

United States Department of the Interior Bureau of Land Management

Categorical Exclusion
DOI-BLM-CO-S070-2014-0040-CX

September 2014

Goodman Point 3D Seismic Project

Location: T36N, R17W Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23
T36N, R18W Sections 1, 2, 11, 13, 14, 23, 24
T37N, R17W Sections 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35
T37N, R18W Sections 12, 13, 14, 23, 24, 25, 26, 35, 36
Canyons of the Ancients National Monument
Montezuma County

Applicant/Address: Kinder Morgan CO₂ Company. LP
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U.S. Department of the Interior
Bureau of Land Management
Canyons of the Ancients National Monument
27501 Highway 184
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Categorical Exclusion Documentation Format When Using Categorical Exclusions Not Established by Statute

A. Background

BLM Office: Bureau of Land Management Tres Rios Field Office

NEPA Number: DOI-BLM-CO-S070-2014-040-CX

Project Name: Goodman Point 3D Seismic Project

Project Description:

Kinder Morgan is proposing to deploy seismic receivers (geophones) on Canyons of the Ancients National Monument (The Monument) in Montezuma County, Colorado in support of their Goodman Point 3D seismic exploration project. The Monument is administered by the Tres Rios Field Office of the Bureau of Land Management. The purpose of the seismic project is to explore for and define the deposits of carbon dioxide CO₂ gas in the McElmo Dome CO₂ Unit.

The energy source points, composed of shot-holes and vibroseis trucks, would be located exclusively on private lands adjacent to the Monument. No source points would be located on the Monument and, additionally, would be located outside a 650-foot-wide buffer around the Monument boundary to avoid all potential impacts to cultural resources on the Monument from energy-source vibrations. Receivers would be laid out in east-west oriented lines spaced 880-feet apart with receiver points (data collection stations) spaced 110-feet apart along each receiver line. Each receiver point is composed of an array of six geophones, a battery, and a data logger similar to that shown in Figure 1, below. The system records seismic data into a wireless data recorder, therefore ground cables between receiver stations are not necessary.

On the Monument, receivers would be deployed by data-acquisition crews on foot and supported by a helicopter that would place cache bags of receivers along the receiver lines. Each cache bag will carry eight receiver sets and would be dropped and picked up at every eighth receiver point along a given receiver line. Receivers would be deployed along the lines by two-member crews on foot. Each receiver station would be laid out by hand and each geophone, mounted on a 4-inch by 3/4-inch diameter spike, would be anchored in the soil using foot pressure. Maintenance (battery or equipment replacement) would be completed by crew members on foot.



Figure 1 – Oyo GeoSpace Seismic Recorder (GSR) – Yellow unit is the GSR data recorder; white unit is a battery pack; red units are geophones with a 4-inch long spike that is pushed into the ground for good contact. The six geophones would be arranged in an approximately 10-foot-diameter circle around each GSR.

Receivers would be in place for approximately one month after deployment. Upon completion of data acquisition, receivers would be picked up by crews walking to the receivers and gathering them into cache bags at pre-determined collection points along the line. The cache bags would then be picked up by a helicopter and flown to staging areas on private land for collection and re-deployment or removal from the project.

Transportation of crews and equipment to, from, and within the project area would utilize existing County and BLM roads. No off-road vehicle travel would occur on BLM lands – except for a medical emergency - and crews would access the proposed receiver locations by walking from existing access roads. Equipment that would be used for crew transport and receiver placement on BLM land would include: two crew-transport vans, one helicopter for receiver placement support, and two project manager trucks and ATVs. **The design features as listed in Appendix A would be followed.**

Project Location:

The proposed seismic project is located northwest of Cortez Colorado in western Montezuma County. The project area lies west of Montezuma County Road (CR) 19, North of CR L, south of CR V, and east of a line trending approximately due north from East Fork Rock Creek in the southwest corner of the project area (Figure 2). Specifically, the project covers the following area.

- T36N, R17W Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23
- T36N, R18W Sections 1, 2, 11, 13, 14, 23, 24
- T37N, R17W Sections 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29,30, 31, 32, 33, 34, 35
- T37N, R18W Sections 12, 13, 14, 23, 24, 25, 26, 35, 36

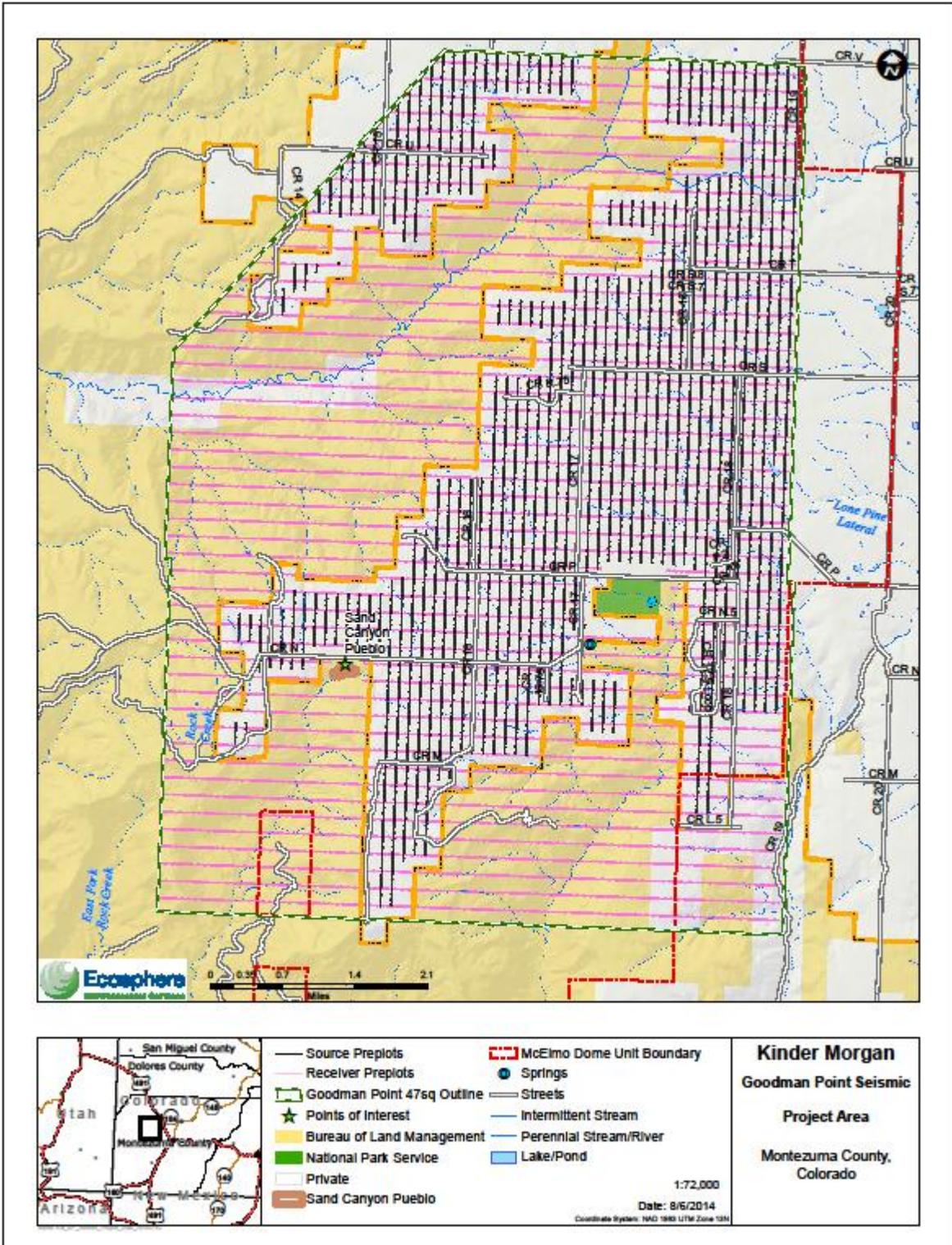


Figure 2 – Project Area and Location

B. Land Use Plan Conformance:

The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Plan: Canyons of the Ancients Resource Management Plan (RMP)

Date Approved: June, 2010

Page Number: Page 5 states, “The Monument Proclamation requires that existing lease rights be honored. However, it also requires that development should not create any significant new impacts to cultural resources or to other objects that the Monument was established to protect. In order to implement management objectives, the preferred management strategy is to protect cultural resources, their associated settings, and surface and subsurface resources, especially in areas of high site density.”

Additionally, the Monument RMP, under the heading “Canyons of the Ancients National Monument Advisory Committee Considerations and Guidance for Management Decisions”, gives the following guidance, “Encourage the use of the least invasive technologies (e.g., 3-D Seismic) to reduce impacts resulting from fluid-mineral exploration.” (Appendix E, page 196, #12). The proposed seismic action is designed to support 3D seismic exploration that meets the intent of this guidance.

C. Compliance with NEPA:

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9

“Approval of Notices of Intent to conduct geophysical exploration of oil, gas, or geothermal, pursuant to 43 CFR 3150 or 3250, when no temporary or new road construction is proposed.” (BLM NEPA HANDBOOK H- 1790-1, Appendix 4, B.6)

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 516 DM2 apply.

Do any of the following exceptions in 516 DM 2, Appendix 2, apply:

Exclusion	YES	NO
1. Have significant adverse effects on public health and safety.	_____	___ <u>X</u> ___
2. Have adverse effects on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands, floodplains; national monuments; migratory birds; and other ecologically significant or critical areas.	_____	___ <u>X</u> ___
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available		

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| resources. | _____ | <u>X</u> |
| 4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. | _____ | <u>X</u> |
| 5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects. | _____ | <u>X</u> |
| 6. Be directly related to other actions with individually insignificant but cumulatively significant environmental effects. | _____ | <u>X</u> |
| 7. Have significant impacts on properties listed, or eligible for listing, in the National Register of Historic Places. | _____ | <u>X</u> |
| 8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have adverse effects on designated Critical Habitat for these species. | _____ | <u>X</u> |
| 9. Violate a Federal law, or a State, local or tribal law or requirement imposed for the protection of the environment. | _____ | <u>X</u> |
| 10. Have disproportionately high and adverse effect on low income or minority populations. | _____ | <u>X</u> |
| 11. Limit access to and ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites. | _____ | <u>X</u> |
| 12. Significantly, contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species. | _____ | <u>X</u> |

I considered the proposed action and with the design features incorporated and the listed conditions of approval (attached, Appendix A below). I have reviewed this Categorical Exclusion and have decided to implement the proposed action with design features and conditions of approval attached.

This action is listed in the Department Manual as an action that may be categorically excluded. I have evaluated the action relative to the 12 extraordinary circumstances above and have determined that none apply and therefore the action has no potential for significant impacts and is categorically excluded from further environmental analysis.

D: Signature

Authorizing Official:  Date: 9.24.14
 Marietta Eaton
 Monument Manager
 Canyons of the Ancients National Monument

Contact Person

For additional information concerning this CX review, contact Robert Garrigues, Natural Resource Specialist, Tres Rios Field Office, 29211 Highway 184 Dolores, CO 81323-9308, phone: 970-882-6841.

Appendix A

Design Criteria and Conditions of Approval:

Kinder Morgan committed to the following **Design Criteria**:

1. There will be no source points located on BLM administered lands, only pedestrian deployment, maintenance & retrieval of receivers. Work crews will access the proposed receiver points on foot from existing access roads.
2. All work would be from existing roads and or existing Kinder Morgan well pads as staging areas.
3. No new road or trail construction will be required and no off-road vehicle travel will occur, except in the case of medical emergency. Any ground disturbance occurring as the result of medical emergency actions would be mitigated as necessary.
4. A helicopter will be used to support deployment and pick-up of receivers.
5. All equipment will be removed from the project area once seismic operations are complete. Solid waste will be removed on a regular basis, and all work areas will be inspected and any remaining solid waste removed following completion of seismic activities.
6. There are two no-entry areas for receiver deployment – Sand Canyon Pueblo (BLM) and the Goodman Point Unit of Hovenweep National Monument (National Park Service). Helicopters will not fly over the two no-entry areas. **Note: these areas need to be defined clearly both by GPS coverage and a more detailed map than was provided with the NOI.**
7. Receivers will not be placed within 50 feet of designated trails within Canyons of the Ancients National Monument.
8. Source points will not be located within 650 feet of the boundaries of Canyons of the Ancients National Monument and Hovenweep National Monument.
9. Known raptor nest locations will be avoided by helicopter activities within ½-mile radius during the following periods*:
 - Golden Eagle: February 1 through July 15
 - Peregrine Falcon: March 15 through July 31

* For raptor nests on BLM land, helicopter activity within the buffer area on private land will be avoided during the restriction period.
10. No Helicopter activity will occur within potential Spotted Owl habitat after March 15, 2015.
11. No refueling or vehicle maintenance will occur on public lands within the project area.
12. Helicopter staging, landing (other than an emergency) or re-fueling will not occur on public lands within the project area.

Conditions of Approval

The following conditions of approval (COAs) are to clarify Design Criteria and/or to cover necessary COAs that were not included as design criteria.

1. Quality Assurance/Quality Control (QA/QC) inspector(s) will monitor the project work on the Monument. The monitoring schedule will be approximately as follows. QA/QC inspectors will attend the primary kick-off meeting, they will be present for the beginning of field work on the Monument, they will conduct random inspections of the work on the Monument, and they will be present for the completion of the project. The total time QA/QC inspectors will be on the project will be range from 25 to 40 percent of the total project time, as needed.
2. All employees of the applicant, any subcontractors, and all survey crew members will be informed by the applicant before commencement of the seismic survey that any disturbance to, defacement of, or removal of archaeological, historical, or sacred material will not be permitted, and violation of the laws that protect these resources will be treated as law enforcement/ administrative issues. The permitted archaeological consultants will conduct “tail-gate” sessions (informal field sessions) when feasible. This will emphasize to subcontractors and all field personnel the sensitivity of cultural resources and their statutory responsibilities when operating on federal lands. New employees hired during the course of the project must get the same briefings prior to beginning work in the field. Applicants will be held accountable for the conduct of their employees and subcontractors in this regard.
3. In partial fulfilment of COA #2, above, all seismic project personnel who will work on the Canyons of the Ancients Monument are required to report to the Anasazi Heritage Center at 27501 Highway 184, Dolores Colorado for a cultural-resource orientation presented by a BLM Law Enforcement Officer and/or Anasazi Heritage Center staff. The orientation must occur before personnel are allowed to work on the Monument. The orientation will include a brief explanation of the federal laws regarding cultural resources and a mandatory viewing of two cultural resource information videos: “Visit with Respect” and “The Cultural Heritage of the Great Sage Plain”. The total video time is about ½ hour. During this visit, Kinder Morgan and its contracting companies should also allow time for the project personnel to visit the Anasazi Heritage Center Museum and other displays. Kinder Morgan, companies, and project personnel should plan that the orientation visit will take a total of approximately 1½-hours.
4. To clarify Design Criteria #6, above: As stated, helicopters will not fly over the two no-entry areas. Additionally, no receivers would be placed within the two no-entry areas. The no-entry areas are Sand Canyon Pueblo (BLM) and the Goodman Point Unit of Hovenweep National Monument (National Park Service). **Note: these areas need to be defined clearly both by GPS coverage and by a more detailed map than was provided with the Notice of Intent (NOI).**
5. The following wildlife COAs are included to clarify and expand upon Design Criteria Numbers 9 and 10, above.
 - a. **Raptors – General:** If a raptor nest is discovered at any time during project implementation, a BLM biologist is to be notified immediately of the location.
 - b. **Golden Eagle – ½-mile buffer from February 1 through July 15.**
 - Open to all receiver placement and retrieval work, including helicopter support, until February 1st.
 - From February 1 through July 15:

- No helicopter activity within ½-mile of identified nests.
 - Receivers can be placed or retrieved on foot to within a ¼-mile buffer around nests.
 - No activity – no receiver placement, retrieval, nor foot traffic within the ¼-mile buffer around the nests.
 - If receivers are stranded inside the ¼-mile buffer after February 1, retrieval will have to be delayed until after July 15th.
- c. **Peregrine Falcon – ½-mile buffer from March 15th through July 31st.**
- Open to all receiver placement and retrieval work, including helicopter support, until March 15th.
 - From March 15 through July 31:
 - No helicopter activity within ½-mile of identified nests.
 - Receivers can be placed or retrieved on foot to within a ¼-mile buffer around nests.
 - No activity – no receiver placement, retrieval, nor foot traffic within the ¼-mile buffer around the nests.
 - If receivers are stranded inside the ¼-mile buffer after March 15th, retrieval will have to be delayed until after July 31st.
- d. **Red-tailed, Cooper’s, and Sharp-shinned Hawks – ½-mile buffer from March 15 through July 31.**
- Open to all receiver placement and retrieval work, including helicopter support, until March 15th.
 - From March 15 through July 31:
 - No helicopter activity within ½-mile of identified nests.
 - Receivers can be placed or retrieved on foot to within a ¼-mile buffer around nests.
 - No activity – no receiver placement, retrieval, nor foot traffic within the ¼-mile buffer around the nests.
 - If receivers are stranded inside the ¼-mile buffer after March 15th, retrieval will have to be delayed until after July 31st.
- e. **Mexican Spotted Owl (MSO) Potential Habitat Timing Restrictions - MSO habitat within BLM (Canyons of the Ancients) boundaries – March 1 through August 31st.**
- Open to all receiver placement and retrieval work, including helicopter support, until March 1st.
 - From March 1 through August 31:
 - No helicopter activity within mapped MSO habitat on BLM lands.
 - To attempt to obtain permission to do foot-only placement or retrieval of receivers (no helicopter support within the MSO habitat), BLM will conduct an informal consultation with the US Fish & Wildlife Service (USFWS) to get concurrence.

- If USFWS does not concur, all activity, including foot traffic must end prior to March 1st.
 - In that case, if receivers are stranded inside the MSO habitat area after March 1st, retrieval will have to be delayed until after August 31st.