



# Presentation to the Wyoming Infrastructure Authority Board

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Ecology and Environment, Inc.

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# Ecology and Environment Inc. Lowham Walsh, LLC

Environmental Services for Wyoming for over 25 years.



*Fawn antelope*





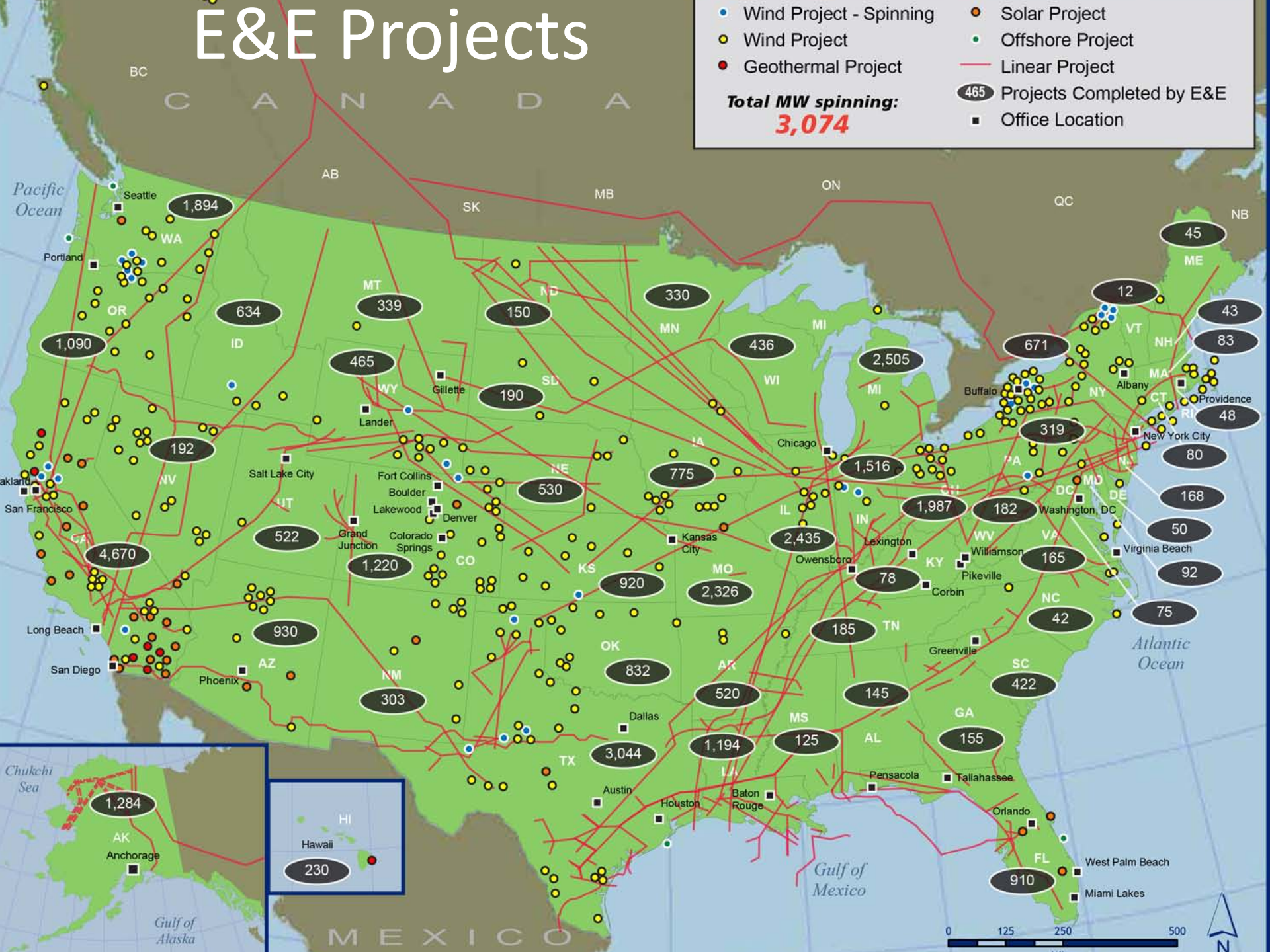
# Multidisciplinary WY-based Specialists in Gillette and Lander



# E&E Projects

- Wind Project - Spinning
- Wind Project
- Geothermal Project
- Solar Project
- Offshore Project
- Linear Project
- 465 Projects Completed by E&E
- Office Location

**Total MW spinning:**  
**3,074**





# Signature WY Wind Projects



Happy Jack Wind Energy and  
Cheyenne Wind Energy Facility  
Duke Energy, Cheyenne, WY

Craven Creek Wind Project  
Third Planer Wind Power, LLC  
Lincoln County, WY



High Plains Wind Project  
Green Wing Pacific Energy, WY

Campbell Hill Wind Farm  
Casper, WY

Multiple Confidential WY  
wind projects



# Critical Issues

## Wyoming Issue

- Smart wind and transmission development
- Big game range protection
- Water resources protection
- Critical habitat for sensitive species

## E&E Services

- Feasibility studies, routing, permitting, compliance
- Web-based GIS, agency coordination
- Hydrologic studies, wetland delineations
- Biological surveys, agency consultation/GIS based habitat determination program





# Ruby Natural Gas Pipeline

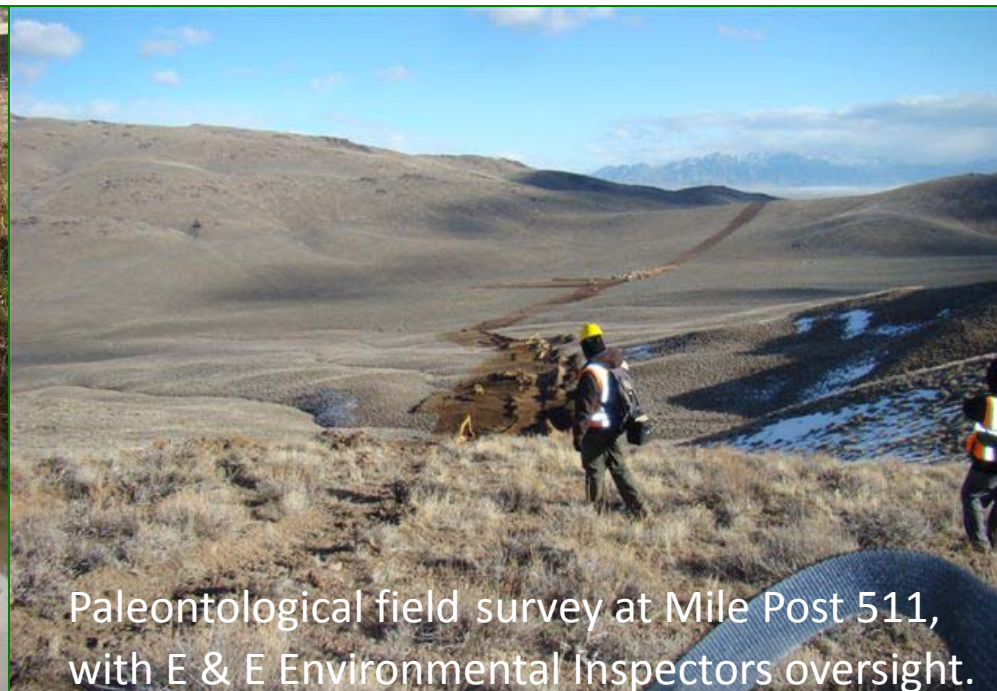
**Client:** El Paso Corporation

**Location:** Wyoming, Utah, Nevada, and Oregon

**Date:** 2007-2011

680-miles, \$3 billion investment to transport Rocky Mountain region natural gas to growing markets in the Western United States.

Recent FERC approval. The nation's first-ever carbon-neutral pipeline.





# Ruby Permitting and Inspection

Commenced field surveys and scoping of project issues in 2008

Received permits to commence construction in 2010.

In 2010 the project began construction.

E&E provided the environmental inspection services.

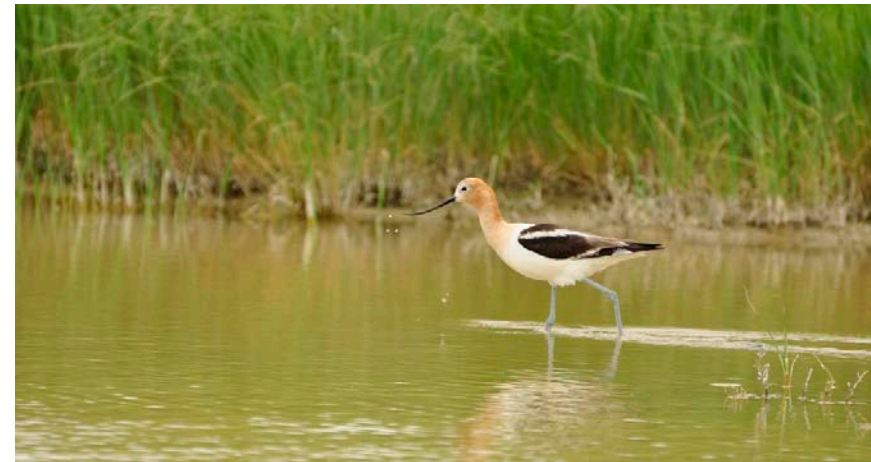
E & E has maintained an experienced and dedicated workforce that has minimized environmental impacts while maintaining the project schedule.





# Environmental Services

Renewable Energy and Transmission  
Permitting and Compliance  
Siting and Routing Studies  
Feasibility Studies  
NEPA Analysis  
Ecological Services  
Biological Surveys  
GIS Services  
Engineering and Remediation  
Solid & Hazardous Waste  
Mining Services  
Oil & Gas Consulting  
Asbestos, Industrial Site Assessment





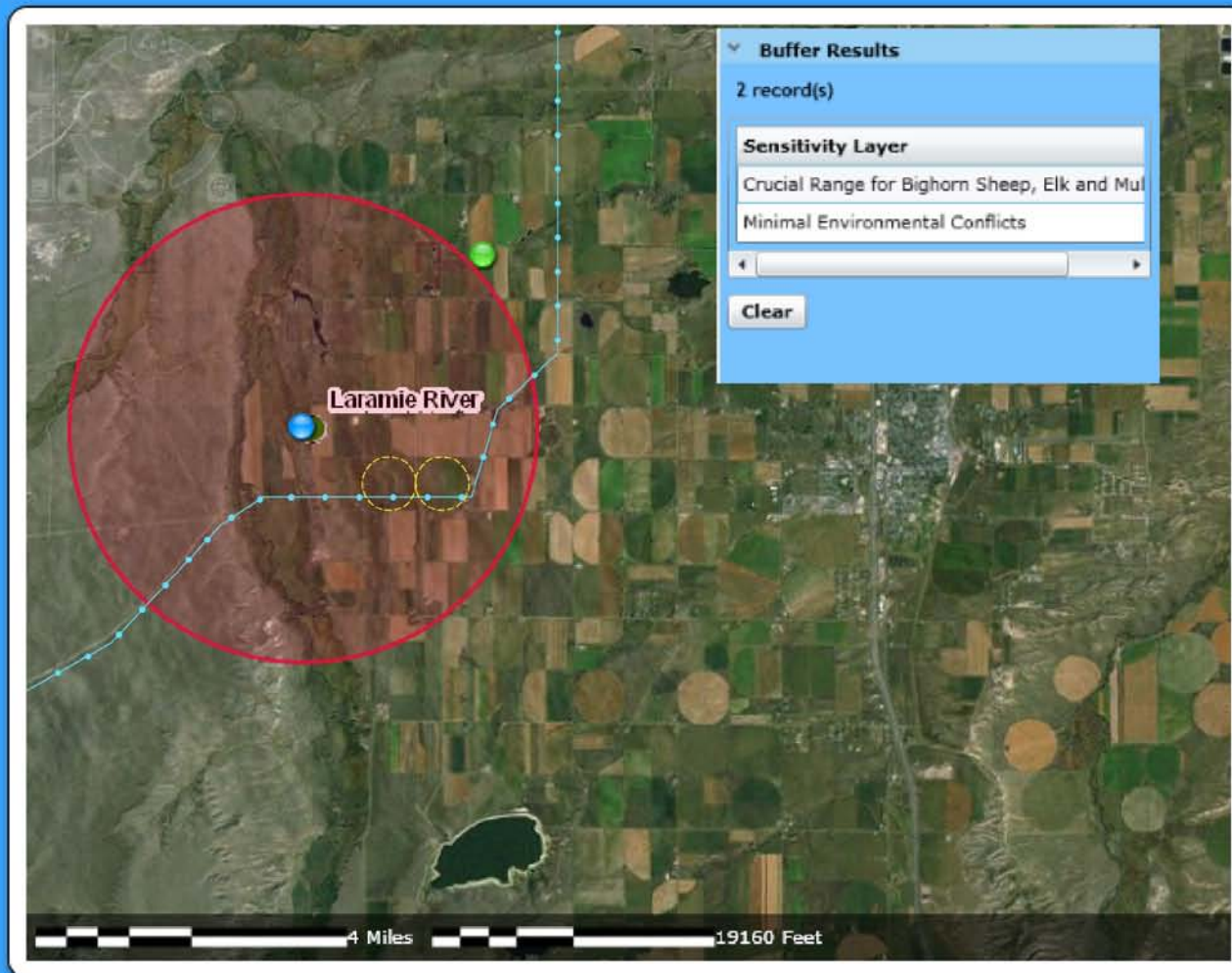
# Cutting Edge, Web-Enabled Siting and Routing Tools



## Legend

- System Layers
- Sensitivity Layers
  - Exclude
  - Avoid
  - High Sensitivity
  - Minimal Environmental Conflict

- > Basemap
- > Identify Results
- > Buffer Tool
- > Buffer Results
- > Search Address
- > Measure Results





# Thank You.



 ecology and environment, inc.  
 **LOWHAM WALSH** LLC  
Engineering & Environmental Services

