

**ENVIRONMENTAL ASSESSMENT
FOR THE HANNA DRAW COALBED
METHANE EXPLORATION PROJECT,
CARBON COUNTY, WYOMING**

Prepared for

**Bureau of Land Management
Rawlins Field Office
Rawlins, Wyoming**

This Environmental Analysis was prepared by TRC Mariah Associates Inc., an environmental consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM). The BLM, in accordance with Title 40 Code of Federal Regulations, Part 1506(a) and (b), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
APD	Application for Permit to Drill
AQD	Air Quality Division
ARPA	<i>Archaeological Resource Protection Act of 1979</i>
AUM	Animal unit month
BA	Biological Assessment
bbl	42-gal barrel
BLM	U.S. Bureau of Land Management
BO	U.S. Fish and Wildlife Service Biological Opinion
bpd	Barrels per day
C.F.R.	<i>Code of Federal Regulations</i>
CBL	Cement bond log
CBM	Coalbed methane
CCRBD	Carbon County Road and Bridge Department
CEQ	Council on Environmental Quality
CERCLA	<i>Comprehensive Environmental Response, Compensation, and Liability Act of 1980</i>
cfs	Cubic feet per second
CGF	Central gathering/metering facility
CIAA	Cumulative impact assessment area
CO	Carbon monoxide
COE	U.S. Army Corps of Engineers
dBA	A-weighted decibel
EA	Environmental assessment
EIS	Environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	<i>Endangered Species Act</i>
FLPMA	<i>Federal Land Policy and Management Act of 1976</i>
FONSI	Finding of No Significant Impact
frac	Fracture stimulation of well bore
gpm	Gallons per minute
HAP	Hazardous air pollutant
HDEPA	Hanna Draw Exploration Project Area
HDPE	High-density polyethelene
hp	Horsepower
I-80	Interstate 80
LOP	Life-of-project
mcf	Thousand cubic feet
mcfgpd	Thousand cubic feet of gas per day

LIST OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

mmcfd	Million cubic feet per day
MSDS	Material Safety Data Sheets
MSHA	Mine Safety and Health Administration
n.d.	No date
NAAQS	National Ambient Air Quality Standards
NCPA	National Cultural Programmatic Agreement
NEPA	<i>National Environmental Policy Act of 1969</i>
NHPA	<i>National Historic Preservation Act</i>
NO ₂	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NSO	No Surface Occupancy
NTL	Notice to Lessee
O ₃	Ozone
ORV	Off-road vehicle
Pb	Lead
pc	Progressive cavity
PM ₁₀	Respirable particulates
PMZ	Primary Management Zone
PSD	Prevention of Significant Deterioration
RMP	Resource Management Plan
ROD	Record of Decision
ROW	Right-of-way
SARA	<i>Superfund Amendments and Reauthorization Act of 1986</i>
SeaWest	SeaWest Windpower, Inc.
SHPO	State Historic Preservation Office
SO ₂	Sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Storm Water Pollution Prevention Plan
T&E	Threatened and endangered
TDS	Total dissolved solids
TEP&C	Threatened, endangered, proposed, and candidate
TSP	Total suspended particulates
UPRR	Union Pacific Railroad
U.S.C.	<i>United States Code</i>
USDC	U.S. Department of Commerce
USDI	U.S. Department of Interior

LIST OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UW	University of Wyoming
VOC	Volatile organic compounds
VRM	Visual Resource Management
WAAQS	Wyoming Ambient Air Quality Standards
WDE	Wyoming Department of Employment
WDEQ	Wyoming Department of Environmental Quality
WDOT	Wyoming Department of Transportation
WGFD	Wyoming Game and Fish Department
Williams	Williams Production RMT Company
WIMS	Wyoming Internet Map Server
WNDD	Wyoming Natural Diversity Database
WOGCC	Wyoming Oil and Gas Conservation Commission
WQD	Water Quality Division
WRCC	Western Regional Climate Center
WSEO	Wyoming State Engineer's Office
WSP	Wyoming State Protocol