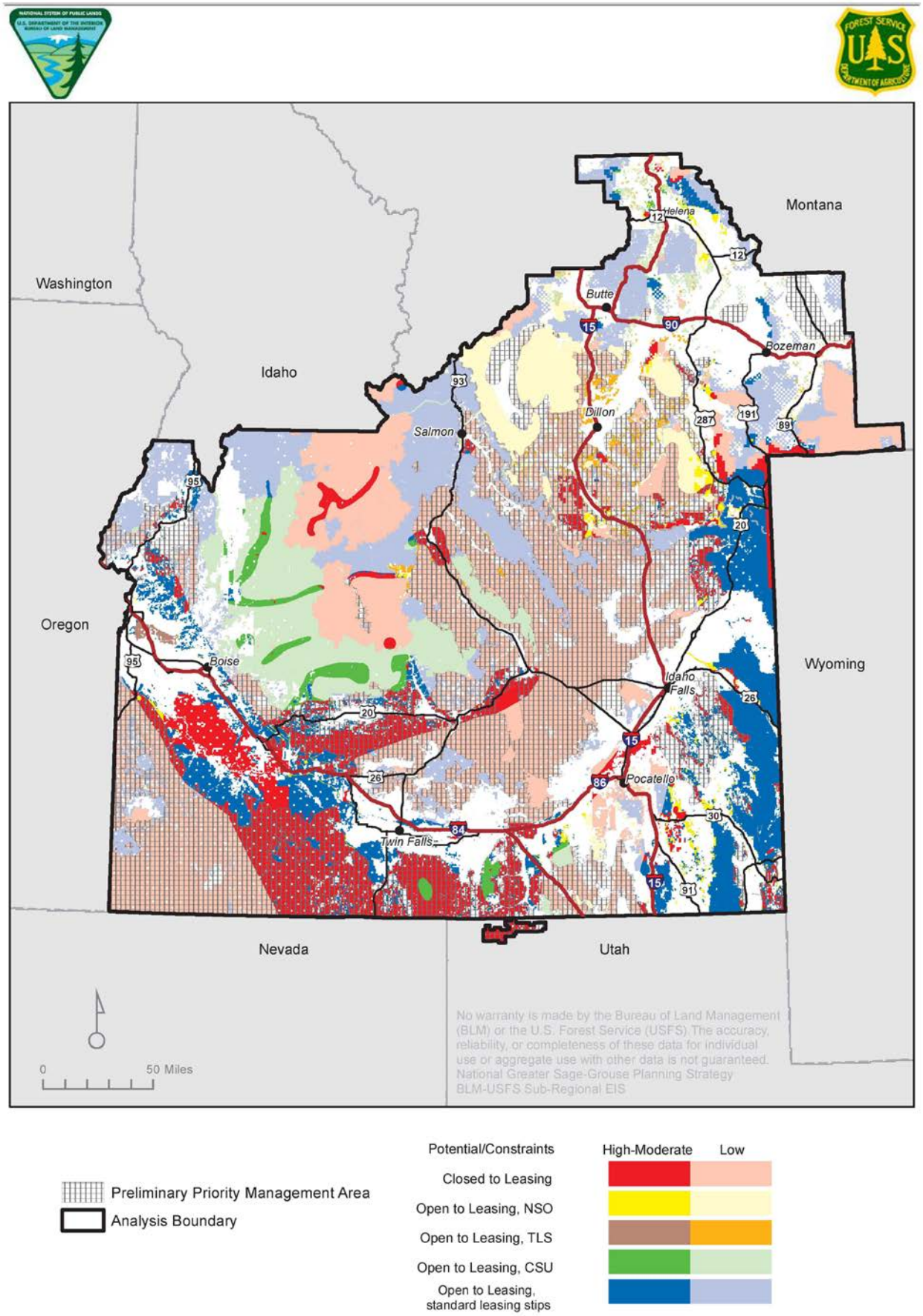


**Figure 2-50**
**Alternative D: Open and Closed to Geothermal Leasing**

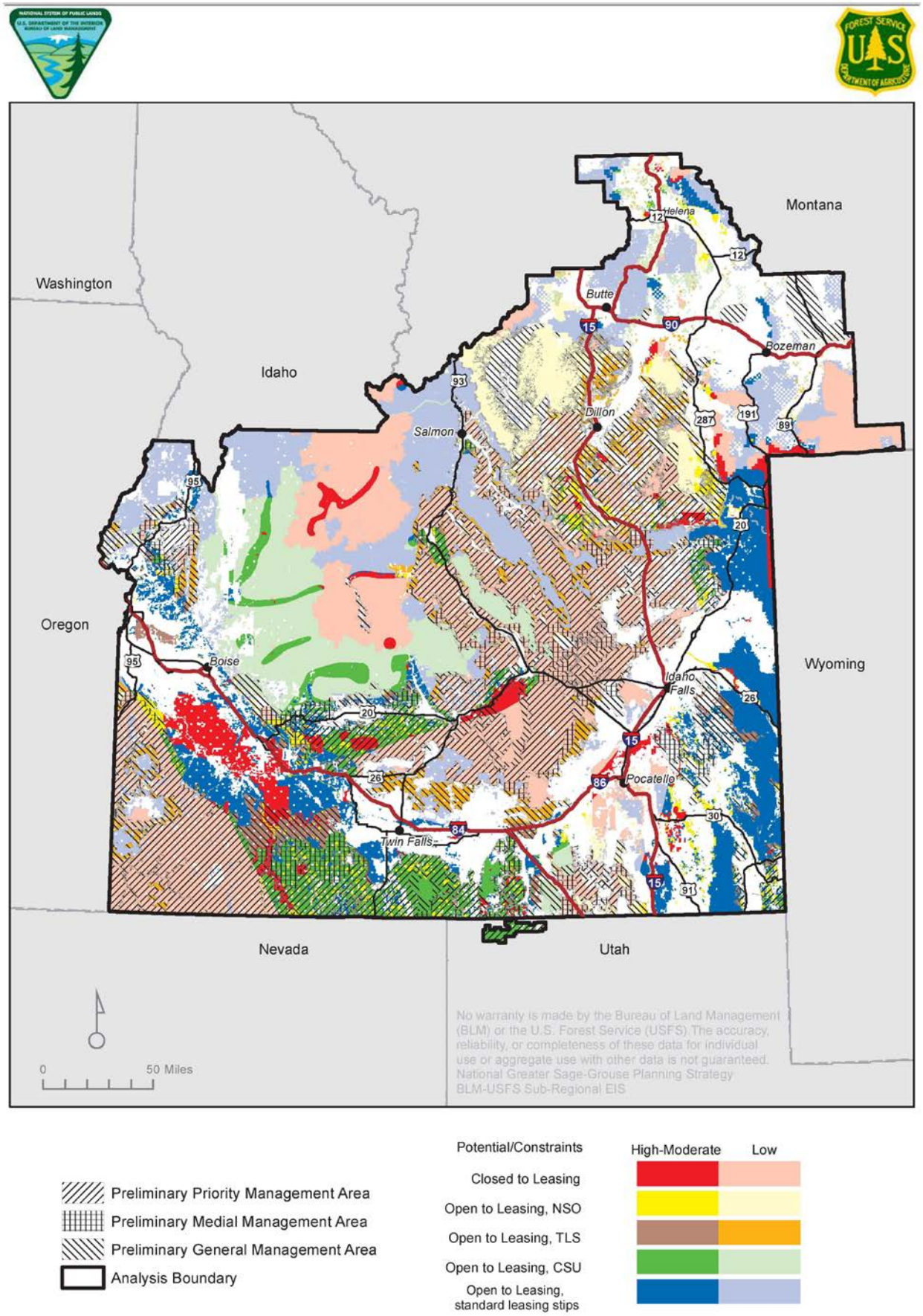


**Figure 2-51**
**Alternative E: Open and Closed to Geothermal Leasing**

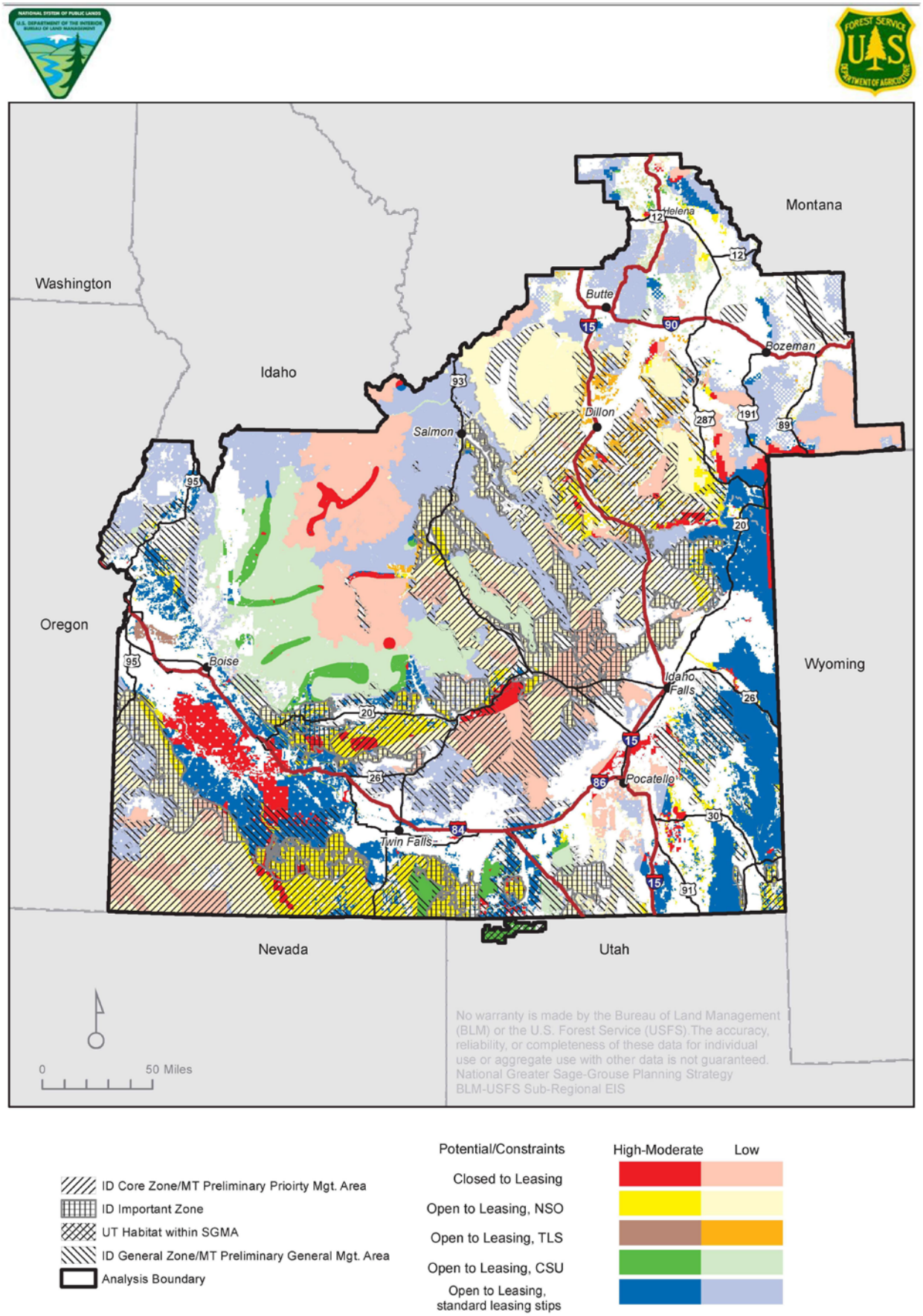


**Figure 2-52**
**Alternative F: Open and Closed to Geothermal Leasing**

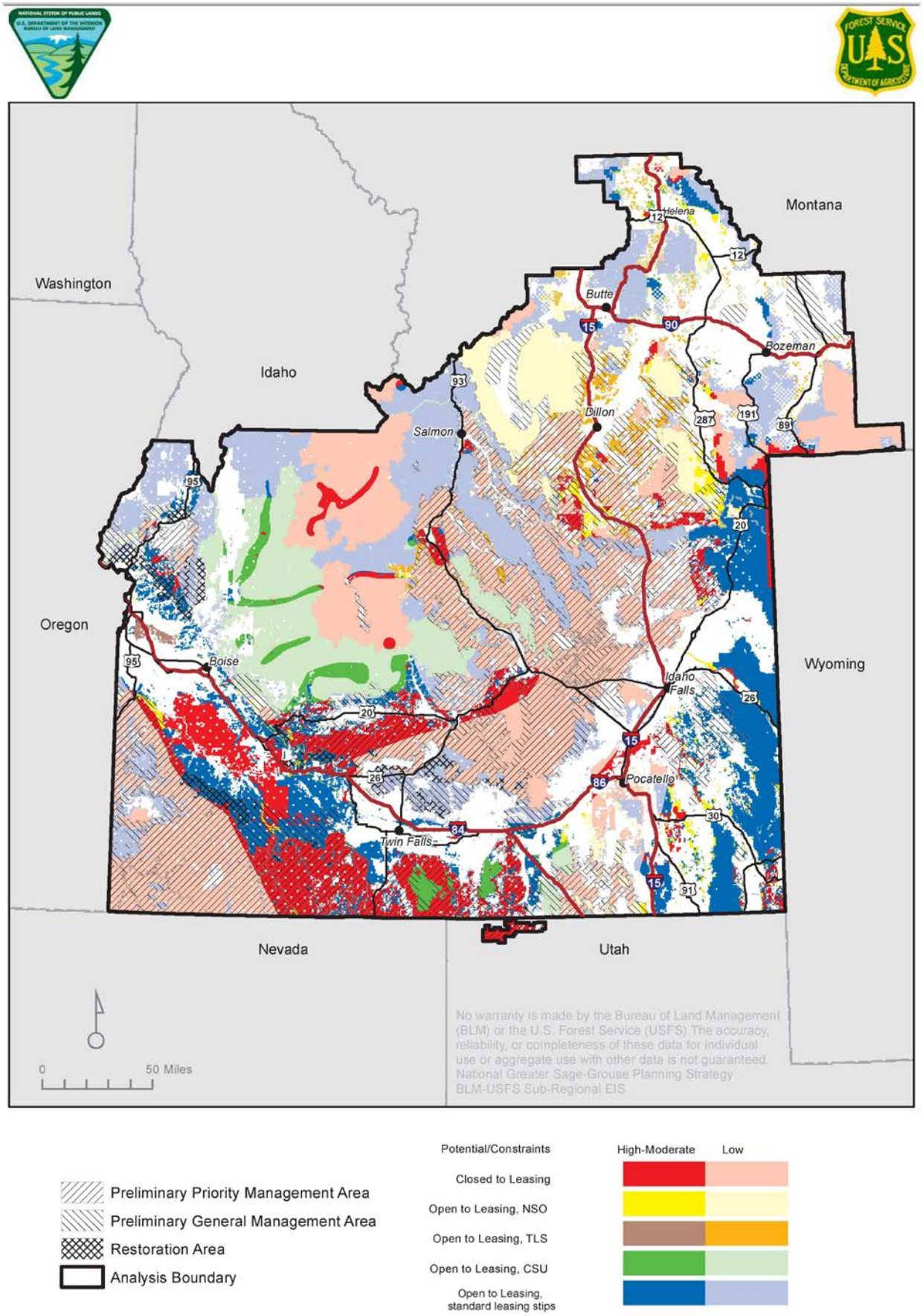
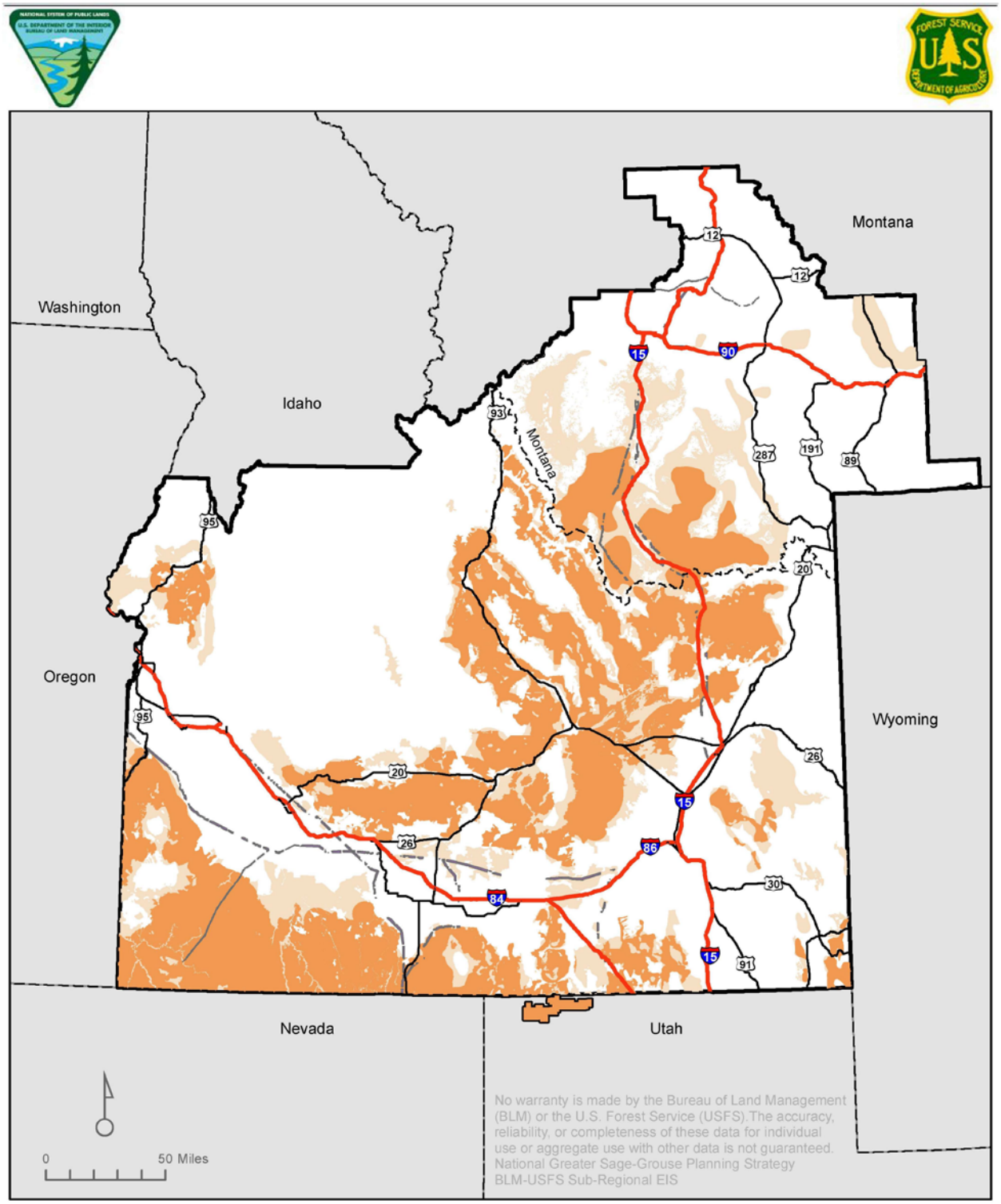


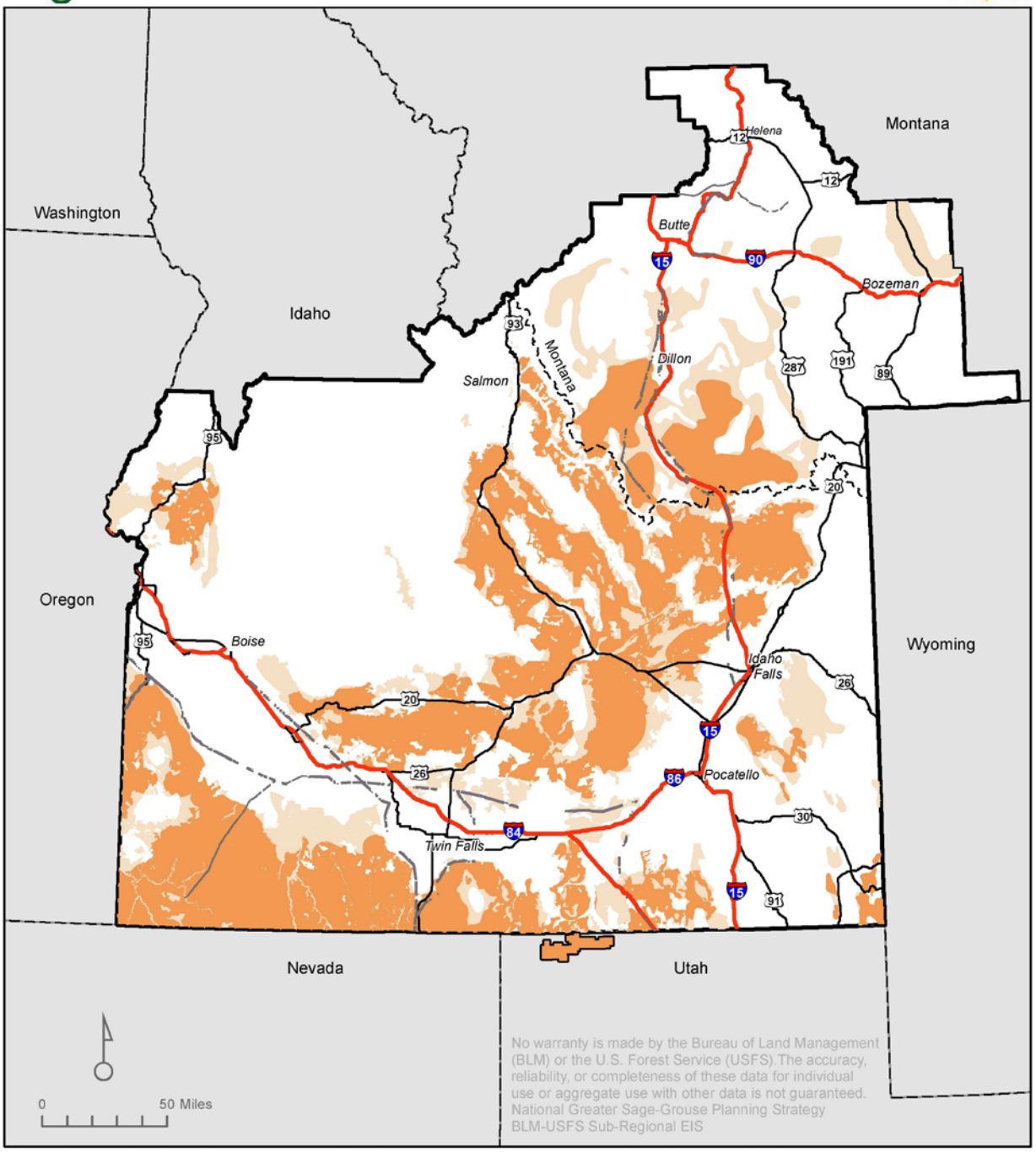
**Figure 2-53**
**Alternative A: Existing Designated Utility Corridors**




Under this planning effort, there are no undesignations or changes to the character of previously existing designated corridors and there are no new proposed designations.

Existing Designated Utility Corridors
Preliminary Priority Management Area
Preliminary General Management Area
Analysis Boundary

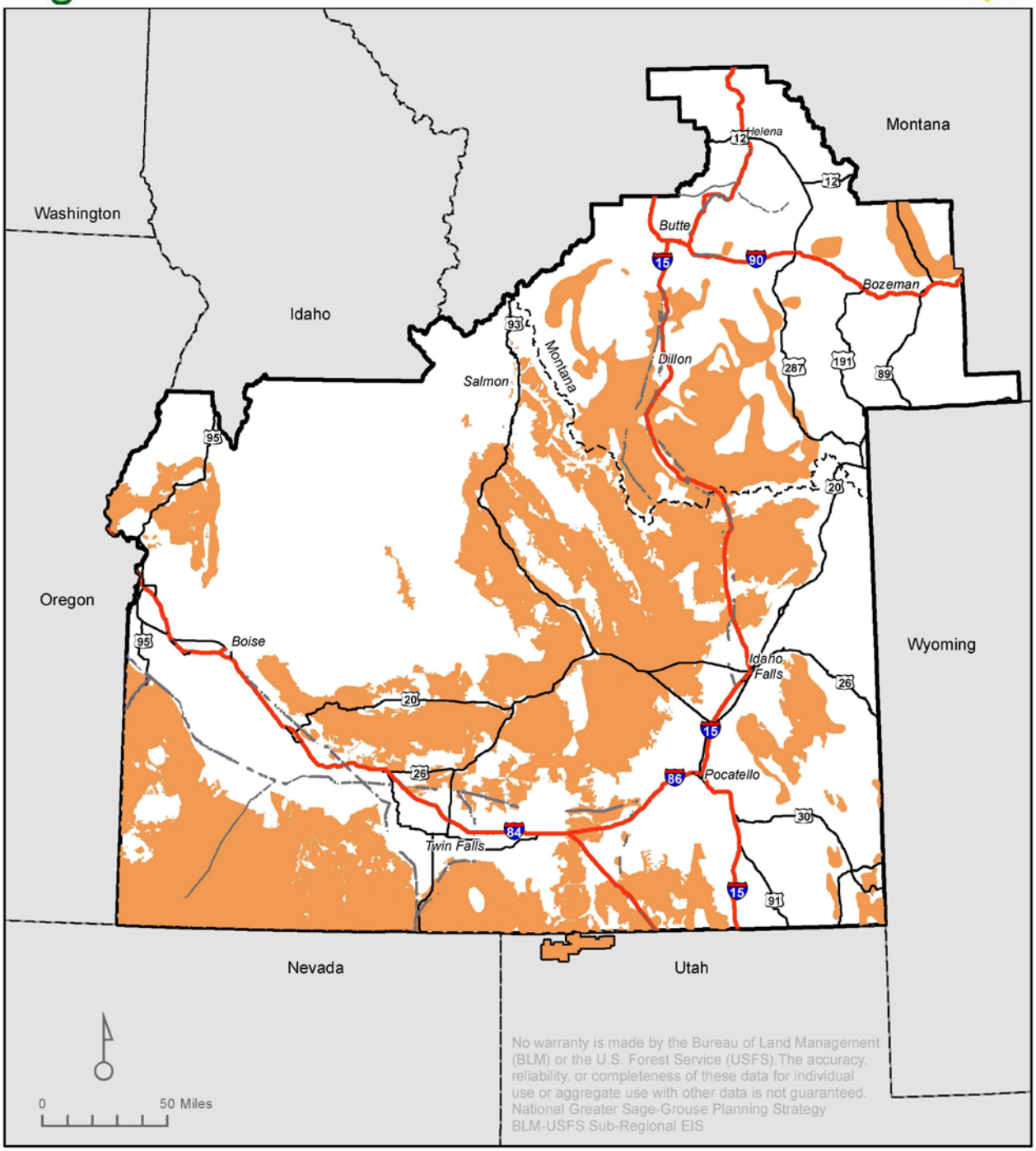
**Figure 2-54**
**Alternative B: Existing Designated Utility Corridors**




Under this planning effort, there are no undesignations or changes to the character of previously existing designated corridors and there are no new proposed designations. In PPMA, ROW actions within corridors can be considered.

- Existing Designated Utility Corridors
- Preliminary Priority Management Area
- Preliminary General Management Area
- Analysis Boundary

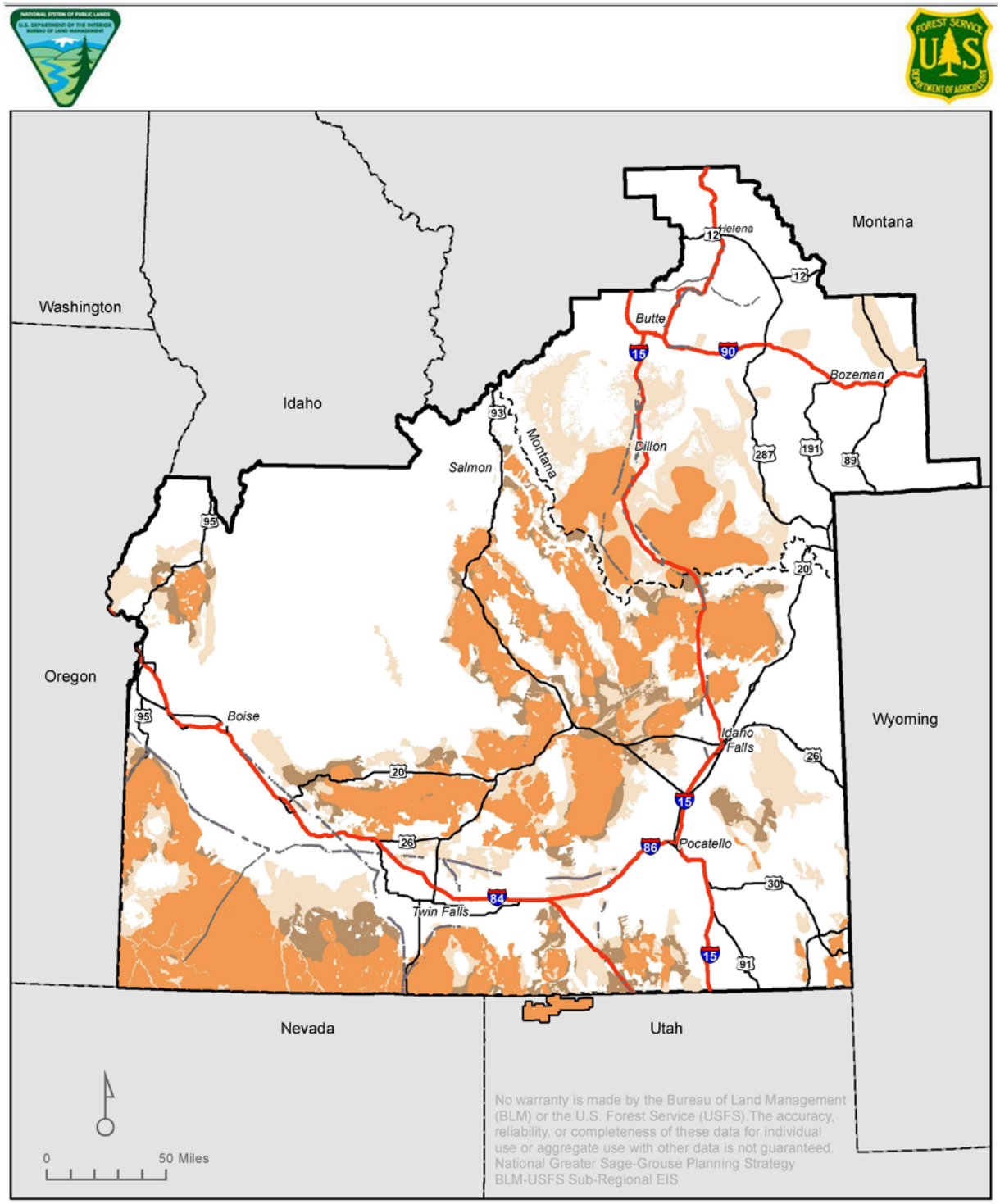
**Figure 2-55**
**Alternative C: Existing Designated Utility Corridors**




Under this planning effort, there are no undesignations or changes to the character of previously existing designated corridors and there are no new proposed designations. In PPMA, ROW actions within corridors can be considered.

Existing Designated Utility Corridors
Preliminary Priority Management Area
Analysis Boundary

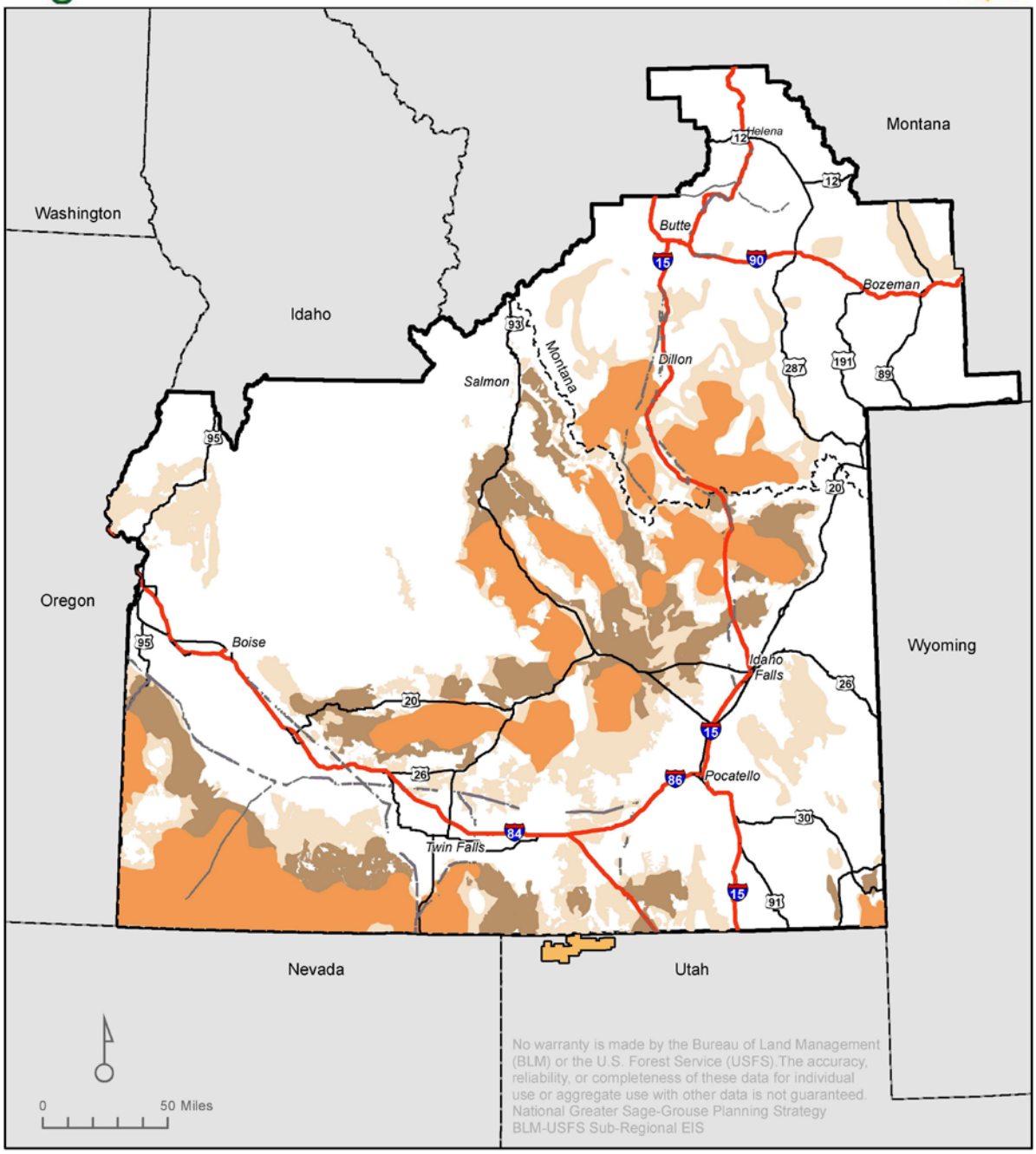
**Figure 2-56**
**Alternative D: Existing Designated Utility Corridors**




Under this planning effort, there are no undesignations or changes to the character of previously existing designated corridors and there are no new proposed designations. In PPMA, new utility pipelines or transmission lines exceeding 50 kV are excluded unless they can be sited within a utility corridor previously designated in the BLM or Forest Service LUP (and subject to appropriate BMPs and siting considerations for GRSG).

- Existing Designated Utility Corridors
- Preliminary Priority Management Area
- Preliminary Medial Management Area
- Preliminary General Management Area
- Analysis Boundary

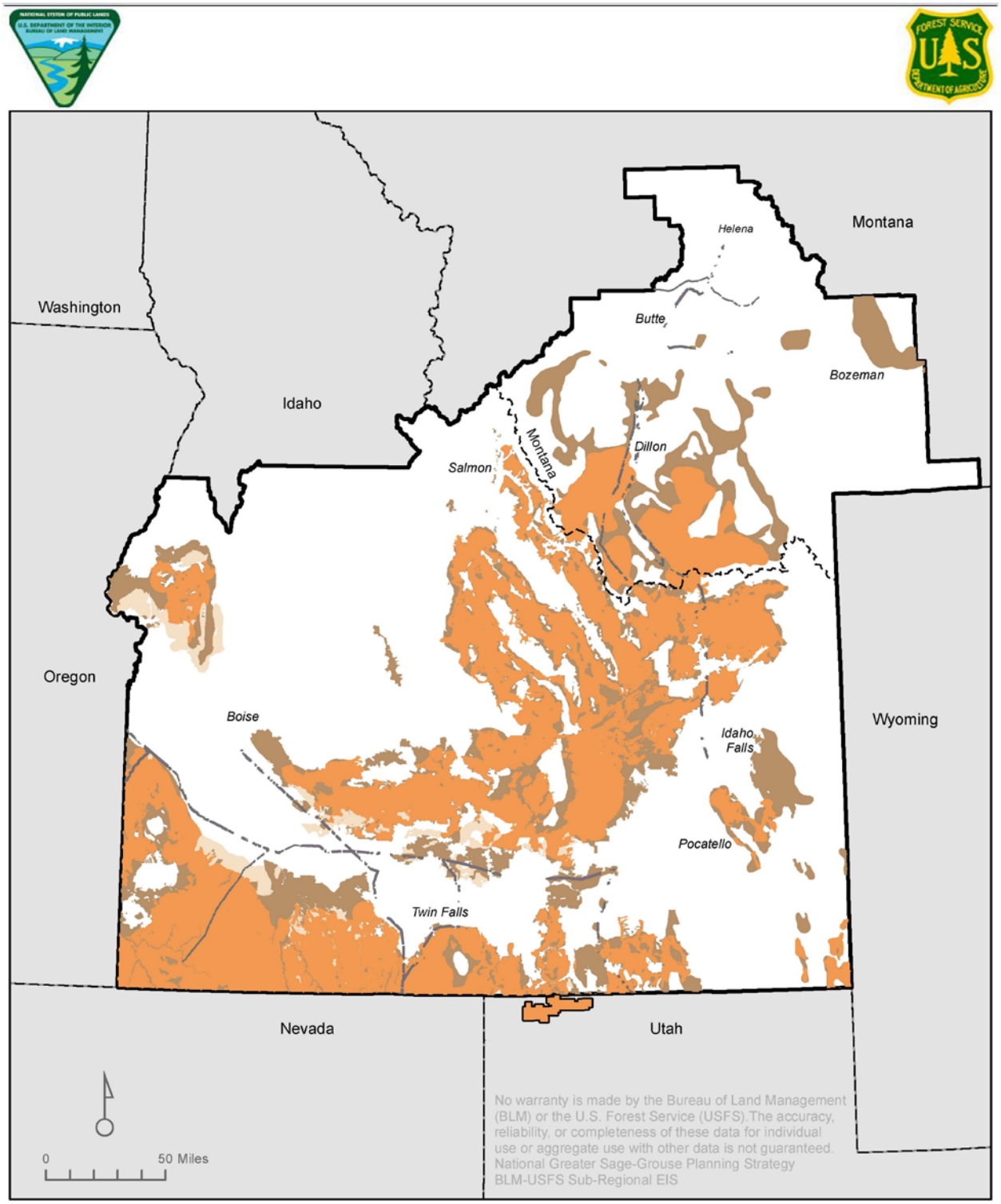
**Figure 2-57**
**Alternative E: Existing Designated Utility Corridors**




Under this planning effort, there are no undesignations or changes to the character of previously existing designated corridors and there are no new proposed designations. In PPMA and IHZ, ROW actions within corridors can be considered.

- Existing Designated Utility Corridors
- Idaho Core Zone/ Montana Preliminary Priority Mgt. Area
- Idaho Important Zone
- Idaho General Zone/ Montana Preliminary General Mgt. Area
- Utah Habitat within SGMA
- Analysis Boundary

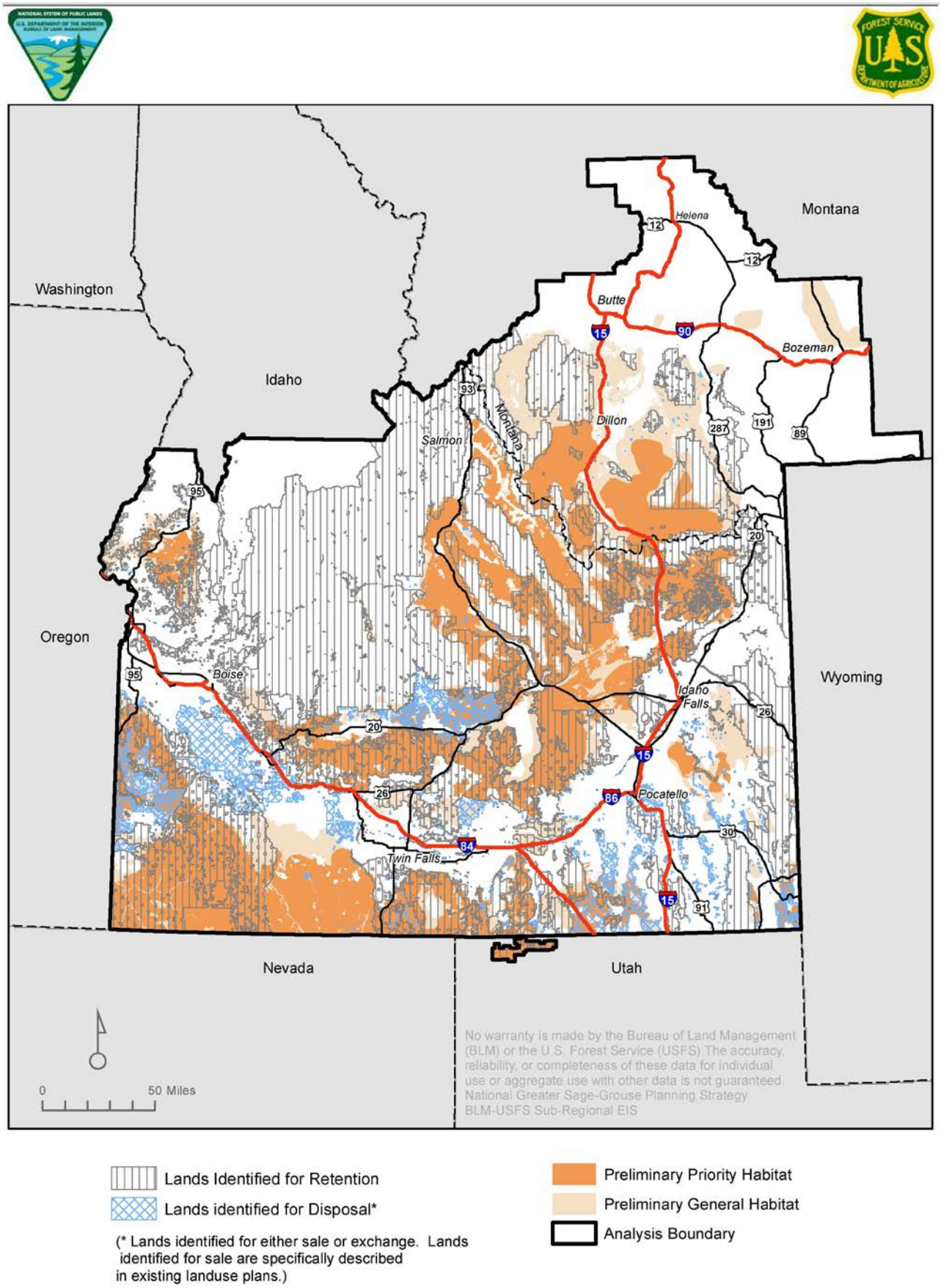
**Figure 2-58**
**Alternative F: Existing Designated Utility Corridors**




Under this planning effort, there are no undesignations or changes to the character of previously existing designated corridors and there are no new proposed designations. In PPMA, ROW actions within corridors can be considered.

- Existing Designated Utility Corridors
- Preliminary Priority Management Area
- Preliminary General Management Area
- Preliminary Restoration Management Area
- Analysis Boundary

**Figure 2-59**
**Alternative A: Lands Identified for Disposal or Exchange**




Lands Identified for Retention

Lands identified for Disposal*

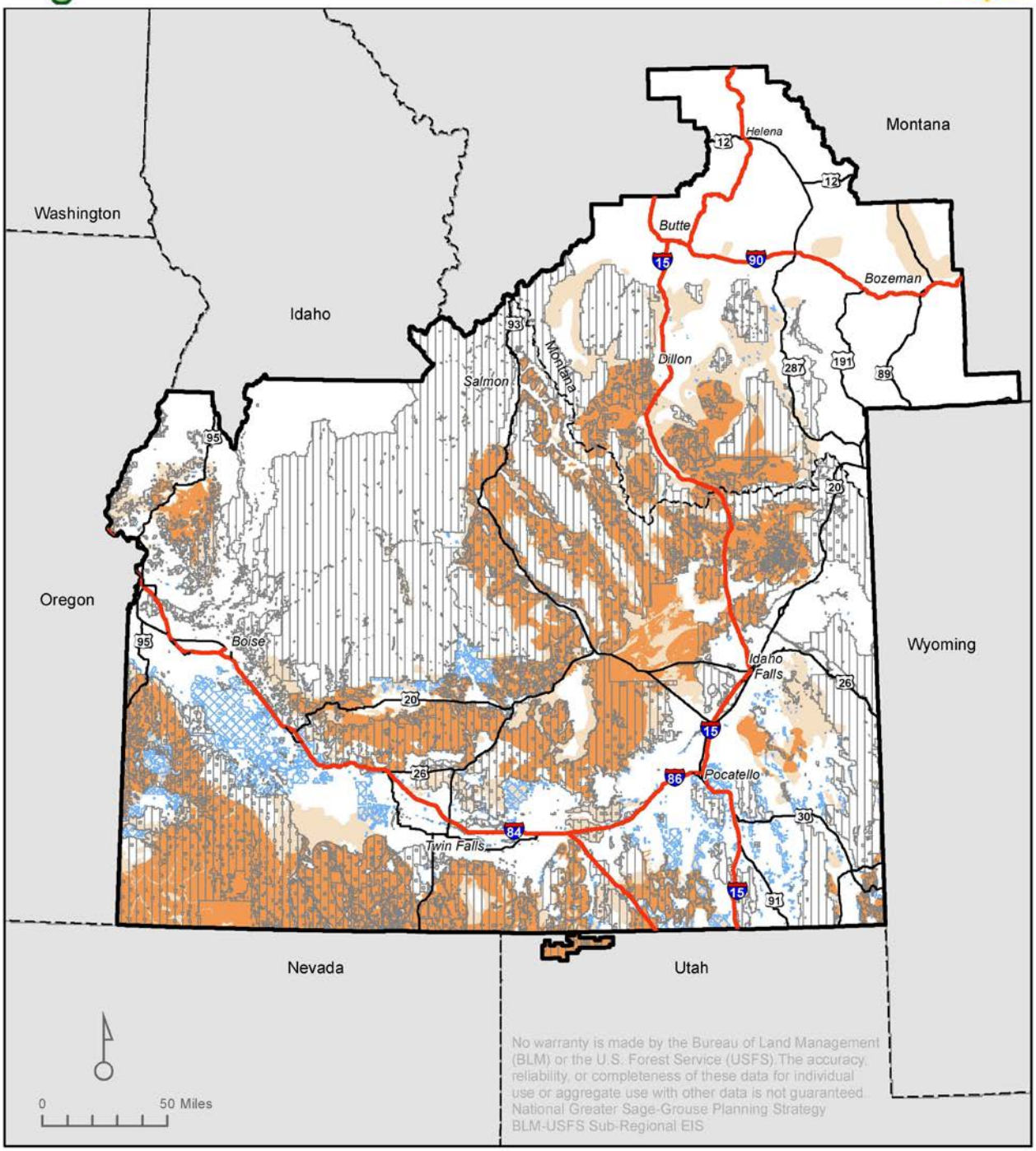
(* Lands identified for either sale or exchange. Lands identified for sale are specifically described in existing landuse plans.)

Preliminary Priority Habitat

Preliminary General Habitat

Analysis Boundary

**Figure 2-60**
**Alternative B: Lands Identified for Disposal or Exchange**




Lands Identified for Retention

Lands Identified for Disposal*

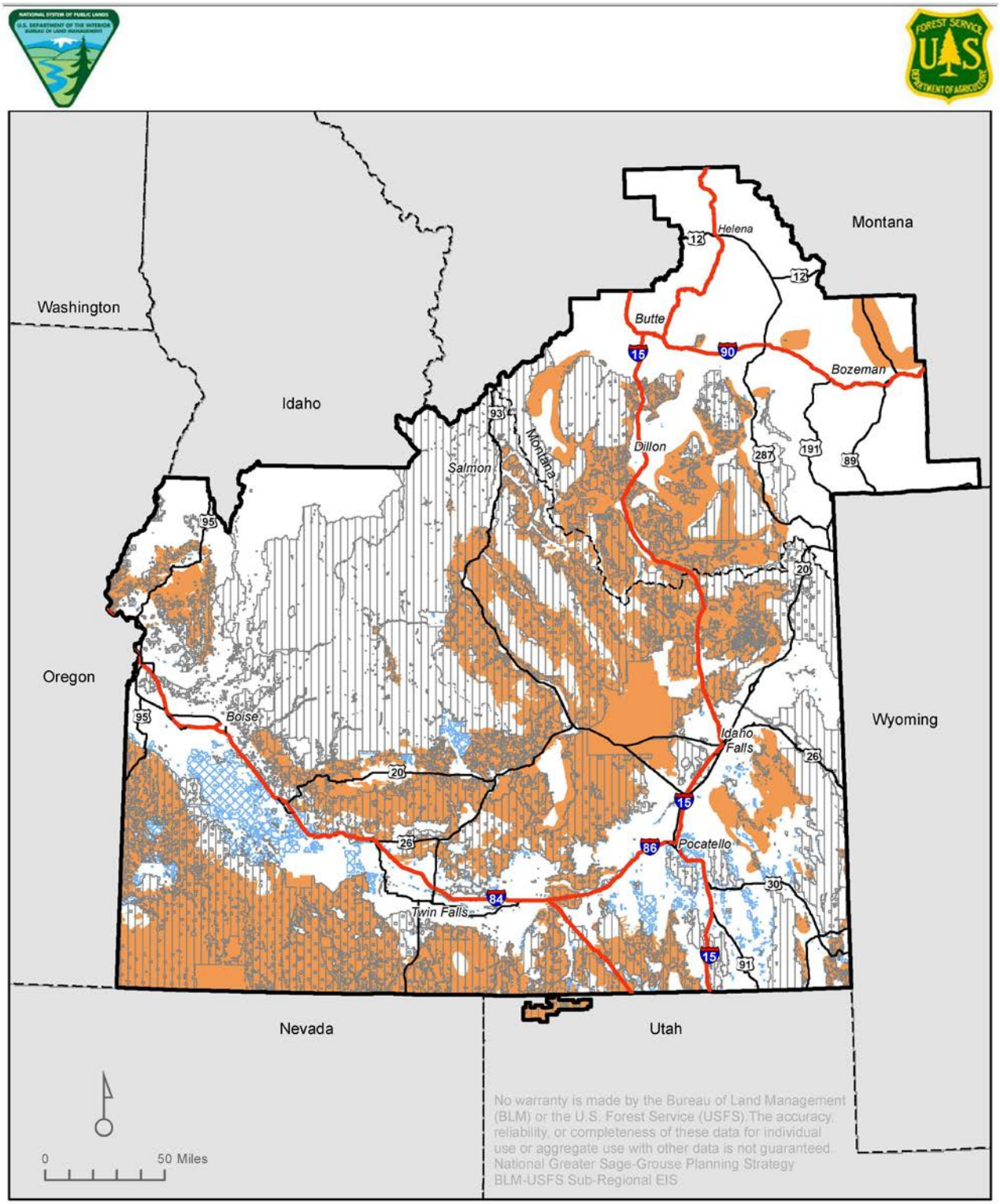
(* Lands identified for either sale or exchange. Lands identified for sale are specifically described in existing landuse plans.)

Preliminary Priority Management Area

Preliminary General Management Area

Analysis Boundary

**Figure 2-61**
**Alternative C: Lands Identified for Disposal or Exchange**




Lands Identified for Retention

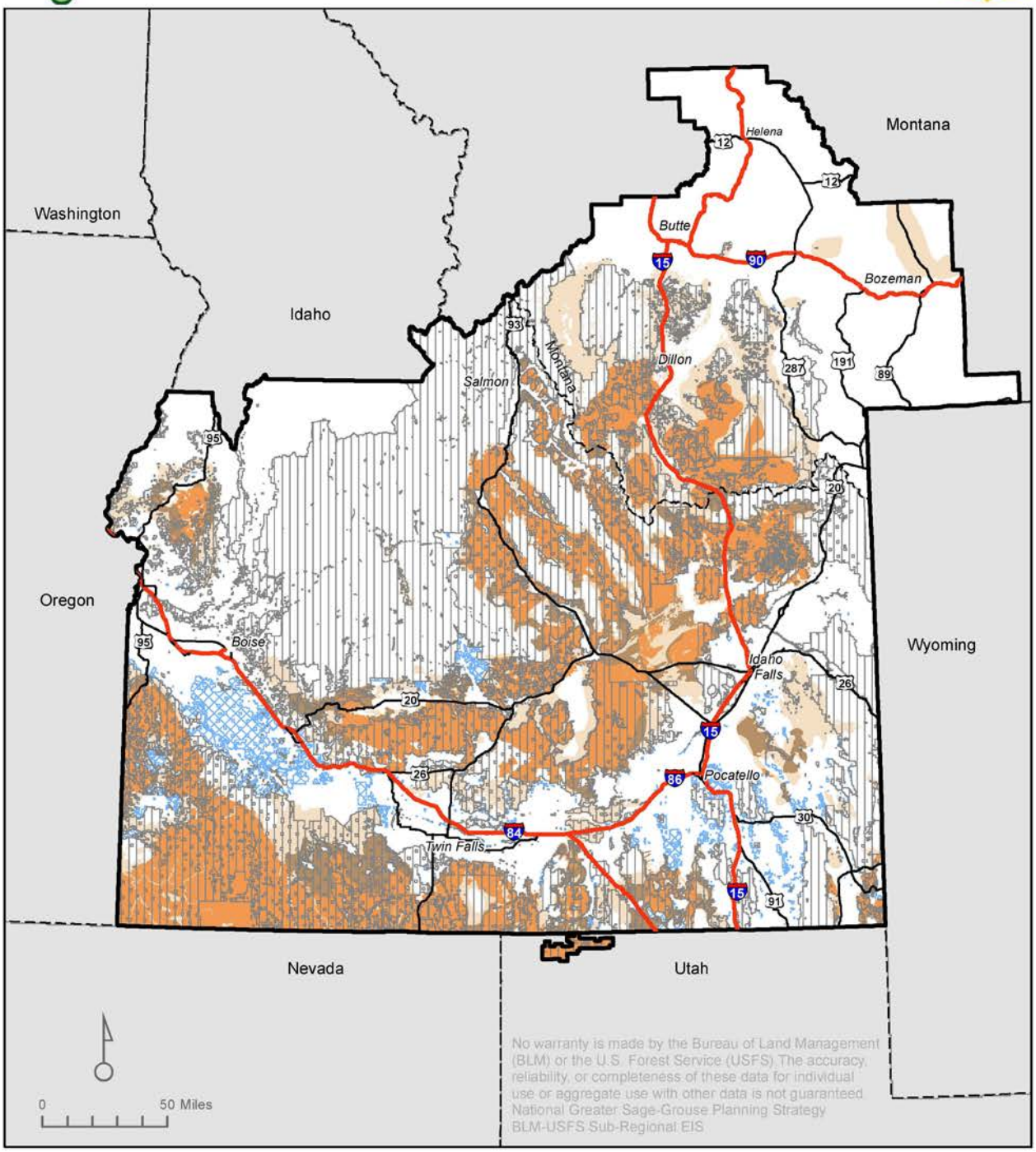
Lands Identified for Disposal*

Preliminary Priority Management Area

Analysis Boundary

(* Lands identified for either sale or exchange. Lands identified for sale are specifically described in existing landuse plans.)

**Figure 2-62**
**Alternative D: Lands Identified for Disposal or Exchange**




Lands Identified for Retention

Lands identified for Disposal*

(* Lands identified for either sale or exchange. Lands identified for sale are specifically described in existing landuse plans.)

Preliminary Priority Management Area

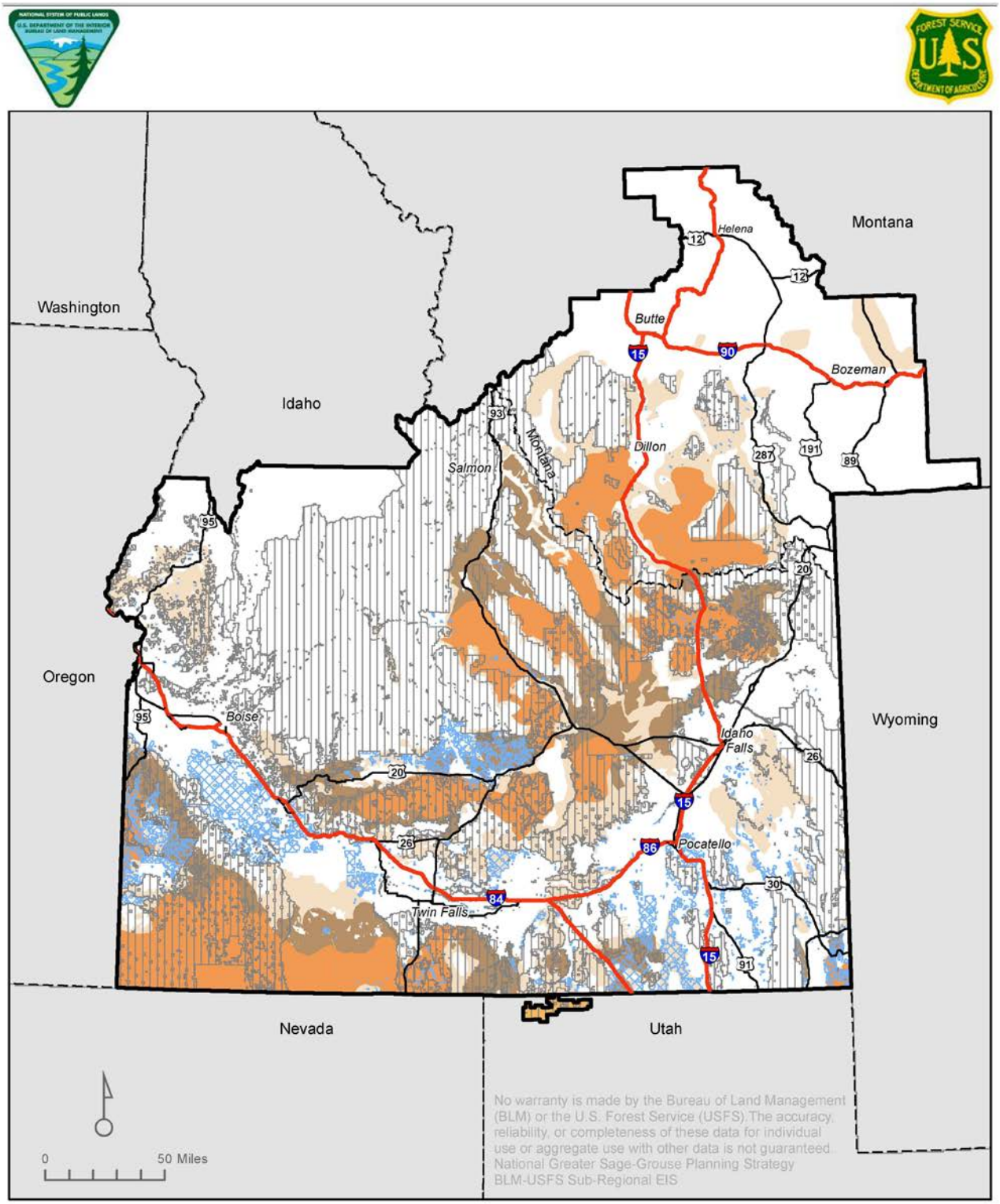
Preliminary Medial Management Area

Preliminary General Management Area

Analysis Boundary

All land would be retained, unless a land exchange would allow for additional or more contiguous federal ownership patterns within PPMA, PMMA, and PGMA.

**Figure 2-63**
**Alternative E: Lands Identified for Disposal or Exchange**




Lands Identified for Retention

Lands Identified for Disposal*

(* Lands identified for either sale or exchange. Lands identified for sale are specifically described in existing landuse plans.)

Idaho Core Zone/ Montana Preliminary Priority Mgt. Area

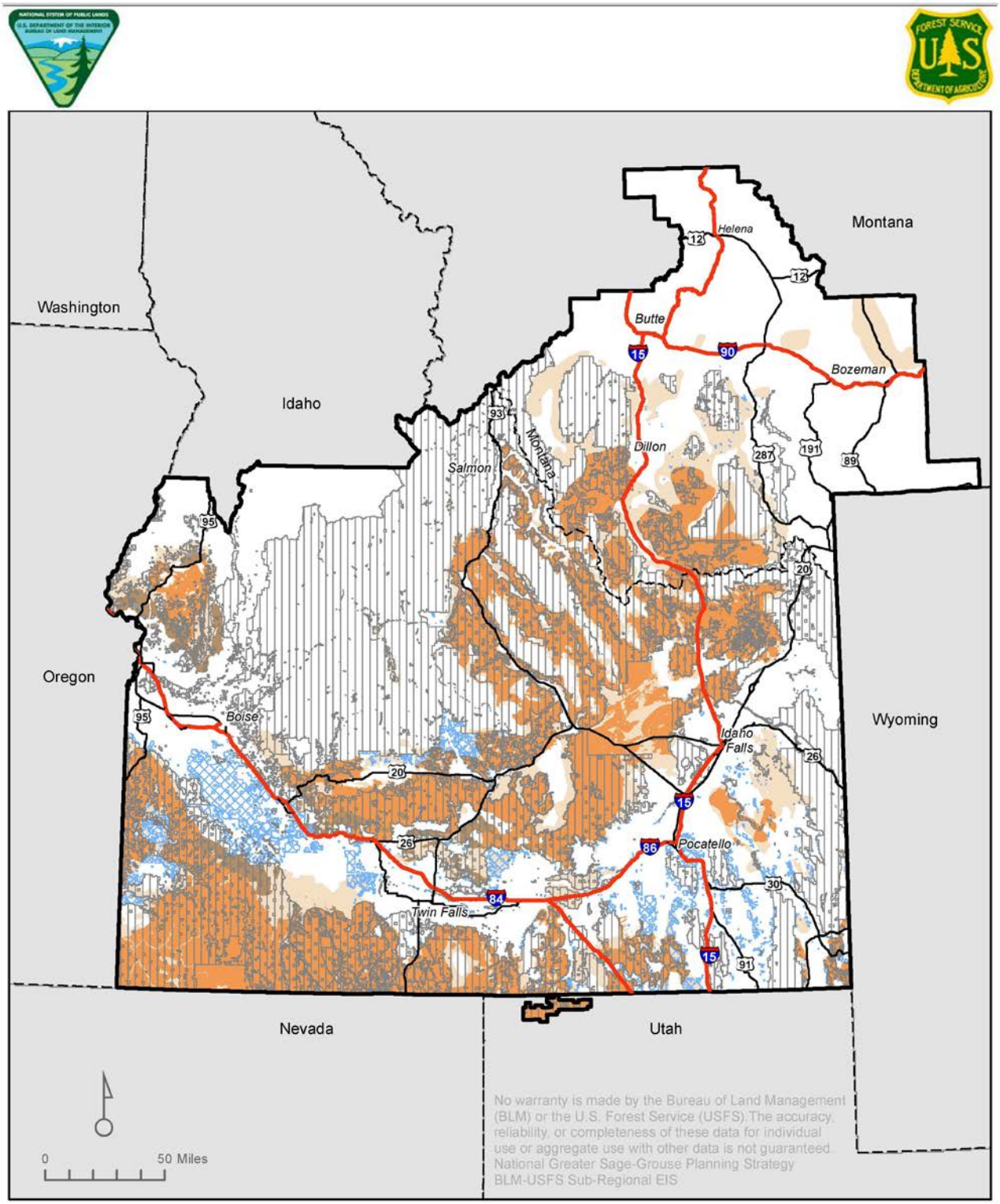
Idaho Important Zone

Idaho General Zone/ Montana Preliminary General Mgt. Area

Utah Habitat within SGMA

Analysis Boundary

**Figure 2-64**
**Alternative F: Lands Identified for Disposal or Exchange**




Lands Identified for Retention

Lands Identified for Disposal*

(* Lands identified for either sale or exchange. Lands identified for sale are specifically described in existing landuse plans.)

Preliminary Priority Management Area

Preliminary General Management Area

Preliminary Restoration Management Area

Analysis Boundary

**Figure 2-65**
**Alternative A: Right-of-way Exclusion and Avoidance Areas for Wind**

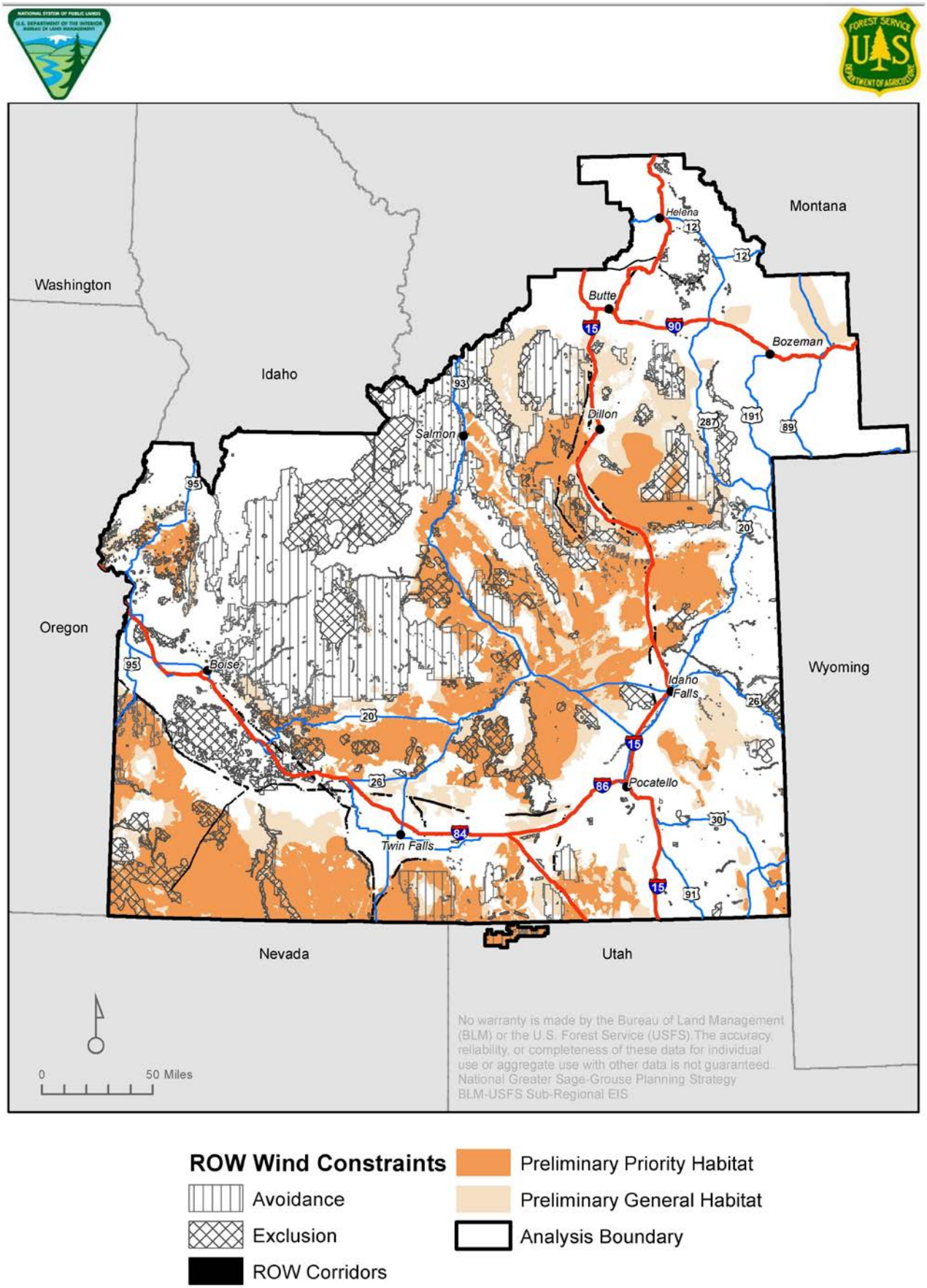


**Figure 2-66**
**Alternative B: Right-of-way Exclusion and Avoidance Areas for Wind**

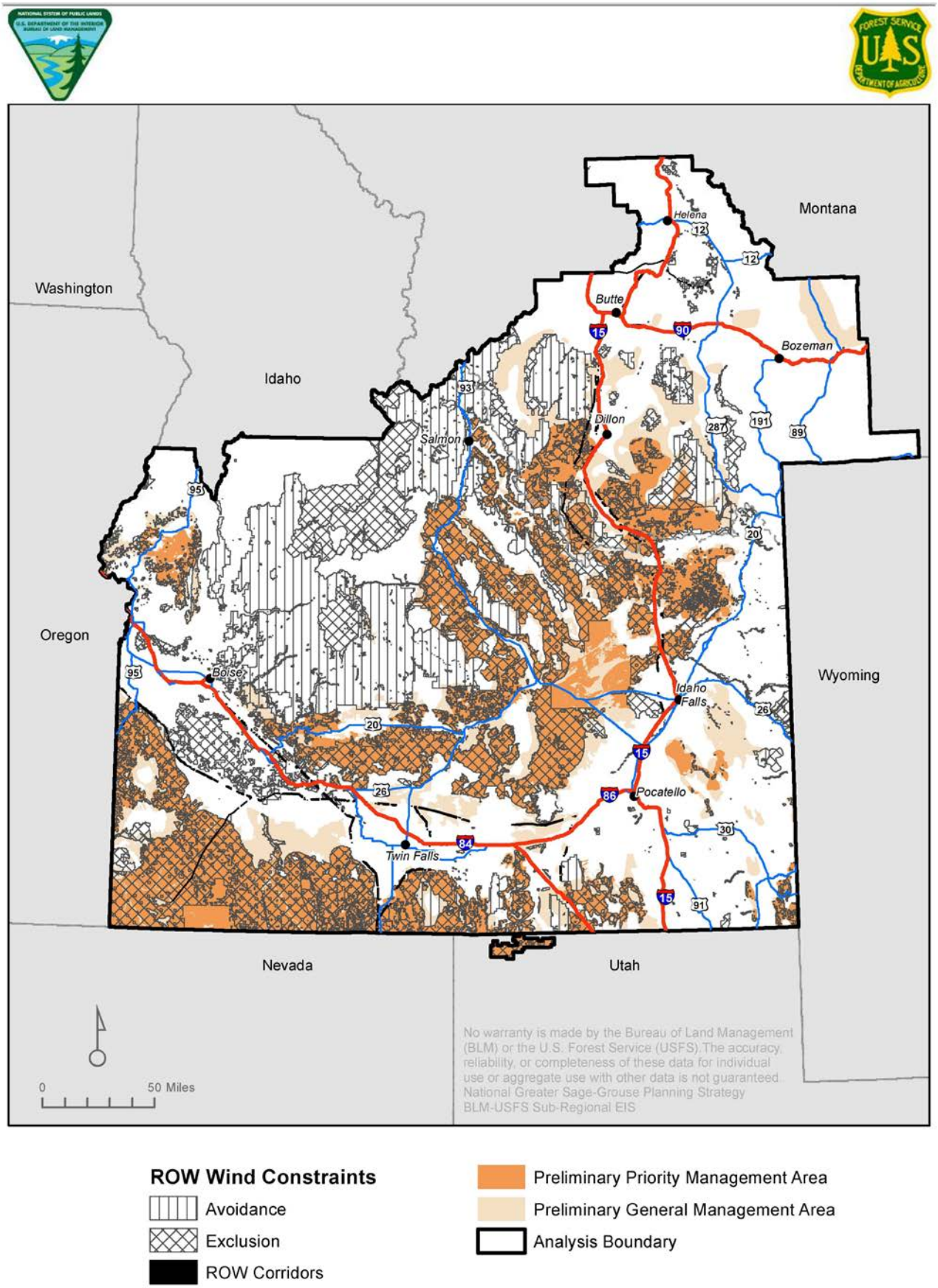
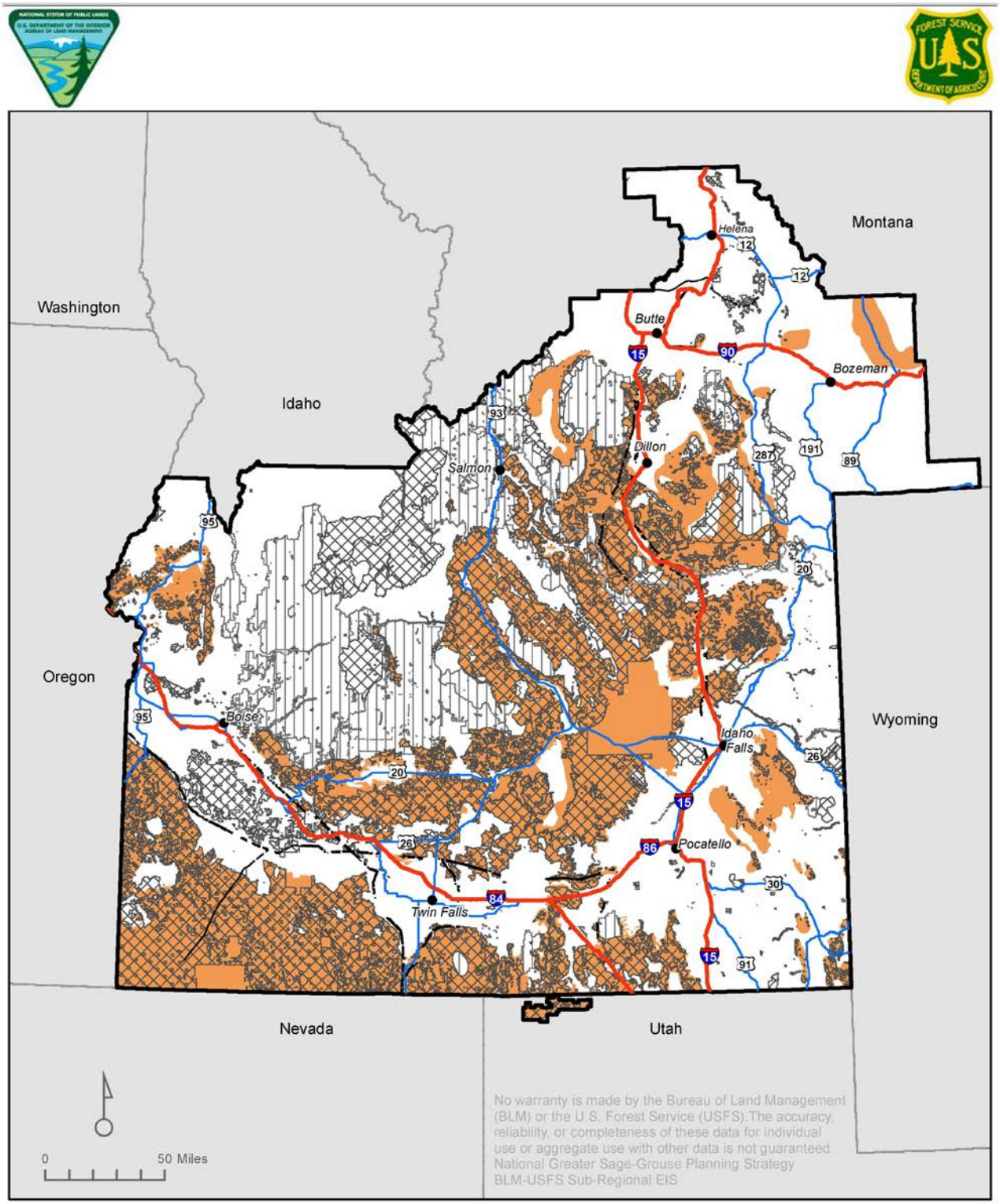


**Figure 2-67**
**Alternative C: Right-of-way Exclusion and Avoidance Areas for Wind**




**ROW Wind Constraints**
- Avoidance
- Exclusion
- ROW Corridors
- Preliminary Priority Management Area
- Analysis Boundary

**Figure 2-68**
**Alternative D: Right-of-way Exclusion and Avoidance Areas for Wind**

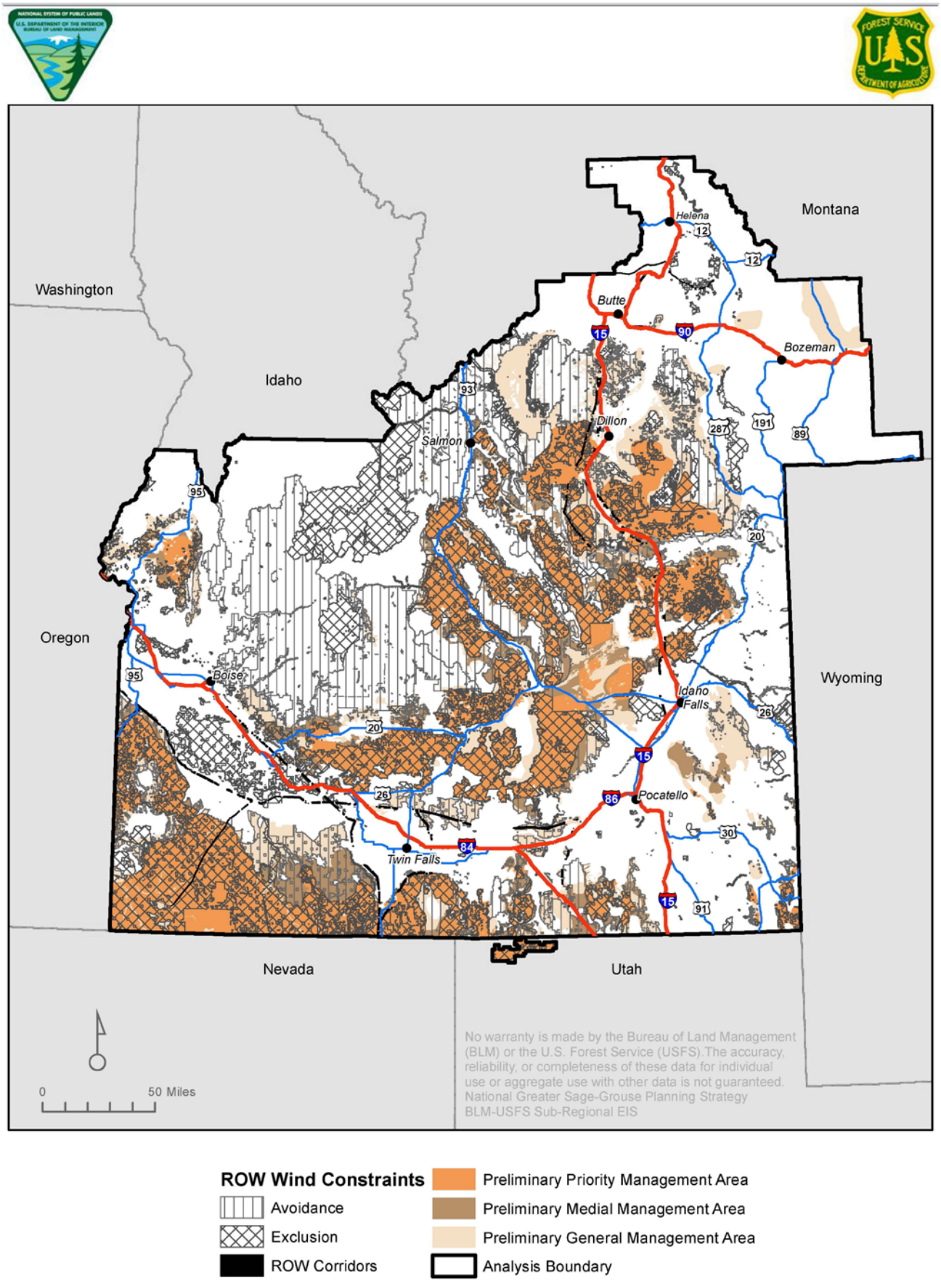


**Figure 2-69**
**Alternative E: Right-of-way Exclusion and Avoidance Areas for Wind**

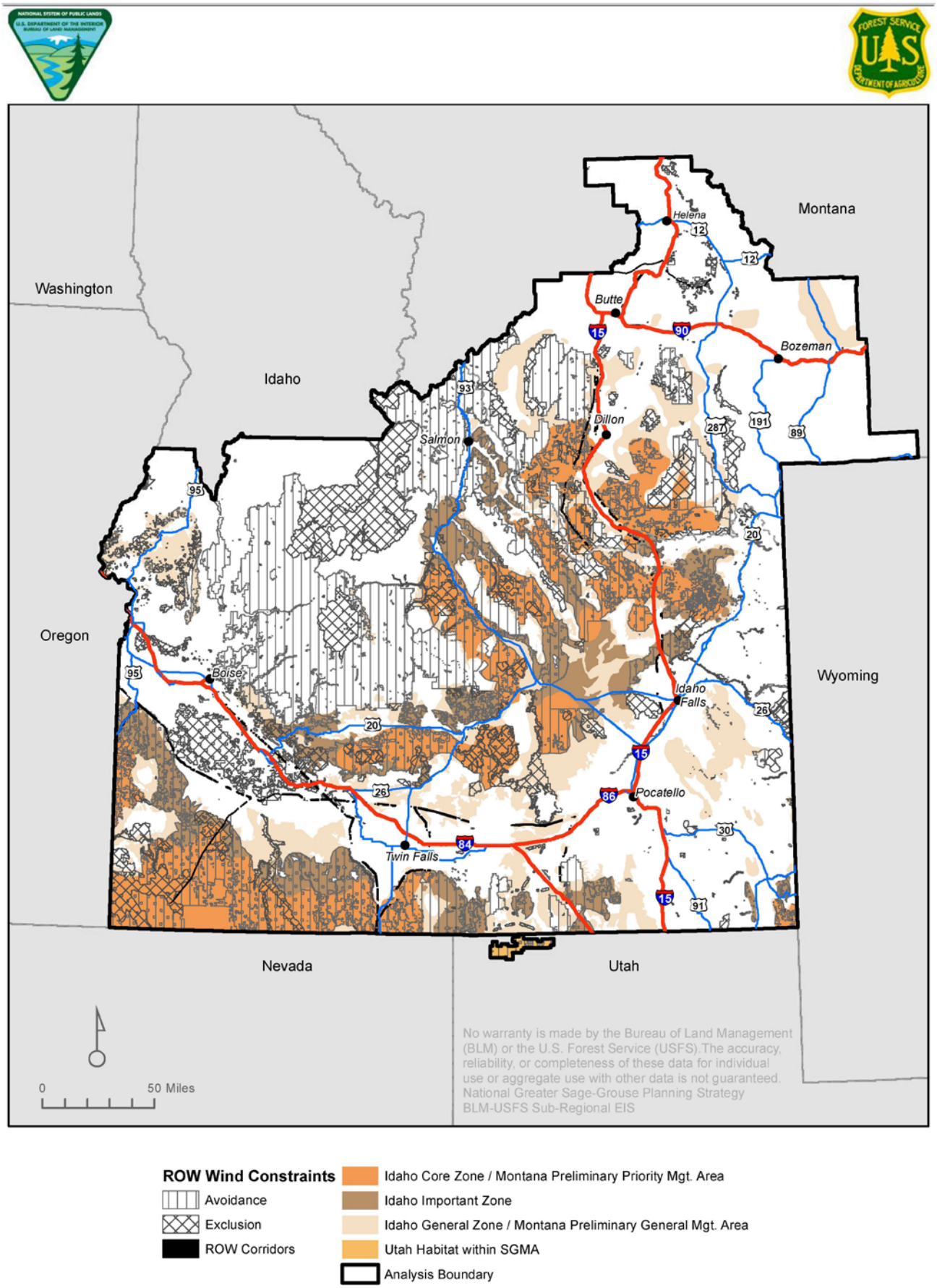
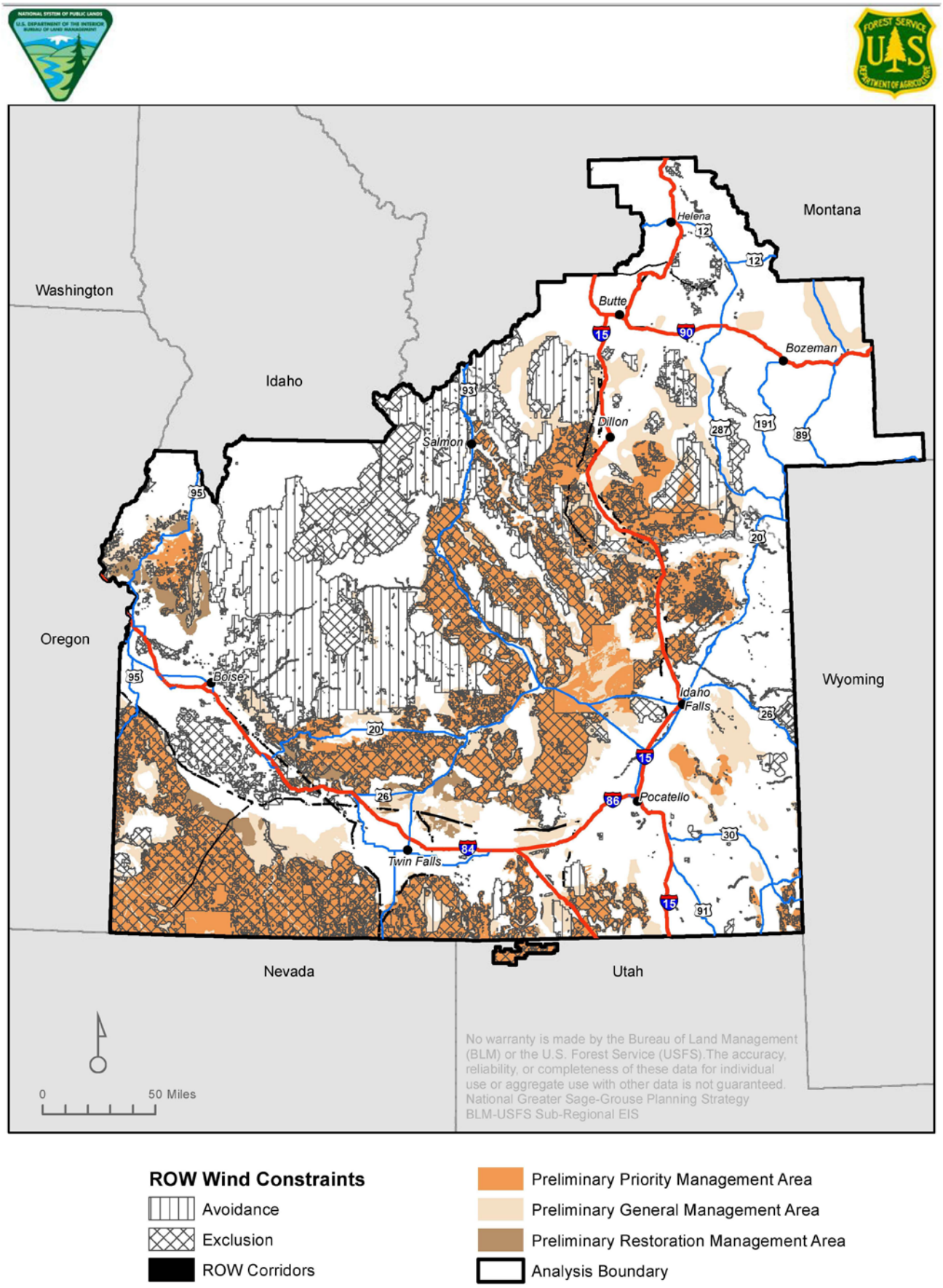



**Figure 2-70**
**Alternative F: Right-of-way Exclusion and Avoidance Areas for Wind**