
FINAL

**SCREENING AND RATIONALE FOR AREAS CONSIDERED
FOR EVALUATION AS RESEARCH NATURAL AREAS
BLACK HILLS NATIONAL FOREST PHASE II PLAN AMENDMENT**

Prepared for:

*United States Department of Agriculture-Forest Service
Black Hills National Forest Phase II Plan Amendment*



Prepared by:



Science Applications International Corporation
An Employee-Owned Company

*8100 Shaffer Parkway, Suite 100
Littleton, CO 80127*

**October 28, 2002
(Revised November 15, 2002)**

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 METHODS	4
3.0 RESULTS	7
3-1 Step 1 – Identification of Areas Considered for Evaluation as RNAs.....	7
3-2 Step 2 – Ranking of Potential Conflicts for Areas Considered for evaluation as RNAs.....	8
3-3 Step 2A – Boundary Adjustment and Conflict Screening of Areas Considered for Evaluation as RNAs.....	8
3-4 Step 3 – Evaluation of Oil and Gas Leasing Potential, Grazing Allotment Status, Active Mining Claims, and Research Monitoring Sites on Areas Considered for Evaluation as RNAs.....	12
3-5 Step 4 – Use of Site-Specific Knowledge to Screen Areas Considered for Evaluation as RNAs.....	13
3-6 Step 4a – Refined Technical Screening	17
3-7 Step 5 – Field Assessment and Candidate RNA Determination.....	20
3-8 Step 5a – Ecological Assessment.....	31
3-9 Summary	41
4.0 REFERENCES	55

LIST OF TABLES

<u>Table</u>	<u>Page</u>
3.1.1 Areas Eliminated During Step 1 Screening	8
3.3.1 Areas Eliminated During Step 2A Screening	9
3.4.1 Areas Eliminated As A Result of Active Mining Claims Screening.....	12
3.5.1 Areas Eliminated During Step 4 Screening	13
3.6.1 Attendees of RNA 9/18/02 Field Meeting.....	17
3.6.2 Areas Eliminated During Step 4a Screening	18
3.7.1 Areas Eliminated During Step 5 Screening	21

3.8.1 Candidate Research Natural Areas (RNAs) Identified From Field Assessments.....	32
3.8.2 Plant Associations Documented on Candidate Research Natural Areas (RNAs)*.....	39
3.8.3 Plant Codes	40
3.8.4 Estimates of Grazing Allotment Overlap with Candidate RNAs	40
3.9.1 Areas Screened Out During Steps 1-5	42