



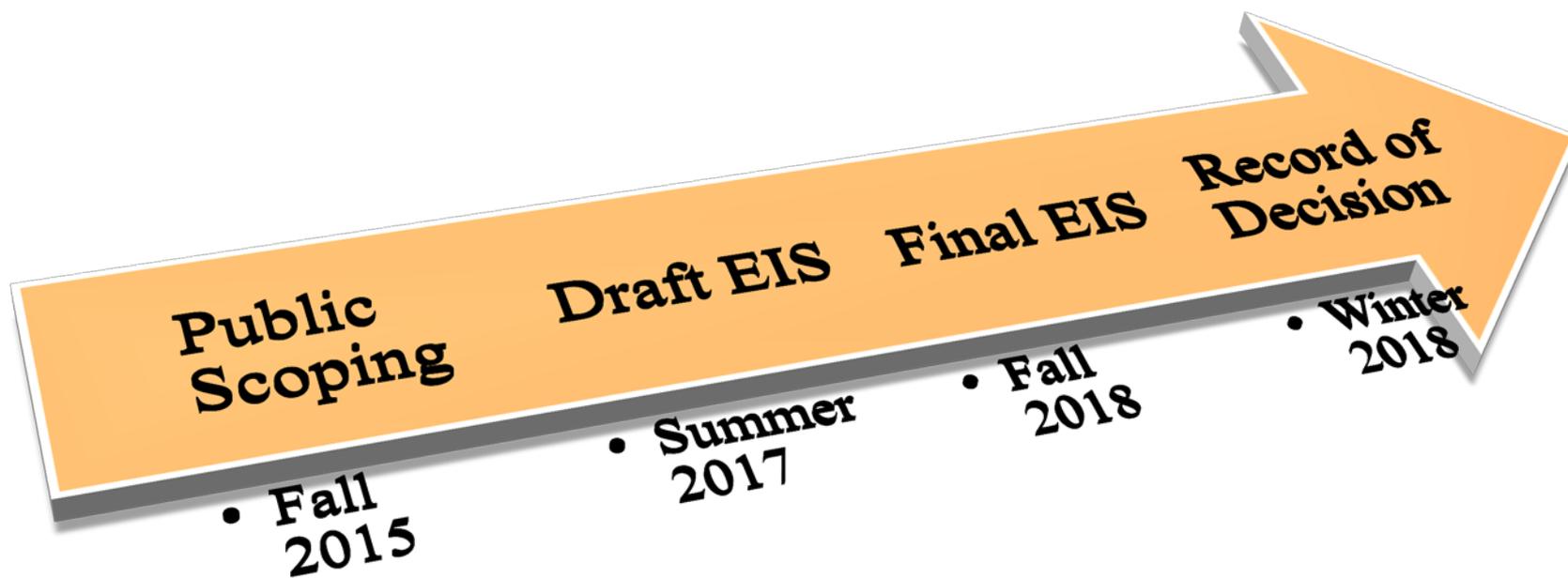
# **GREATER CROSSBOW OIL AND GAS DEVELOPMENT PROJECT**



**Public Meeting on Alternatives  
September 8, 2016**



## Project Schedule

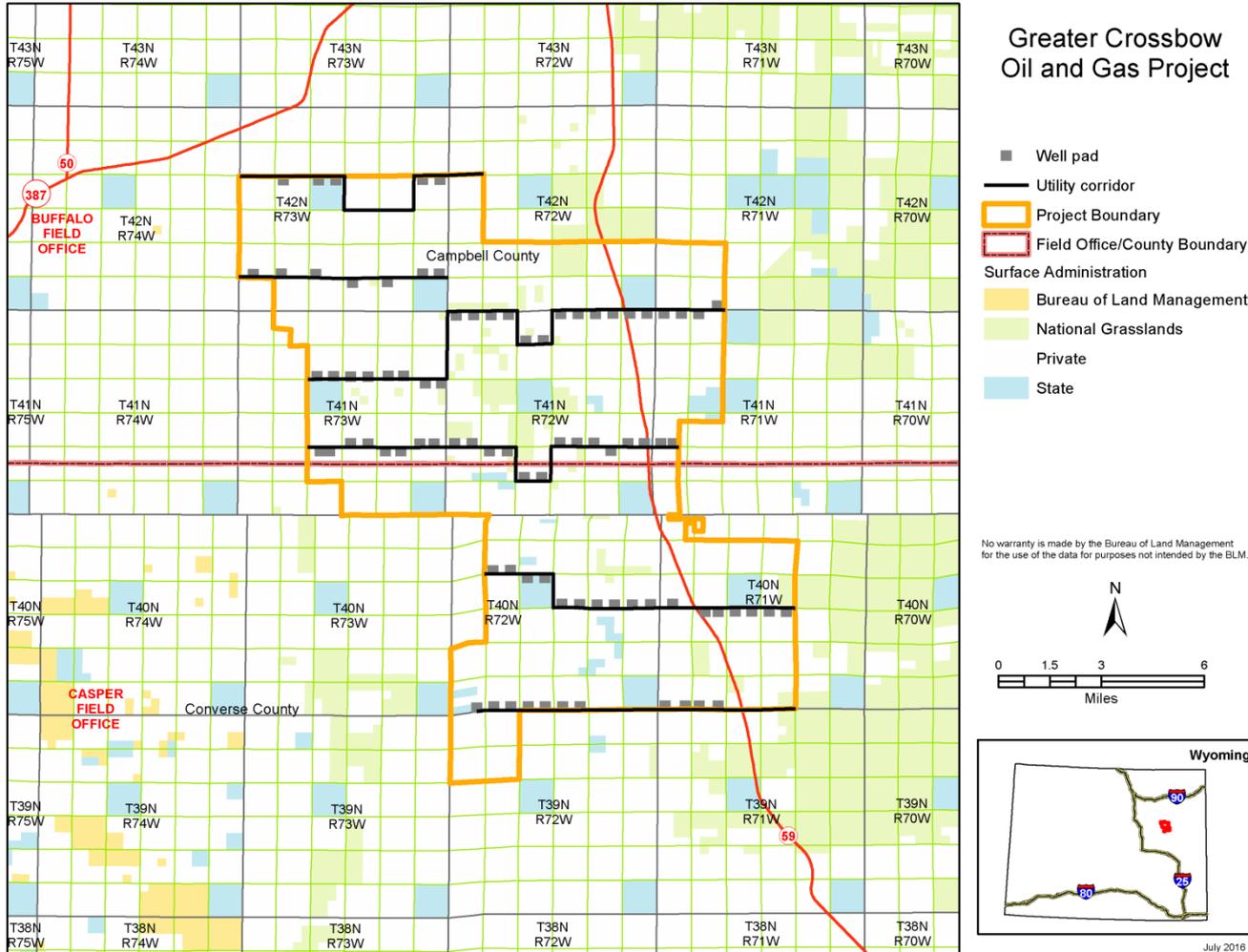




# Wyoming

Buffalo Field Office

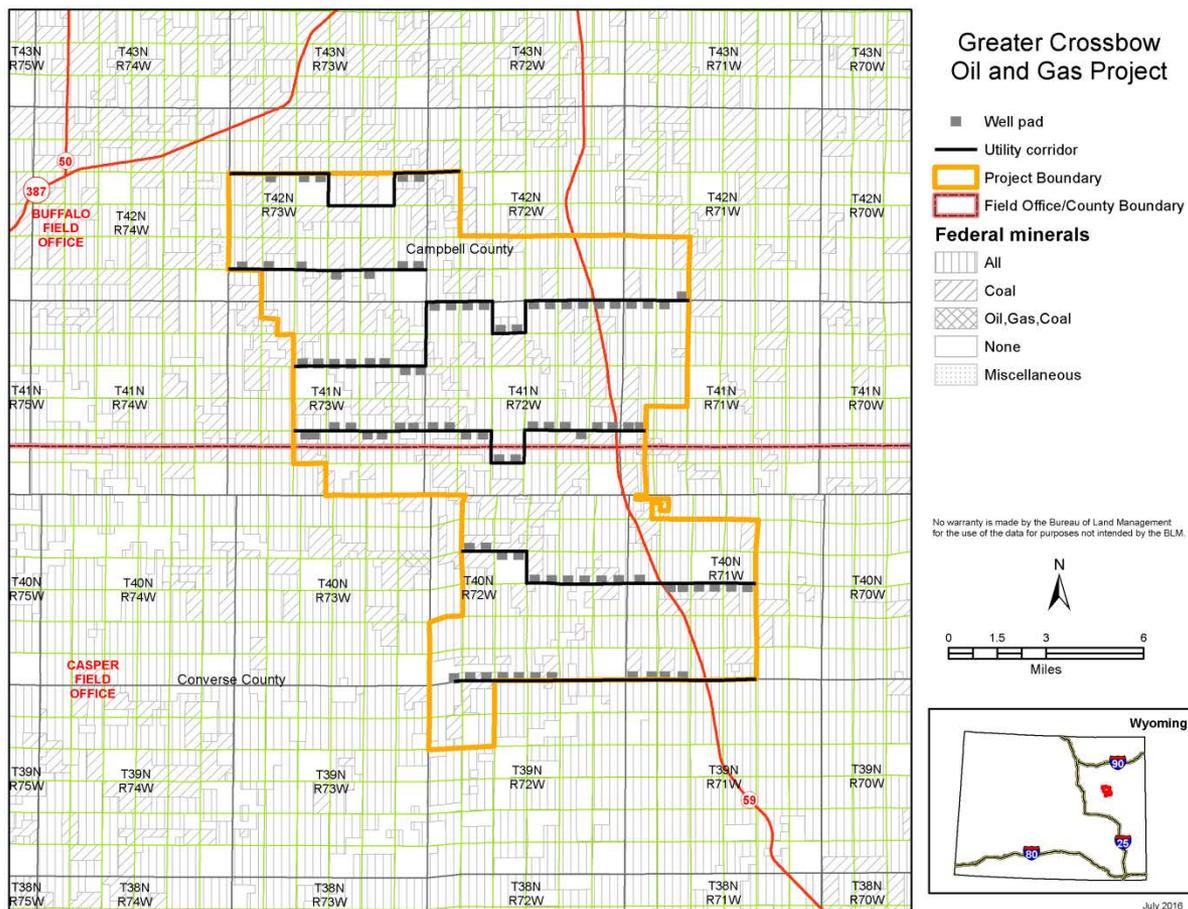
## Project Area Surface Ownership



Project Area 106,897Acres: 87% Private, 8% State, 5% USFS



## Project Area Sub-surface Ownership

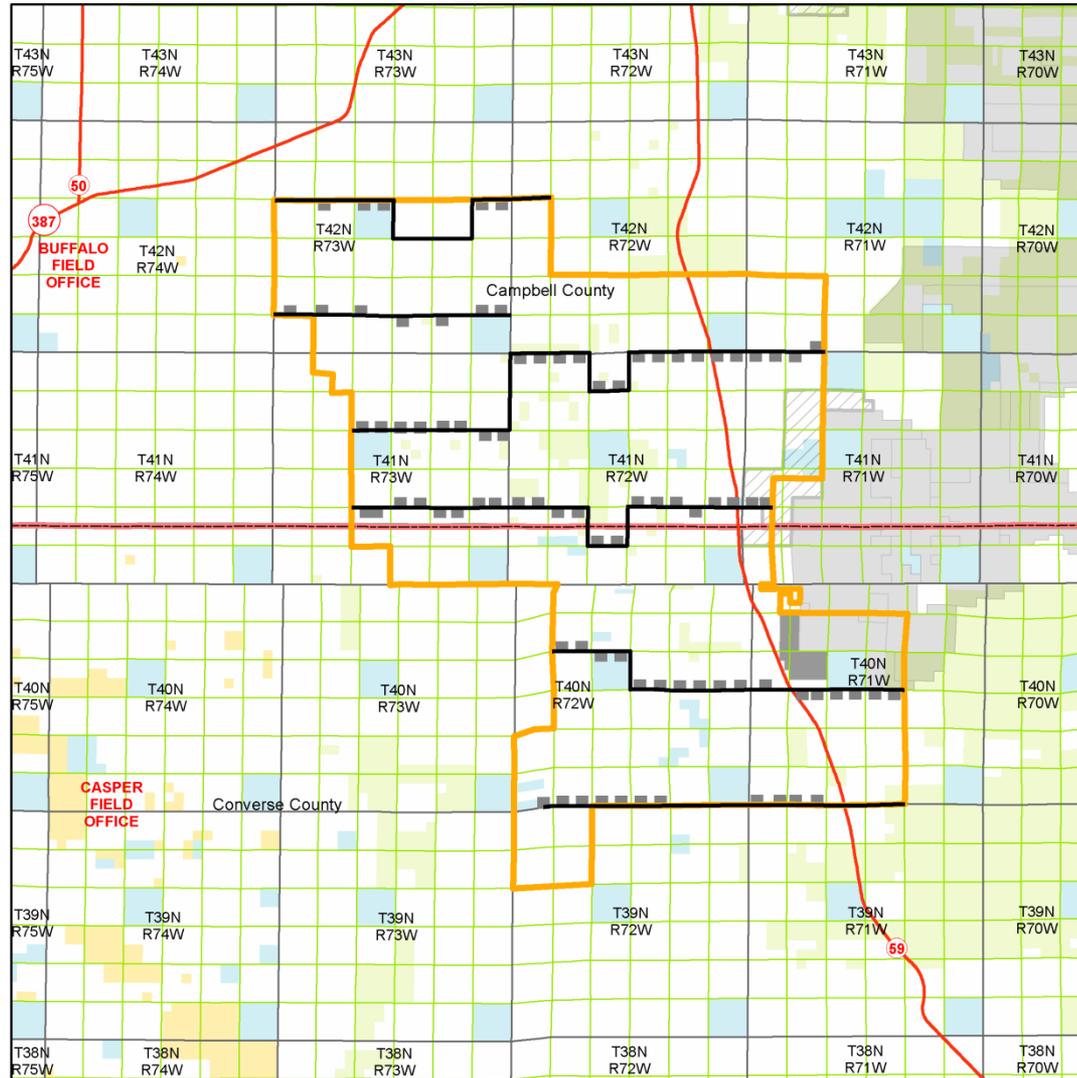


Project Area 106,987 Acres: 64% Federal fluid minerals, 29% Private, 8% State



# Wyoming

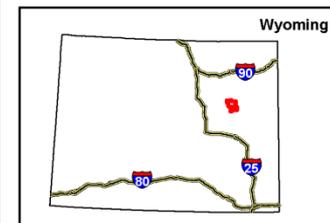
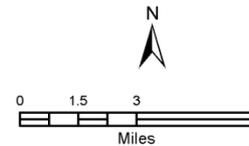
## Greater Crossbow – Coal Lease Proximity



### Greater Crossbow Oil and Gas Project

- Utility corridor
- Well pad
- ▭ Project Boundary
- ▭ Field Office/County Boundary
- Surface Administration
  - ▭ Bureau of Land Management
  - ▭ National Grasslands
  - ▭ Private
  - ▭ State
- Coal Development
  - ▭ Coal Lease
  - ▨ Coal Lease By Application
  - ▭ Lease Mod Application

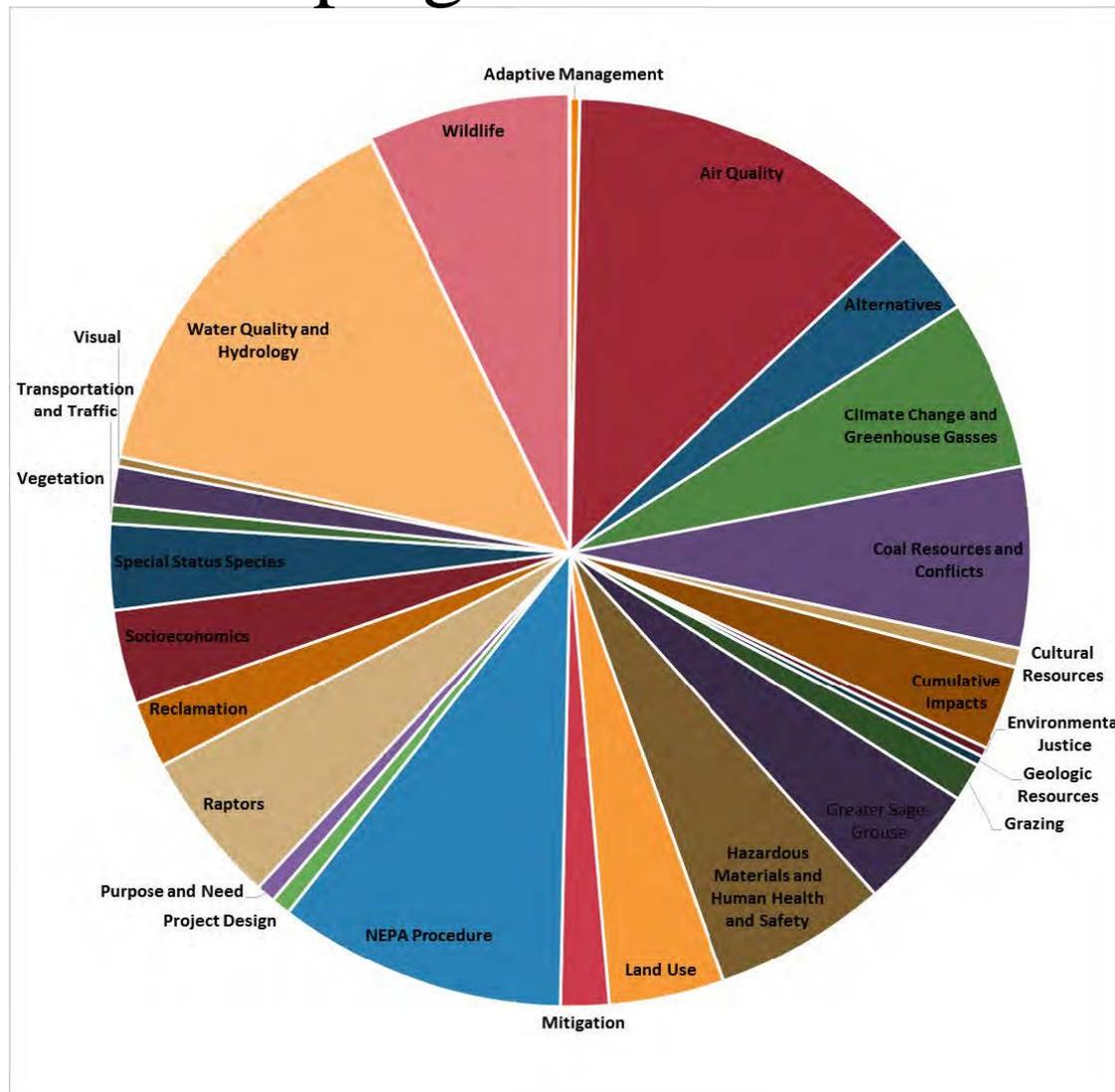
No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.





# Wyoming

## Scoping Comments





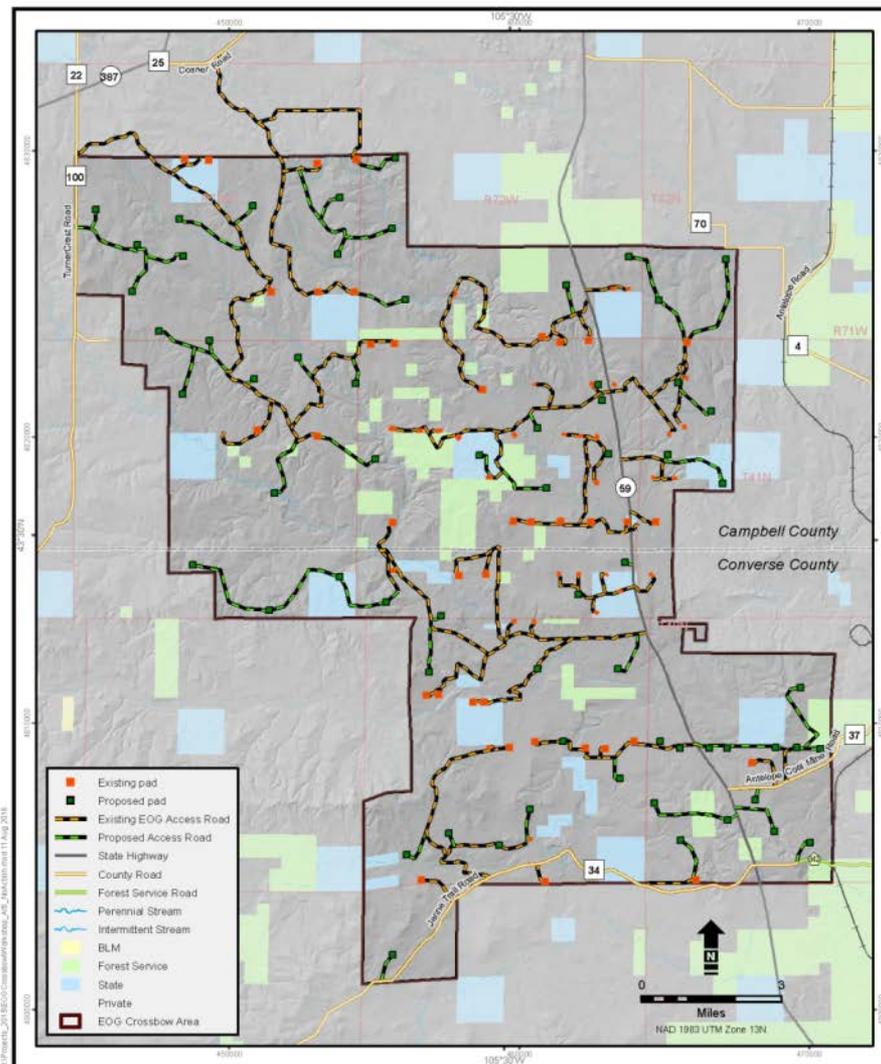
## Alternative I

### No Action (“Traditional”)

- Oil and Gas Development to continue in accordance with LUPs.
- Mix of horizontal and vertical wells (1,700 wells on 250 pads).
- Roads, spider web.
- Production trucked.
- Applicant committed measures optional with non-federal wells.
- BLM management not applied to non-federal wells.



# Wyoming



**Alternative I - No Action**  
 Greater Crossbow Project Area  
 Campbell and Converse Counties, Wyoming



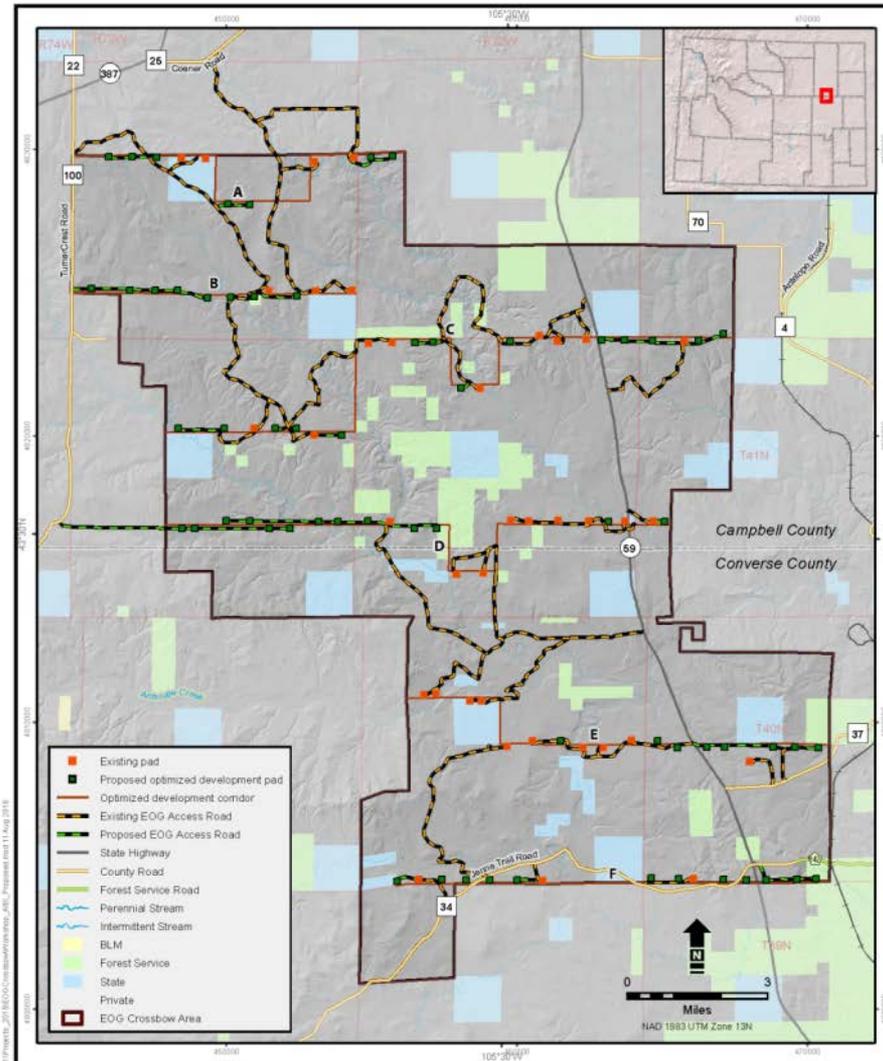
## Alternative II

### Proposed Action (“Spine & Rib”)

- Large multi-well (“opti-pads”) on corridors.
- Horizontal wells with extended laterals (1,500 wells on 100 pads).
- Buried utilities within the corridors, production piped.
- Migratory Bird Conservation Plan (raptor territories).



# Wyoming



**Alternative II - EOG Proposed Project**  
Greater Crossbow Project Area  
Campbell and Converse Counties, Wyoming

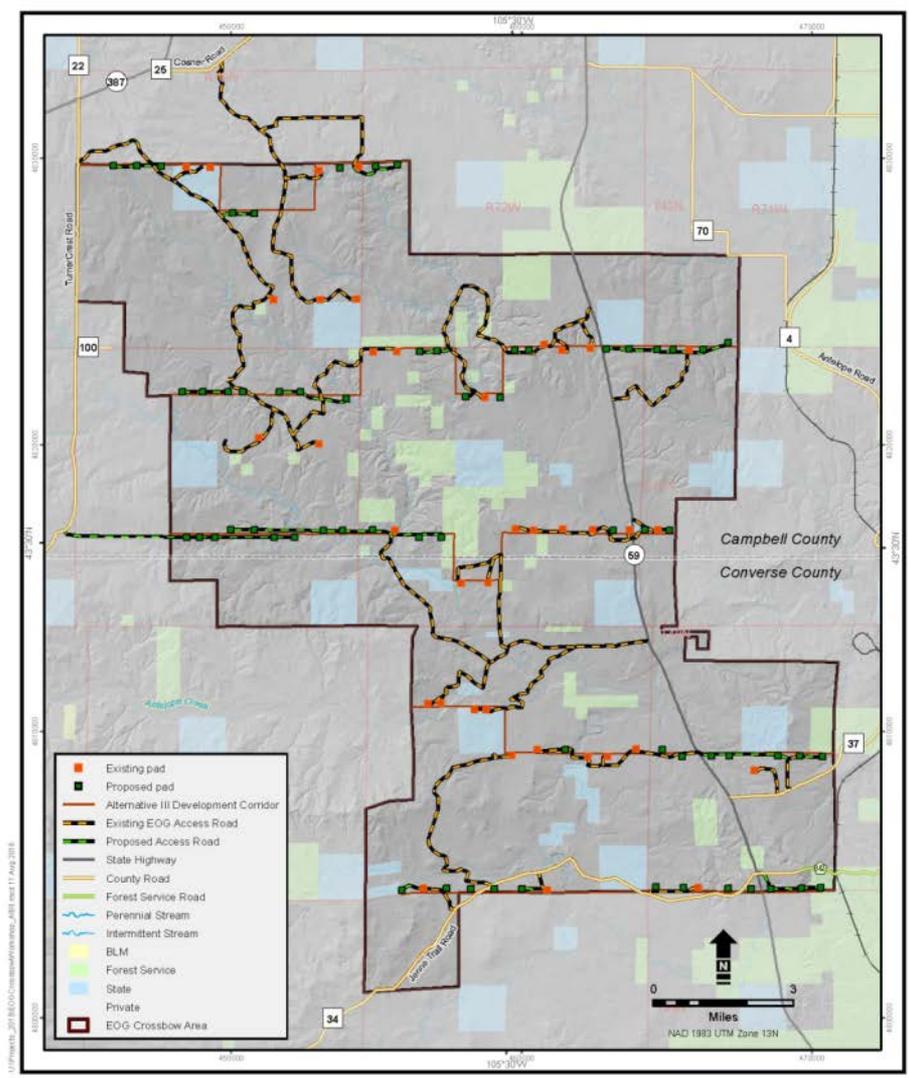


## Alternative III

- Increased Production & Conservation
  - Horizontal wells with extended laterals (2,400 wells on 100 pads).
  - Pipelines constructed prior to production.
  - Water (source & disposal) within project area.
  - 10 year Coal LBA grace period.
  - 0.5 mile controlled use buffer for fish-bearing streams and residences.
  - FWS raptor recommendations



# Wyoming



**Alternative III**  
Greater Crossbow Project Area  
Campbell and Converse Counties, Wyoming



# Wyoming

	Alternative I	Alternative II	Alternative III
Spacing	Traditional	Spine & Rib (2-4 miles apart)	Spine & Rib (4 miles apart)
Well types	Horizontal & vertical	Horizontal (1-2 mile laterals)	Horizontal (2 mile laterals)
Well numbers	1,696 (1,392 EOG)	1,500	2,400
Pads	174	100	100
Pad size	12 acres initial 6 acres long-term	40 acres initial 21 acres long-term	40 acres initial 24 acres long-term
Wells per pad	4 to 8	15 to 22	24
Transportation	Trucking	Trucking then pipelines	Pipelines



# Wyoming

	Alternative I	Alternative II	Alternative III
Source water	Existing sources	14 (4 existing, 10 proposed)	14 (4 existing, 10 proposed)
Venting & flaring	Existing regulations	Existing regulations	BLM proposed venting/flaring rule
Coal interest	Governing plan	Governing plan	Oil & gas grace period.
Water disposal	Trucked to existing	Trucked then piped (4 wells proposed)	Pipeline (4 wells proposed)
Raptor management	Governing plan	Conservation Plan	USFWS recommendations
Residence buffer	1,000 feet	1,000 feet	0.5 miles
Fish bearing stream buffer	0.25 miles	0.25 miles	0.5 miles (Antelope included)



# Wyoming

## Questions?

