

**FINAL**

**POWDER RIVER  
REGIONAL COAL  
ENVIRONMENTAL IMPACT STATEMENT**

**PREPARED BY:**

**BUREAU OF LAND MANAGEMENT  
DEPARTMENT OF THE INTERIOR**

*Maxwell T. Anderson*

---

**STATE DIRECTOR**

**WYOMING STATE OFFICE**

# TABLE OF CONTENTS

<b>SUMMARY</b> .....	1
<b>CHAPTER 1 PURPOSE AND NEED</b> .....	5
<b>INTRODUCTION</b> .....	5
<b>REQUIRED AUTHORIZATIONS</b> .....	5
<b>PURPOSE AND NEED FOR LEASING WITHIN THE REGION</b> .....	5
<b>REVIEW OF PROGRAM IMPLEMENTATION WITHIN THE REGION</b> .....	6
<b>OTHER COAL</b> .....	7
<b>ISSUES AND AREAS OF CONCERN</b> .....	7
<b>TRACT RANKING</b> .....	8
<b>TABLES FOR CHAPTER 1</b> .....	9
<b>CHAPTER 2 ALTERNATIVES INCLUDING THE PROPOSED ACTION</b> .....	13
<b>INTRODUCTION</b> .....	13
<b>ASSUMPTIONS</b> .....	13
<b>ALTERNATIVE 1 (NO ACTION)</b> .....	14
<b>ALTERNATIVE 2</b> .....	16
<b>ALTERNATIVE 3</b> .....	18
<b>ALTERNATIVE 4</b> .....	20
<b>CONCLUSION</b> .....	21
<b>TABLES AND FIGURES FOR CHAPTER 2</b> .....	22

## TABLE OF CONTENTS

<b>CHAPTER 3 DESCRIPTION OF THE AFFECTED ENVIRONMENT .....</b>	<b>35</b>
<b>INTRODUCTION.....</b>	<b>35</b>
<b>GEOLOGY AND OTHER MINERALS.....</b>	<b>35</b>
<b>WATER RESOURCES .....</b>	<b>35</b>
GROUND WATER.....	35
SURFACE WATER.....	37
<b>AIR QUALITY.....</b>	<b>37</b>
<b>SOILS, VEGETATION, AND RECLAMATION.....</b>	<b>38</b>
<b>WILDLIFE .....</b>	<b>38</b>
<b>CULTURAL RESOURCES.....</b>	<b>39</b>
<b>VISUAL RESOURCES .....</b>	<b>40</b>
<b>LAND USE.....</b>	<b>40</b>
AGRICULTURE.....	40
OTHER LAND USES.....	40
<b>RECREATION .....</b>	<b>41</b>
<b>TRANSPORTATION.....</b>	<b>41</b>
RAILROADS.....	41
HIGHWAYS.....	41
<b>NOISE.....</b>	<b>42</b>
RAILROADS.....	42
HIGHWAYS.....	42
<b>SOCIOLOGY.....</b>	<b>42</b>
SOCIAL ORGANIZATION.....	42
COMMUNITY SERVICES AND FACILITIES .....	42
HOUSING.....	43
ATTITUDES.....	43
<b>ECONOMICS.....</b>	<b>43</b>
<b>TABLES FOR CHAPTER 3.....</b>	<b>44</b>

# TABLE OF CONTENTS

<b>CHAPTER 4 ENVIRONMENTAL CONSEQUENCES.....</b>	<b>53</b>
<b>INTRODUCTION.....</b>	<b>53</b>
<b>GEOLOGY AND OTHER MINERALS.....</b>	<b>53</b>
<b>WATER RESOURCES.....</b>	<b>54</b>
GROUND WATER.....	54
SURFACE WATER.....	55
<b>AIR QUALITY.....</b>	<b>57</b>
<b>SOILS, VEGETATION, AND RECLAMATION.....</b>	<b>60</b>
<b>WILDLIFE.....</b>	<b>61</b>
<b>CULTURAL RESOURCES.....</b>	<b>62</b>
<b>VISUAL RESOURCES.....</b>	<b>62</b>
<b>LAND USE.....</b>	<b>63</b>
<b>RECREATION.....</b>	<b>63</b>
<b>TRANSPORTATION.....</b>	<b>64</b>
RAILROADS.....	64
HIGHWAYS.....	64
<b>NOISE.....</b>	<b>64</b>
<b>SOCIOLOGY.....</b>	<b>65</b>
SOCIAL ORGANIZATION.....	65
COMMUNITY SERVICES AND FACILITIES.....	65
HOUSING.....	65
<b>ECONOMICS.....</b>	<b>65</b>
<b>UNAVOIDABLE ADVERSE IMPACTS.....</b>	<b>67</b>
<b>SHORT TERM VS. LONG TERM.....</b>	<b>69</b>
<b>IRREVERSIBLE/IRRETRIEVABLE.....</b>	<b>69</b>
<b>TABLES FOR CHAPTER 4.....</b>	<b>70</b>

## TABLE OF CONTENTS

<b>LIST OF PREPARERS.....</b>	<b>85</b>
<b>REFERENCES.....</b>	<b>87</b>
<b>APPENDIX A AIR QUALITY.....</b>	<b>A-1</b>
<b>APPENDIX B WILDLIFE .....</b>	<b>B-1</b>
<b>APPENDIX C CULTURAL RESOURCES.....</b>	<b>C-1</b>
<b>APPENDIX D VISUAL RESOURCES .....</b>	<b>D-1</b>
<b>APPENDIX E RECREATION.....</b>	<b>E-1</b>
<b>APPENDIX F TRANSPORTATION .....</b>	<b>F-1</b>
<b>APPENDIX G ECONOMICS.....</b>	<b>G-1</b>
<b>APPENDIX H COMMENTS AND RESPONSES .....</b>	<b>H-1</b>