

*Energy Development and
Wildlife Conservation in
Western North America*

Edited by
David E. Naugle

Foreword by Mark S. Boyce

 ISLANDPRESS

Washington | Covelo | London

CONTENTS

<i>Foreword</i>		ix
<i>Preface</i>		xiii
<i>Acknowledgments</i>		xvii
PART I	ENERGY DEVELOPMENT AND THE HUMAN FOOTPRINT	1
Chapter 1	Introduction to Energy Development in the West <i>David E. Naugle and Holly E. Copeland</i>	3
Chapter 2	Geography of Energy Development in Western North America: Potential Impacts on Terrestrial Ecosystems <i>Holly E. Copeland, Amy Pocewicz, and Joseph M. Kiesecker</i>	7
PART II	BIOLOGICAL RESPONSE OF WILDLIFE AND INVASIVE PLANTS TO ENERGY DEVELOPMENT	23
Chapter 3	Unifying Framework for Understanding Impacts of Human Developments on Wildlife <i>Chris J. Johnson and Martin-Hugues St-Laurent</i>	27
Chapter 4	Sage-Grouse and Cumulative Impacts of Energy Development <i>David E. Naugle, Kevin E. Doherty, Brett L. Walker, Holly E. Copeland, Matthew J. Holloran, and Jason D. Tack</i>	55
Chapter 5	Effects of Energy Development on Ungulates <i>Mark Hebblewhite</i>	71
Chapter 6	Effects of Energy Development on Songbirds <i>Erin M. Bayne and Brenda C. Dale</i>	95
Chapter 7	Invasive Plants and Their Response to Energy Development <i>Paul H. Evangelista, Alycia W. Crall, and Erin Bergquist</i>	115

Chapter 8	Wind Power and Biofuels: A Green Dilemma for Wildlife Conservation <i>Gregory D. Johnson and Scott E. Stephens</i>	131
PART III	CONSERVATION BY DESIGN: PLANNING AND IMPLEMENTING SOLUTIONS	157
Chapter 9	Energy by Design: Making Mitigation Work for Conservation and Development <i>Joseph M. Kiesecker, Holly E. Copeland, Bruce A. McKenney, Amy Pocewicz, and Kevin E. Doherty</i>	159
Chapter 10	Forecasting Energy Development Scenarios to Aid in Conservation Design <i>Holly E. Copeland, Kevin E. Doherty, David E. Naugle, Amy Pocewicz, and Joseph M. Kiesecker</i>	183
Chapter 11	Resource Policy, Adaptive Management, and Energy Development on Public Lands <i>Melinda Harm Benson</i>	195
Chapter 12	Community-Based Landscape Conservation: A Roadmap for the Future <i>Gregory A. Neudecker, Alison L. Duvall, and James W. Stutzman</i>	211
	<i>Literature Cited</i>	231
	<i>Contributors</i>	285
	<i>About the Editor</i>	291
	<i>Index</i>	293