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# DEFENSE INFRASTRUCTURE

## Additional Information Is Needed to Better Explain the Proposed 100,000- Acre Expansion of the Piñon Canyon Maneuver Site



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Highlights of [GAO-09-171](#), a report to congressional committees

## Why GAO Did This Study

In 2007, the Army announced that the Office of the Secretary of Defense (OSD) had approved its request to expand its Piñon Canyon Maneuver Site, Colorado, by acquiring up to an additional 418,577 acres. The National Defense Authorization Act for Fiscal Year 2008 required the Army to address 29 provisions related to the expansion in a report to Congress. In July 2008, the Army reported that, although it had revalidated the requirement for at least 418,577 additional acres at the maneuver site, in response to community, cost, and other concerns it now proposed to limit the acquisition of additional training land to 100,000 acres.

The act also required GAO to review the Army's report and the justification for the proposed expansion. This report examines the extent to which the Army's report (1) addresses the provisions of the mandate and (2) explains the selection of the 100,000-acre site. GAO compared the mandate requirements with the responses in the Army's report, met with Army officials to discuss the expansion, and visited the Piñon Canyon Maneuver Site and Fort Carson.

## What GAO Recommends

GAO recommends that the Army provide Congress with additional information explaining (1) six of the responses to the mandate and (2) the rationale for selecting the 100,000 acres for the proposed expansion. DOD partially agreed with the recommendations.

To view the full product, including the scope and methodology, click on [GAO-09-171](#). For more information, contact Brian J. Lepore at (202) 512-4523 or [leporeb@gao.gov](mailto:leporeb@gao.gov).

## DEFENSE INFRASTRUCTURE

### Additional Information Is Needed to Better Explain the Proposed 100,000-Acre Expansion of the Piñon Canyon Maneuver Site

#### What GAO Found

While the Army's 2008 report on the Piñon Canyon Maneuver Site generally addresses the provisions of the National Defense Authorization Act for Fiscal Year 2008, the report is lacking certain information that would help clarify six of the Army's responses to the mandate. For example, the Army provided a list of all the training activities that occurred at Piñon Canyon from May 2007 to April 2008, but this information does not indicate how much of the training area was used, nor does it indicate whether any of these exercises were performed simultaneously. Therefore, the report is not clear regarding how much of the maneuver site was used for training in a given month or annually and whether the units could train simultaneously. It is also unclear how this information was used to support the required analysis of the maximum annual training load without the proposed expansion of the site. Without additional information on the mandated provisions, it is difficult for Congress and the public to fully understand six of the Army's responses to the mandated provisions.

The Army's report does not fully explain the current selection of the 100,000-acre site. Following are examples of specific issues not addressed in the Army's report:

- The Army reported that it has reduced the amount of land it intends to purchase from 418,577 to 100,000 acres but did not explain its basis for selecting fewer acres or the specific site.
- The estimated cost per acre used for internal planning to acquire additional land at the maneuver site has increased since 2007 but the Army's report does not discuss this increase.
- The Army completed the required analyses when requesting OSD's approval for the up to 418,577-acre expansion, but has not completed an analysis for the current 100,000-acre proposal that would help to understand, among other items, how much of the 100,000 acres would actually be used for training, what type of training can be conducted, and what are the estimated costs to maintain the 100,000 acres.

Army officials said that these questions and others would be difficult to address without the analysis required by the National Environmental Policy Act of 1969. Although the Army issued the mandated report, Army officials stated that, to date, the Army has voluntarily declined to spend other appropriated funds to begin the National Environmental Policy Act process due to congressional concerns about the potential effects of the proposed expansion. The officials further stated that uncertainty over congressional support for the potential expansion made a delay in expending funds to start the National Environmental Policy Act process appear to be prudent. Without the benefit of the analyses and information on how the Army identified the 100,000 acres currently being proposed for acquisition, especially in light of the growth in the estimated price per acre, it is difficult for Congress and the public to evaluate the full benefits and costs associated with the proposed 100,000-acre expansion.

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## Abbreviations

DOD	Department of Defense
NEPA	National Environmental Policy Act
OSD	Office of the Secretary of Defense

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### Congressional Committees

The Army has reported that its training land shortfall will reach 4.5 million acres by 2013 due to the combined effects from a variety of initiatives, including the 2005 base realignment and closure recommendations, Grow the Army initiative, and transformation and modularity,<sup>1</sup> which have increased training land requirements at installations across the continental United States. In its 2004 Range and Training Land Strategy,<sup>2</sup> the Army identified Fort Carson, Colorado, specifically its nearby Piñon Canyon Maneuver Site training area, as an installation where land acquisition could be a possible solution to help address the training land shortfall. In February 2007, the Army announced that the Office of the Secretary of Defense (OSD) had approved its request to expand the current 235,300 acres of the Piñon Canyon Maneuver Site by acquiring up to an additional 418,577 acres for training.

However, the proposed expansion has drawn criticism from some affected landowners and interest groups and has raised the attention of some members of Congress with respect to how any acquired land will be used. For instance, the National Defense Authorization Act for Fiscal Year 2007<sup>3</sup> contained a mandate that required the Army to provide Congress details concerning current and future training requirements at Fort Carson and Piñon Canyon Maneuver Site. In response, the Army reported in December 2006 that transformation is the primary factor causing the largest increase in the Army's training land requirements. For instance, transformation to a modular force increases the acreage required for training a single brigade combat team by nearly 144 percent, from around 66,000 acres before transformation to approximately 161,000 acres after.

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<sup>1</sup>Army transformation and modularity efforts include the standardization of unit structure to modular brigade combat teams and integration of new technology and equipment to make the Army more deployable, flexible, lethal, and adaptive. In 2007, the President announced the Grow the Army initiative, which is expected to increase the Army's troop strength by 74,200 soldiers including active, National Guard, and Reserve units by 2013.

<sup>2</sup>Department of the Army, *Range and Training Land Strategy* (Washington, D.C.: Feb. 11, 2004).

<sup>3</sup>Pub. L. No. 109-364, § 2827 (2006).

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The Consolidated Appropriations Act, 2008, which was enacted on December 26, 2007, stated that none of the funds appropriated or otherwise made available in the act may be used for any action that is related to or promotes the expansion of boundaries or the size of the Piñon Canyon Maneuver Site.<sup>4</sup> Army officials stated that they redirected the focus of contract employees that had been working on potential expansion efforts to instead support the Army's response to section 2831(a) of the National Defense Authorization Act for Fiscal Year 2008,<sup>5</sup> which required the Army to address 29 provisions pertaining to the potential expansion of Piñon Canyon in a report to Congress. These provisions fall in three categories: (1) an analysis of whether existing training facilities are sufficient to support training needs, (2) a report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, and (3) an analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion. Army officials told us that for the purposes of the preparation of this mandated report, they used operations and maintenance funds that, in their view, were not subject to the above-referenced prohibition. In its report responding to this mandate, the Army reported in July 2008 that, although it had revalidated the requirement for at least 418,577 additional acres at the maneuver site, in response to community, cost, and other concerns it now proposed to limit the acquisition of additional training land to 100,000 acres south of the existing site. Further, the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009, which was enacted in September 2008, stated that none of the funds appropriated or otherwise made available in Division E, Title I of the act may be used for any action that is related to or promotes the expansion of boundaries or size of the Piñon Canyon Maneuver Site.<sup>6</sup> According to Army officials, these funding restrictions apply only to Military Construction Appropriations and do not preclude the Army from further studying the 100,000-acre site or starting the National Environmental Policy Act

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<sup>4</sup>Pub. L. No. 110-161, Division I, Title IV, § 409 (2007).

<sup>5</sup>Pub. L. No. 110-181, § 2831(a) (2008).

<sup>6</sup>Pub. L. No. 110-329, Division E, Title I, § 127 (2008).

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(NEPA) of 1969 process using other appropriations.<sup>7</sup> However, the officials stated that, to date, the Army has voluntarily declined to spend other appropriated funds to begin the NEPA process due to congressional concerns.

The National Defense Authorization Act for Fiscal Year 2008<sup>8</sup> also required us to review the Army's 2008 report on the Piñon Canyon Maneuver Site and the justification for the proposed expansion of the Piñon Canyon Maneuver Site, and to submit a report to Congress regarding the results of our review no later than 180 days from the release of the Army's report. This report examines the (1) extent to which the Army's report addresses the provisions of the mandate and where additional information would help clarify the Army's responses, and (2) extent to which the Army's report explains the current identification of the 100,000-acre site for the potential expansion of the Piñon Canyon Maneuver Site.

In conducting our review, we examined all 29 reporting provisions contained in the National Defense Authorization Act for Fiscal Year 2008 and compared them with the responses provided in the Army's 2008 report on the Piñon Canyon Maneuver Site. We met with appropriate Army officials to understand and document the reasons for the Army's responses and to discuss how the proposed expansion would benefit training at Fort Carson. We also visited Fort Carson and the Piñon Canyon Maneuver Site to see firsthand existing training facilities and ranges. We also obtained and reviewed key policies and guidance the Army has developed for managing its training lands and ranges to determine how they were used by the Army to justify the need for the expansion at Piñon Canyon

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<sup>7</sup>NEPA, codified as amended at 42 U.S.C. § 4321-4347, establishes environmental policies and procedures that are required to be followed by all federal agencies to the fullest extent possible. In accordance with these requirements and the regulations for implementing NEPA established by the Council for Environmental Quality, agencies typically evaluate the likely environmental effects of a project they are proposing to undertake with an environmental assessment and/or environmental impact statement. The Council on Environmental Quality is responsible for, among other things, issuing guidelines and reviewing agencies' policies and procedures to ensure compliance with the act. Council on Environmental Quality regulations implementing NEPA appear at 40 C.F.R. Part 1500.

<sup>8</sup>Pub. L. No. 110-181, § 2831(b) (2008).

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Maneuver Site.<sup>9</sup> We conducted this performance audit from August 2008 through January 2009, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. A detailed description of our scope and methodology is included in appendix I of this report.

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## Results in Brief

While the Army's 2008 report on Piñon Canyon Maneuver Site generally addresses the provisions laid out in section 2831 of the National Defense Authorization Act for Fiscal Year 2008 by providing responses to each of the 29 provisions,<sup>10</sup> the report is lacking certain information that would help clarify the Army's responses about whether existing training facilities are sufficient to support the training needs and alternatives for enhancing economic development opportunities for southeastern Colorado for 6 of the 29 mandated provisions. For example, in one response about whether existing training facilities are sufficient to support the training needs, the Army provided a list of all the training activities that occurred at Piñon Canyon Maneuver Site from May 2007 to April 2008, but this information did not indicate how much of the training area was used, nor did it indicate whether any of these exercises were performed simultaneously. Therefore, the report is not clear about how much of the Piñon Canyon Maneuver Site was used for training in a given month or annually or whether the units could train simultaneously, and it is unclear how this information was used to support the required analysis of the maximum annual training load without the proposed expansion of the maneuver site. In another response, the Army was required to provide a training calendar showing all planned brigade combat teams stationed or planned to be stationed at Fort Carson at home station. The calendar depicts all the brigade combat teams that are planned to be stationed at Fort Carson as assigned to Fort Carson, but shows at least two of these brigade combat

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<sup>9</sup>In addition to this review of the Army's 2008 report on the Piñon Canyon Maneuver Site, we also reviewed the Army's approach for acquiring additional training land, including the information in the Army Range Requirements Model. The results of both reviews will be published on January 13, 2009. See GAO, *Defense Infrastructure: Army's Approach for Acquiring Land Is Not Guided by Up-to-Date Strategic Plan or Always Communicated Effectively*, [GAO-09-32](#) (Washington, D.C.: Jan. 13, 2009).

<sup>10</sup>The 29 provisions are listed in appendix II.



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teams deployed. Since Army officials told us that the proposed expansion is based on peacetime assumptions, the Army report is not clear as to why the calendar depicts brigade combat teams as being deployed, given that in peacetime the teams would be less likely to be deployed. In a response to alternatives for enhancing economic development opportunities for southeastern Colorado, the Army reported that it eliminated from consideration the option to station an active duty unit at Piñon Canyon Maneuver Site during its Programmatic Environmental Impact Statement for Grow the Army and that surrounding communities do not have the infrastructure required to support the stationing of units. However, the Army's response does not explain or describe the analysis used in the environmental impact statement; therefore, it is unclear how the Army came to the conclusion that stationing units at the Piñon Canyon Maneuver Site is unfeasible. Without certain additional information on the mandated provisions, it is difficult for Congress and the public to fully understand some of the Army's responses in its report.

The Army's 2008 report on the Piñon Canyon Maneuver Site does not fully explain the current identification of the 100,000-acre site for the proposed expansion. Since OSD approved the expansion of the maneuver site in 2007, both the acreage proposed for acquisition and price per acre have changed, and several important questions about the 100,000-acre site selected for acquisition have not been addressed. First, in its 2008 report, the Army stated that it has reduced the amount of land it intends to acquire, but did not provide a detailed explanation of how it identified the smaller site. Second, the estimated cost used for internal planning to acquire additional land at the Piñon Canyon Maneuver Site has increased since February 2007, when OSD initially approved the Army's request to expand the maneuver site. However, the Army's report does not discuss this increase in the price per acre. Third, several important questions about the 100,000 acres selected for acquisition have not been fully explained. While the Army completed the required analyses outlined in Army Regulation 350-19<sup>11</sup> in requesting OSD's approval for the acquisition

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<sup>11</sup>Department of the Army Regulation 350-19, *Sustainable Range Program*, U.S. Army Chief of Staff (Washington, D.C.: Aug. 30, 2005). According to Army Regulation 350-19, a military land acquisition proposal is a series of questions intended to provide senior leadership with the essential information to make a decision about a major land acquisition. When preparing the proposal, the proponent installation is to summarize, where applicable, information detailed in the range complex master plan, range development plan, and analysis of alternatives study. The proposal is to include a map of the proposed acquisition, the purpose of the acquisition, potential effects on surrounding communities, and several other items related to the proposed land acquisition.

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of up to 418,577 acres to expand the Piñon Canyon Maneuver Site, the request was justified on the estimated costs and benefits of the full 418,577-acre proposal and not on a smaller acquisition. However, the Army has not fully explained (1) how much of the 100,000 acres would actually be used for training, (2) what benefits would be gained from adding the 100,000 acres to the existing Piñon Canyon Maneuver Site, (3) what effect sustainment and maintenance activities would have on training on the 100,000 acres, and (4) what the future costs would be for sustaining and maintaining the 100,000 acres. Army officials said that these questions and others would be difficult to address without the analysis required by NEPA. As previously noted, the Consolidated Appropriations Act, 2008,<sup>12</sup> prohibited the use of funds appropriated or otherwise made available for any action that is related to or promotes the expansion of the Piñon Canyon Maneuver Site, and the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009,<sup>13</sup> prohibited the use of funds appropriated or otherwise made available in Division E, Title 1 of the act for any action that is related to or promotes the expansion of the Piñon Canyon Maneuver Site. Army officials said these funding restrictions apply only to Military Construction Appropriations and do not preclude the Army from further studying the 100,000-acre site or starting the NEPA process using other appropriated funds. The officials also stated that, to date, the Army has voluntarily declined to spend other appropriated funds to begin the NEPA process due to congressional concerns. The officials further stated that uncertainty over congressional support for the potential expansion made a delay in expending funds to start the NEPA process appear to be prudent. Further, Army officials explained that the Army would not begin the NEPA analysis for the potential expansion without consulting with congressional stakeholders and having a reasonable expectation that military construction funds would be available for the potential acquisition. Without knowing how the Army identified the 100,000 acres currently being proposed for acquisition and several other questions about benefits and costs of the proposed expansion, it is difficult for Congress and the public to evaluate the full benefits and costs associated with the proposed 100,000-acre expansion.

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<sup>12</sup>Consolidated Appropriations Act, 2008, Pub. L. No. 110-161, Division I, Title IV, § 409 (2007).

<sup>13</sup>Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009, Pub. L. No. 110-329, Division E, Title I, § 127 (2008).

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We are recommending that the Army provide Congress and the public with additional information further explaining (1) the six responses about whether existing training facilities are sufficient to support the training needs and about alternatives for enhancing economic development opportunities for southeastern Colorado, and (2) the reasons the Army selected the current 100,000-acre site for the proposed expansion and the growth in the estimated price per acre, as well as more detailed information on how much of the 100,000 acres would actually be used for training, what benefits would be gained from adding the 100,000 acres to the existing maneuver site, what effect sustainment and maintenance activities would have on training on the 100,000 acres, and what the future costs would be for sustaining and maintaining the 100,000 acres. In written comments on a draft of this report, the Army partially agreed with our recommendations, but did not specify what actions, if any, it would take to implement them. In addition, the Army raised a variety of concerns including our characterization of its report and our initial inclusion of cost estimates used for internal planning purposes. While we recognize that the Army had certain concerns about our report, we continue to believe the opportunity exists to improve its responses to Congress, hence the need for our recommendations. We discuss the Army's comments in detail later in this report.

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## Background

The Army, in its initial Range and Training Land Strategy, identified Fort Carson—specifically its Piñon Canyon Maneuver Site—as one installation where potential land acquisition would be a feasible solution to addressing overall training land shortfalls.<sup>14</sup> Fort Carson is located south of Colorado Springs, Colorado, and has command over and administrative responsibility for the existing Piñon Canyon Maneuver Site, a maneuver training facility located 150 miles away in the southeastern area of the state. The maneuver site consists of 235,000 acres, 95 percent (224,000 acres) of which is available for maneuver training for soldiers stationed at Fort Carson and other installations.

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## Proposed Expansion of the Piñon Canyon Maneuver Site

In March 2005, the Army completed a Land Use Requirements Study that examined the availability of training areas within Piñon Canyon Maneuver Site and concluded that a shortfall of approximately 418,500 acres existed that needed to be addressed in order to meet training requirements. The

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<sup>14</sup>See Army's *Range and Training Land Strategy*.

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Army concluded that it needed additional land as the result of the 2005 base realignment and closure, Grow the Army, and transformation and modularity initiatives, which would increase the number of brigade combat teams permanently stationed at Fort Carson from one to five. Also, the number of soldiers is now expected to grow from 14,500 to 28,500 by 2011 as the result of these initiatives.

In July 2006, the Army developed a land acquisition proposal in order to secure approval from OSD to pursue an expansion of up to 418,577 acres at Piñon Canyon Maneuver Site. The proposed expansion area at that time consisted of 100,000 acres of contiguous land directly south of the existing Piñon Canyon Maneuver Site and 318,577 acres located to the west of the site. Prior to OSD approval, information regarding the expansion was unofficially disclosed to the press. This information, including a map of the proposed expansion area, did not provide a clear, complete, or accurate explanation of the Army's need for and approach to acquiring additional land or of the Army's plans to also use other strategies to meet critical training needs, and thus caused concern regarding the Army's acquisition plans among some affected landowners and interest groups.

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## Congressional Reporting Requirements and Direction

The proposed expansions also raised the attention of Congress, which sought more detailed information from the Army regarding any expansion of the Piñon Canyon Maneuver Site. In response to section 2827 of the National Defense Authorization Act for Fiscal Year 2007,<sup>15</sup> the Army provided a report to Congress that addressed questions related to training requirements at Piñon Canyon Maneuver Site,<sup>16</sup> such as a description of the current and projected military requirements, an analysis of the reasons for changes in training requirements, and a proposed plan for addressing shortfalls in training requirements. In February 2007, OSD approved the Army's request to expand the Piñon Canyon Maneuver Site. However, the Consolidated Appropriations Act, 2008, which was enacted in December 2007, stated that none of the funds appropriated or otherwise made available in the act may be used on any action that is related to or promotes the expansion of the boundaries or size of the Piñon Canyon Maneuver Site.<sup>17</sup> Army officials stated that as a result, they redirected the

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<sup>15</sup>Pub. L. No. 109-364, § 2827 (2006).

<sup>16</sup>Department of the Army, *National Defense Authorization Act Section 2827(a) Report on Piñon Canyon Maneuver Site* (Washington, D.C.: Dec. 8, 2006).

<sup>17</sup>Pub. L. No. 110-161, Division I, Title IV, § 409 (2007).

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focus of contract employees that had been working on potential expansion efforts to instead support the Army's response to section 2831 of the National Defense Authorization Act for Fiscal Year 2008,<sup>18</sup> which required the Army to provide Congress with a report regarding its plans for expansion at the Piñon Canyon Maneuver Site within 6 months of the law's passage. Specifically, section 2831 of the act requires that the Army's report provide responses to 29 provisions that are categorized under three broad reporting categories: (1) an analysis of whether existing training facilities are sufficient to support training needs, (2) a report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, and (3) an analysis of alternatives for economic development opportunities in southeastern Colorado at the site or through any proposed expansion. Army officials told us that for the purposes of preparing the report required by section 2831 of the National Defense Authorization Act for Fiscal Year 2008, they used operations and maintenance funds that, in their view, were not subject to the above-referenced prohibition on the use of funds for any action related to or promoting the expansion of the boundaries or size of the Piñon Canyon Maneuver Site. The Army provided its report to Congress in July 2008. Further, the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act,<sup>19</sup> which was enacted in September 2008, stated that none of the funds appropriated or otherwise made available in Division E, Title I of the act may be used on any action that is related to or promotes the expansion of the boundaries or size of the Piñon Canyon Maneuver Site. According to Army officials, these funding restrictions apply only to Military Construction Appropriations and do not preclude the Army from further studying the 100,000-acre site or starting the NEPA process using other appropriations. However, the officials stated that, to date, the Army has voluntarily declined to begin the NEPA process due to congressional concerns. The officials further stated that uncertainty over congressional support for the potential expansion made a delay in expending funds to start the NEPA process appear to be prudent.

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## Army's Guidance and Approach to Acquiring Land

Army officials stated they address training land shortfalls through four major strategies that include (1) focused land management; (2) acquisition of buffers to mitigate encroachment; (3) utilization of other federal lands; and (4) when necessary, land acquisition. In order to proceed with a major

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<sup>18</sup>Pub. L. No. 110-181, § 2831 (2008).

<sup>19</sup>Pub. L. No. 110-329, Division E, Title I, § 127 (2008).

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land acquisition—defined as those exceeding 1,000 acres or costing more than \$1 million—the Army is required to seek approval from OSD because on September 13, 1990, OSD issued a Department of Defense (DOD) wide moratorium on major land acquisitions. The Secretary of Defense later revised and updated DOD’s land acquisition moratorium policy in October 1990, December 1994, November 2002, and July 2005. Waivers to this moratorium may be granted by the Secretary or Office of the Secretary of Defense on a case-by-case basis if a military service can justify to OSD a need to acquire more land. When justifying a land acquisition in order to obtain OSD waiver approval, such as the justification that was prepared in order to obtain the waiver approval to pursue the potential land acquisition at the Piñon Canyon Maneuver Site, Army officials follow a process and methodology used to determine the amount of land needed to fulfill training requirements. This multistep process entails three key steps—a doctrinal analysis,<sup>20</sup> operational analysis, and sustainability analysis.

- **Doctrinal analysis.** Army officials use the Army Range Requirements Model to determine the doctrinal training requirement—the total amount of land needed to completely meet doctrinal standards. The model calculates how much land is needed to train a unit for a specific task and how much land is needed based on Army doctrine and data from several administrative and operational data systems. The training land requirements calculated by the model are simply a baseline of what the Army needs and are not the final results. For example, the model does not account for certain factors that impact training, such as the condition of training land assets, past usage of training land and ranges, environmental restrictions, protection of cultural resources, and encroachment pressures. The operational and sustainability analyses adjust the model’s calculations to account for those factors that the model itself does not consider.
- **Operational analysis.** Army officials complete an operational analysis that compares the doctrinal requirement with current range and training land assets, the rate of use of these assets, and the condition of the training land and ranges to determine which facilities are suitable and not

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<sup>20</sup>Army training doctrine and policy are provided in four key documents: Army Training Circular 25-1, *Training Land*, U.S. Army Chief of Staff (Washington, D.C.: Mar. 15, 2004); Army Training Circular 25-8, *Training Ranges*, U.S. Army Chief of Staff (Washington, D.C.: Apr. 5, 2004); Army Pamphlet 350-38, *Standards in Training Commissions*, U.S. Army Chief of Staff (Washington, D.C.: July 24, 2008); and Army Pamphlet 415-28, *Real Property Category Codes*, U.S. Army Chief of Staff (Washington, D.C.: Apr. 11, 2006).

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suitable for training. They adjust the range requirements model's calculation based on the result of this analysis.

- **Sustainability analysis.** Army officials undertake a sustainability analysis to account for factors, such as the use of training land by other military services, environmental restrictions, and encroachment pressures that make training land unusable. The results of the sustainability analysis show the optimum amount of land the Army would need to mitigate the impact of maneuver training damage. When possible, the Army prefers to use land on a rotational basis to allow it to recover from training, because increasing the concentration of training exercises in a limited area of land can result in less time for recovery and, consequently, additional repair and sustainment projects that require funding. Army officials adjust the results of the operational analysis based on the result of this sustainability analysis.

After these analyses, if the proposed land acquisition project exceeds \$1 million or is greater than 1,000 acres, the Army installation prepares and coordinates a major land acquisition proposal in order to request a waiver to the department's moratorium on major land acquisitions and submits the proposal to Army headquarters for review, coordination, and approval. If the request is approved, Army headquarters then submits the major land acquisition proposal to OSD for approval to proceed with the land acquisition. The proposal includes, where applicable, information from the range complex master plan, the range development plan, and analysis of alternatives study together with the purpose of the acquisition, estimate of cost, assessment of the potential environmental impacts, and consideration of alternatives. If the waiver request is denied by OSD, the process ends.

If OSD approves the waiver request, the Army then must address the requirements of NEPA and the associated regulations established by the Council on Environmental Quality, which require, in part, that all federal agencies, including the Army, to evaluate the likely environmental effects of projects they are proposing using an environmental assessment or, if the project constitutes a major federal action significantly affecting the quality of the human environment, a more detailed environmental impact statement. If an environmental impact statement is required for a particular acquisition, it must include a purpose and need statement, a description of all reasonable project alternatives and their associated environmental impacts (including a "no action" alternative), a description

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of the environment of the area to be affected or created by the alternatives being considered, and an analysis of the environmental impacts of the proposed action and each alternative.<sup>21</sup> Until an agency issues a final environmental impact statement and record of decision, an agency generally may not take any action concerning the proposal which would either have an adverse environmental impact or limit the choice of reasonable alternatives. If the decision in the record of decision is to acquire the land, OSD then requests congressional approval to acquire the land. If Congress approves OSD's request, Congress authorizes the land acquisition and appropriates the necessary funds.

We more fully describe the Army's approach for acquiring additional training land, including the information in the Army Range Requirements Model, in a separate January 13, 2009, report.<sup>22</sup>

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## The Army's Report Generally Addresses the Mandate, but Additional Information Would Help to Better Understand Its Responses

The Army's 2008 report on the Piñon Canyon Maneuver Site generally addresses section 2831 of the National Defense Authorization Act for Fiscal Year 2008 by responding to each of the mandate's 29 provisions. For example, the report described additional training activities that could be conducted if the site was expanded and adequately addressed 23 of the mandated provisions. However, we found that the responses to six of the provisions—on whether existing training facilities are sufficient to support the training needs and alternatives for enhancing economic development opportunities for southeastern Colorado—were not clear and lacked information that would help provide the reader a better understanding (see table 1).

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<sup>21</sup>40 C.F.R. § 1502.13-1502.16.

<sup>22</sup>GAO, *Defense Infrastructure: Army's Approach for Acquiring Land Is Not Guided by an Up-to-Date Strategic Plan or Always Communicated Effectively*, [GAO-09-32](#) (Washington, D.C.: Jan. 13, 2009).



**Table 1: Information That Would Help Clarify the Army’s Response to Six Provisions of the National Defense Authorization Act for Fiscal Year 2008**

Provision	Information that would help clarify the response
<p>Section 2831(a)(2)(A)(iii)(I):</p> <p>An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site, including the number of brigade-sized and battalion-sized military exercises held at the site since its establishment.</p>	<p>The Army reported the number of military brigade-sized and battalion-sized exercises held at Piñon Canyon Maneuver Site from October 2004 to April 2008, even though the provision requires that the Army list the number of exercises since the establishment of the site. Although the Army noted that the system it uses to capture training exercises began tracking training events in 2004, it does not mention how or whether such exercises were tracked prior to 2004. However, in its 2007 report on Piñon Canyon Maneuver Site, the Army indicated that it has been using the area to conduct training exercises since 1985 but Army officials said that the requested data did not exist for the early years. Still, additional information would help the reader better understand why the Army did not provide the number of training events since the establishment of the Piñon Canyon Maneuver Site.</p>
<p>Section 2831(a)(2)(A)(iii)(II):</p> <p>An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site, including an analysis of the maximum annual training load at the site, without expanding the site.</p>	<p>The Army reported the annual training load at Piñon Canyon Maneuver Site from May 2007 to April 2008. However, this information does not indicate how much of the maneuver site was used, nor does it indicate whether any of these exercises were performed simultaneously. Such information would help the reader understand how much of the maneuver site is used for training during a given month or annually. Also, an explanation as to how this information was used to support the required analysis of the maximum annual training load without the proposed expansion would help the reader better understand how the Army developed its response to this provision.</p> <p>The Army reported that adjustments to training events, referred to as “workarounds,” would be necessary to fully meet training requirements without the expansion of the Piñon Canyon Maneuver Site and that workarounds would have a negative impact on training. However, the Army does not describe the nature of these workarounds or how they would impact the training load. Such information would help the reader better understand the type and amount of workarounds necessary to fully meet training requirements at the existing Piñon Canyon Maneuver Site and the potential benefits of an expansion that would obviate the need for such workarounds.</p> <p>The Army reported that increased usage of current training land would result in higher operational costs and greater environmental damage to the land, but does not provide specific information regarding operational costs or the specific effects of increased usage of training land to support this observation. This information would help the reader clearly understand the type and amount of costs involved with not expanding the Piñon Canyon Maneuver Site.</p>

Provision	Information that would help clarify the response
<p>Section 2831(a)(2)(A)(iii)(III):</p> <p>An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site, including an analysis of the training load and projected training calendar at the site when all brigades stationed or planned to be stationed at Fort Carson are at home station.</p>	<p>The Army provided a training calendar in appendix E of the report that lists all brigade combat teams stationed and planned to be stationed at Fort Carson, but the calendar shows that at least two of the brigade combat teams are to be deployed in support of Operation Iraqi Freedom (Global War on Terrorism). Since Army officials told us that acquisition plans are made using peacetime assumptions, it is unclear why the Army chose to use a training calendar in which not all the brigade combat teams are physically present at home station. Additional information explaining the training calendar would help the reader to better understand why the Army chose to show its brigade combat teams deployed when the acquisition is based on peacetime assumptions. Additional information would also help the reader to better understand how deployment affects training at the Piñon Canyon Maneuver Site.</p> <p>The Army reported that, while there is currently a training land shortfall at Fort Carson and the Piñon Canyon Maneuver Site, units are able to effectively train using minor workarounds. With the increase in population at Fort Carson, the Army reported that, without an expansion, the shortfall would result in major training workarounds and less than optimal training. It also reported that units would not be able to meet their training requirements. However, the Army does not include a description of the nature of these workarounds, the difference between minor and major workarounds, or the training requirements that would not be met. Such information would help the reader better understand the type and amount of workarounds necessary to fully meet training requirements at the existing Piñon Canyon Maneuver Site and the potential benefits of an expansion.</p>
<p>Section 2831(a)(2)(C)(iii):</p> <p>An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the procurement of additional services and goods, including biofuels and beef, from local businesses.</p>	<p>The Army's response discusses measures it would take to assist the local economy, such as encouraging units to purchase goods in support of future training events from local merchants near the Piñon Canyon Maneuver Site and hosting contract training events for local small businesses. While the Army's response discusses the procurement of additional services and goods from local businesses (which presumably would be applicable to the procurement of biofuels and beef), the report does not include a specific discussion of procuring biofuels and beef from local businesses. It is unclear why the Army did not directly address biofuels or beef specifically. Clarification as to why this information was not included would help the reader better understand how the Army developed its response to this provision.</p>
<p>Section 2831(a)(2)(C)(viii):</p> <p>An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion including consideration of additional investments in Army missions and personnel, such as stationing an active duty unit at the site.</p>	<p>The Army reported that it is not consider stationing an active duty unit at Piñon Canyon Maneuver Site because such an option was eliminated during its Programmatic Environmental Impact Statement for Grow the Army<sup>a</sup> and that surrounding communities do not have the infrastructure required to support the stationing of units. However, by not explaining or describing the analysis used in the environmental impact statement, it is unclear how the Army came to the conclusion that stationing units at the Piñon Canyon Maneuver Site is unfeasible.</p>

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**Provision****Information that would help clarify the response**

Section 2831(a)(2)(C)(viii)(I):

An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of additional investments in Army missions and personnel, such as stationing an active duty unit at the site, including an analysis of anticipated operational benefits.

The Army's explanation regarding the anticipated operational benefits of stationing an active duty unit at Piñon Canyon Maneuver Site lacks specifics. For instance, the Army reported that operational benefits resulting from the stationing of units at Piñon Canyon Maneuver Site are limited because the site lacks the infrastructure required to support a unit, but it does not explain the types of infrastructure that are needed. In addition, the Army's response does not include information on the costs associated with the necessary infrastructure, nor does it include information on the types of operational benefits this infrastructure would provide. As such, it is unclear as to what type of operational benefits would arise if the necessary infrastructure was in place. Providing such information would make it easier for the reader to understand how the Army determined that there would be little or no operational benefit to stationing a unit at Piñon Canyon Maneuver Site.

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Source: GAO analysis of the National Defense Authorization Act for Fiscal Year 2008 and the Army's 2008 report on the Piñon Canyon Maneuver Site.

<sup>a</sup>Department of the Army, Final Programmatic Environmental Impact Statement for Army Growth and Force Structure Realignment (Washington, D.C.: Oct. 26, 2007).

Army officials said that the 2008 report was reviewed at several different management levels within the Department of the Army and was intentionally written in a manner that would be easily understood by the public after receiving criticisms concerning the technical nature of the previous report on the Piñon Canyon Maneuver Site in response to the National Defense Authorization Act for Fiscal Year 2007. As a result, some information and technical data were revised or deleted during this review and approval process. Nonetheless, without additional information on these provisions, it is difficult for Congress and the public to fully understand the Army's responses to these provisions.

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## The Army's Report Does Not Fully Explain the Identification of 100,000-Acre Site for the Proposed Expansion of the Piñon Canyon Maneuver Site

The Army's 2008 report on the Piñon Canyon Maneuver Site does not fully explain the current identification of the 100,000-acre site for the proposed expansion. Since OSD approved the Army's pursuit of the expansion of the maneuver site in 2007, both the acreage proposed for acquisition and the price per acre used for planning purposes have changed, and several important questions about benefits and costs of the 100,000-acre site selected for acquisition have not yet been fully explained. Army officials said that these questions would be addressed during the analysis required by the NEPA process. However, Army officials stated that the Army would not begin the NEPA process for the potential expansion without consulting with congressional stakeholders and having a reasonable expectation that military construction funds would be available for the potential acquisition.

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### The Army's Report Does Not Fully Explain the Identification of the Smaller Site

The Army based its original request to expand Piñon Canyon Maneuver Site by 418,577 acres on doctrinal requirements, but in its 2008 report reduced this amount to 100,000 acres because of budgetary constraints, concerns about potential historic and culturally sensitive areas, and the fewer number of landowners with which to deal compared with the larger number of landowners on the original 418,577 acres. However, the Army did not provide further details on how it selected the fewer acres or the specific 100,000-acre site south of the current maneuver site. The Army reported that, although it had revalidated the requirement for up to 418,577 additional acres at Piñon Canyon, the 100,000-acre expansion would be used to develop a training complex capable of supporting maneuver and live fire for a combined arms battalion and would provide sufficient space to allow a heavy brigade combat team and an infantry brigade combat team to conduct simultaneous combat training exercises.

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### The Army's Report Does Not Discuss the Growth in the Price per Acre

While the estimated cost to acquire additional land at the Piñon Canyon Maneuver Site has increased, the Army's report does not disclose this increase. For example, the report did not disclose that the estimated cost per acre used for internal planning purposes has increased from about \$280 per acre since February 2007, when OSD initially approved the Army's request to expand the maneuver site by 418,577 acres. At that time, the estimated cost for the acquisition included the costs of the land, improvements, relocation assistance, and administrative costs and the goal was to complete the land acquisition within 5 years.

More recently, the Army's fiscal years 2010-2015 planning budget shows that it is budgeting \$52.6 million (\$17.6 million in fiscal year 2010, \$20 million in fiscal year 2011, and \$15 million in fiscal year 2012) in military construction funds to expand the Piñon Canyon Maneuver Site. According to an Army official, the increased cost estimate partly reflects the idea that buying only from willing sellers and refraining from using eminent domain could increase the per acre cost average. Also, the Army shortened the acquisition schedule from 5 to 3 years in an attempt to accommodate the concerns of expansion opponents who asserted that the uncertainties over expansion have caused economic hardship for some nearby landowners in terms of making investment decisions on their land. According to the Army, opponents have stated that local banks are less willing to lend money to nearby landowners for their agribusinesses whose future operations are in question. So to reduce the length of uncertainty, and create more clarity, the Army shortened the acquisition schedule.

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If the Army moves forward to acquire the land, Army officials said that they are uncertain whether acquisition costs may increase or decrease because of changes in economic and other conditions that are likely to occur between now and when the potential acquisition would be finalized. The process to complete the required NEPA process, to request and obtain congressional approval to acquire the land, and to actually purchase the land from willing sellers is expected to take several years—the NEPA process alone is expected to take at least 16 to 24 months. During this period, for example, cattle prices or local rainfall could increase or decrease, which would potentially change the selling price of the land.

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**Several Important Questions about the 100,000-Acre Site Have Not Been Fully Addressed**

Neither the original justification used to obtain OSD's waiver nor the 2007 report on the Piñon Canyon Maneuver Site provides any specific information regarding the potential expansion of the maneuver site by 100,000 acres. In requesting OSD's approval for the acquisition of up to 418,577 acres to expand the Piñon Canyon Maneuver Site, the request was justified on the estimated costs and benefits of the full 418,577-acre proposal and not on a smaller acquisition. While the Army completed the analyses required by Army Regulation 350-19<sup>23</sup> in order to obtain OSD waiver approval to pursue the potential acquisition up to 418,577 acres, the Army has not fully explained its rationale for the potential acquisition of the smaller site currently being proposed for acquisition.

According to Army Regulation 350-19, a military land acquisition proposal is a series of questions intended to provide senior leadership with the essential information to make a decision about a major land acquisition. Specifically, Appendix B of the regulation states that a land acquisition proposal should include the future use of the land, potential benefits, funding, training, readiness, anticipated environmental impacts, etc. The Army completed the analyses required in order to obtain OSD approval to pursue the potential acquisition of up to 418,577 acres. However, the Army has not fully explained the rationale behind the identification of the 100,000-acre site, such as (1) how much of the 100,000 acres would actually be used for training, (2) what benefits would be gained from adding the 100,000 acres to the Piñon Canyon Maneuver Site, (3) what effect sustainment and maintenance activities would have on training on the 100,000 acres, and (4) what the future costs would be for sustaining and maintaining the 100,000 acres. For example, Fort Carson officials said

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<sup>23</sup>See Department of the Army Regulation 350-19.

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that they did not know but were concerned about the condition of the land and whether the Army could quickly start using the land or would need to reseed the land before training on it.

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### Analyses Required by the NEPA Process May Address Many Questions

Army officials said that these questions regarding the 100,000-acre expansion, including the amount usable for training, potential benefits, the effects of sustainment and maintenance activities on training, and the cost of sustainment and maintenance activities would be difficult to address without the analysis required by the NEPA process. For example, NEPA and the associated regulations established by the Council on Environmental Quality, which require, in part, that all federal agencies, including the Army, evaluate the likely environmental effects of projects they are proposing using an environmental assessment or, if the project constitutes a major federal action significantly affecting the quality of the human environment, a more detailed environmental impact statement. An environmental impact statement must include a purpose and need statement, a description of all reasonable project alternatives and their associated environmental impacts (including a “no action” alternative), a description of the environment of the area to be affected or created by the alternatives being considered, and an analysis of the environmental impacts of the proposed action and each alternative.<sup>24</sup>

Army officials noted that the NEPA process would help to more clearly explain and justify the proposed expansion by identifying overall sustainment and maintenance costs as well as environmental and historical restrictions on the 100,000 acres, which would provide a more accurate picture of how much of the 100,000 acres could be used for training, the type of training that could happen, and how quickly the land could be used for training. As previously noted, none of the funds appropriated or otherwise made available in the Consolidated Appropriations Act, 2008, or in Division E, Title I of the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009, may be used for any action that is related to or promotes the expansion of the Piñon Canyon Maneuver Site. Army officials stated that these funding restrictions apply only to Military Construction Appropriations and do not preclude the Army from further studying the 100,000-acre site or starting the NEPA process. However, the officials stated that, to date, the Army has voluntarily declined to spend other appropriated funds to begin the

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<sup>24</sup>40 C.F.R. § 1502.13-1502.16.

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process due to congressional concerns putting the potential acquisition process (including any type of NEPA analysis) on pause. Further, Army officials explained that because military construction funds are used for land acquisitions, the Army would not begin the NEPA analysis for the potential expansion without consulting with congressional stakeholders and having a reasonable expectation that military construction funds would be available for the potential acquisition.

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## Conclusions

While the Army's 2008 report on the Piñon Canyon Maneuver Site generally addresses the provisions outlined in section 2831 of the National Defense Authorization for Fiscal Year 2008, more information is needed to better understand the Army's responses to six provisions on whether existing training facilities are sufficient to support the training needs and alternatives for enhancing economic development opportunities for southeastern Colorado. Without additional information on the mandated provisions, it is difficult for Congress and the public to fully understand the Army's report.

Additional information is also needed to help explain how the Army decided to reduce the proposed expansion and selected the 100,000 acres currently being proposed for acquisition, the growth in the estimated price per acre, as well as how much of the 100,000 acres would actually be used for training, what benefits would be gained from adding the 100,000 acres to the Piñon Canyon Maneuver Site, what effect sustainment and maintenance activities would have on training on the 100,000 acres, and what the future costs would be for sustaining and maintaining the 100,000 acres. Without the benefit of the analyses and information on how the Army decided to select the 100,000 acres currently being proposed for acquisition, especially in light of the growth in the estimated price per acre, it is difficult for Congress and the public to evaluate the full benefits and costs associated with the proposed 100,000-acre expansion.

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## Recommendations for Executive Action

To better inform congressional decision makers and facilitate congressional oversight, we recommend that the Secretary of Defense direct the Secretary of the Army to take the following two actions:

- Provide Congress with additional information explaining the six responses about whether existing training facilities are sufficient to support the training needs and about alternatives for enhancing economic development opportunities for southeastern Colorado, which were lacking in the Army's 2008 report on the maneuver site.

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- Provide Congress with additional information explaining the reasons the Army selected the current 100,000-acre site for the proposed expansion and the growth in the estimated price per acre, as well as how much of the 100,000 acres would actually be used for training, what benefits would be gained from adding the 100,000 acres to the existing maneuver site, what effect sustainment and maintenance activities would have on training on the 100,000 acres, and what the future costs would be for sustaining and maintaining the 100,000 acres.

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## Agency Comments and Our Evaluation

In written comments on a draft of this report, which represented the views of DOD and the Army, the Assistant Secretary of the Army for Installations and Environment partially agreed with our recommendations but did not specify what actions, if any, DOD or the Army would take to implement them. In addition, the Assistant Secretary provided general report comments, specific report comments, and comments about our recommendations but raised a variety of concerns in their comments about our characterization of the Army's report, which we discuss below.

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## General Report Comments

In this comments section, the Army stated several times that GAO concurred with the Army and suggested that our report title should be revised to reflect that the Army's requirement for an expansion at the Piñon Canyon Maneuver Site is valid. The Army also stated that the title of our report does not match the actual findings of our report and consequently leaves the reader with the impression that the Army failed to address the central questions of Congress. Our work and this report were focused on the extent to which the Army addressed the report provisions required by the section 2831 of the National Defense Authorization Act for Fiscal Year 2008 and the extent to which the Army explained the need for the 100,000-acre expansion rather than the 418,577 acres that the Army initially sought. As such, our draft report addresses these objectives and identified the 23 of the 29 reporting provisions that the Army generally addressed but not the extent to which we do or do not concur with the Army's plan. Moreover, as noted in our report, the Army's responses to 6 of the provisions were not clear and lacked information; consequently, we continue to believe that the title of our report accurately reflects our findings and recommendations.

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## Specific Report Comments

The Army disagreed with the draft report's discussion of the increased cost per acre to expand the Piñon Canyon Maneuver Site and recommended these costs not be included in our final report. The Army



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stated that no appraisals have been conducted to determine a more accurate price per acre, and the cost figures were not requested by Congress and are used for internal planning and budgeting purposes only. While we recognize that comprehensive appraisals have not been done yet, the Army used the estimated cost per acre that we cited in our draft report to project the cost of the land acquisition in its moratorium waiver request to OSD and increased estimates for internal budget purposes. We included the initial and increased cost estimates in our draft report because without this information we believed that it would be difficult for Congress to effectively exercise its oversight of the proposed expansion and, if found justified, to appropriate sufficient funds to support it. Because we continue to believe that the Congress will need this information, we did not remove our discussion of the potentially increased acquisition cost; however, we revised our report to delete the more recent, increased cost estimates to avoid a premature release of the estimates since they have not been fully validated or disclosed to the public by the Army. We continued to report the initial cost per acre estimate the Army used in its moratorium waiver request to OSD because this estimate is already in the public domain.

The Army also commented that the draft report did not accurately reflect Army officials' statements regarding congressional funding restrictions involving the potential Piñon Canyon Maneuver Site expansion and provided revised language to clarify the Army's position on the restrictions. We have revised our report to respond to this comment.

The Army also recommended that we characterize the Army's land acquisition process as essentially reasonable or sound. We did not assess the soundness of the Army's land acquisition process during this review. However, we issued a companion report and concluded that the Army has an extensive, analytical approach to making decisions for pursuing training land acquisitions, which is based on (1) the Army's strategic plan for training ranges—Range and Training Land Strategy—used to address training land shortfalls and (2) the Army Range Requirements Model, an analytical computerized decision support tool that gathers data at the installation level to determine training requirements and capabilities.<sup>25</sup> While we also found that the strategic plan needs to be updated, we

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<sup>25</sup>GAO, *Defense Infrastructure: Army's Approach for Acquiring Land Is Not Guided by Up-to-Date Strategic Plan or Always Communicated Effectively*, GAO-09-32 (Washington, D.C.: Jan. 13, 2009).

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concluded that the model does provide a consistent and reasonable framework for Army headquarters, major commands, and installations to use to calculate training land capabilities and requirements at individual installations.

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## Comments about Our Recommendations

The Army partially agreed with the first recommendation to provide Congress with additional information about (1) the extent to which existing training facilities are sufficient to support training needs and (2) alternatives for enhancing economic development opportunities for southeastern Colorado. In its comments, the Army stated that it strongly believes that the best way to provide this information to Congress is through the NEPA process. It also stated that NEPA is a critical part of the decision process and much of the information that we recommended the Army provide Congress will be determined through the NEPA process. Even though the Army had not started the NEPA process by the time of our report, the Army's comments provided some of the additional information regarding the six responses that we concluded were lacking. Nonetheless, more detailed information would further clarify these responses. For example, the Army provided a list of workaround scenarios in its comments and provided one detailed example of a workaround, but it still does not explain the difference between minor and major workarounds, the amount of workarounds needed to meet current training requirements, or how these workarounds impact the training load at the Piñon Canyon Maneuver Site. At the same time however, nothing in our recommendation prevents the Army from using the NEPA process to provide the additional information still lacking if the Army determines that this would be the most appropriate approach and would provide the information to Congress in a timely manner. Therefore, we continue to believe that providing more detailed information on the six responses would help Congress and the public to fully understand the Army's report.

The Army also partially agreed with our recommendation to provide the rationale for selecting the 100,000 acres for the proposed expansion but did not state what actions it plans to take, if any, to address the recommendation. The Army stated that it believes that it adequately explained in the report why it preferred a smaller land acquisition. Specifically, the Army stated that from the outset it has placed a priority on the acquisition of area A, the 100,000 acres proposed in the initial expansion. While we are aware that the Army preferred the 100,000 acres initially, our recommendation was focused on the usability and sustainability of the 100,000-acre parcel and not why the Army chose to start with the 100,000 acres. We continue to believe that the Congress

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needs this information to assist in its oversight of the proposed expansion and therefore stand by our recommendation.

The Army also stated its assumption that all 100,000 acres of the site will be used for training unless an in-depth analysis conducted during the NEPA process reveals a major problem that would preclude the use of most or all of the acreage. Further, the Army stated that while execution of the range maintenance and sustainment program on the 100,000 acres would permit training land to be accessible and usable, it is premature to project future sustainment costs. However, whether the Army makes these determinations through the NEPA process or another method, we continue to believe the amount of acreage useable for training and sustainment cost projections to be valuable information in determining the justification for the 100,000-acre site. Without this information, it is difficult for Congress and the public to fully understand the Army's justification for expansion.

The Army's comments are reprinted in their entirety in appendix III. The Army also provided technical comments, which we have incorporated into the report as appropriate.

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We are sending copies of this report to the Secretary of Defense, the Secretary of the Army, and the Director, Office of Management and Budget. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>. If you have any questions, please contact me at (202) 512-4523 or [leporeb@gao.gov](mailto:leporeb@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.



Brian J. Lepore, Director  
Defense Capabilities and Management

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*List of Committees*

The Honorable Carl Levin  
Chairman  
The Honorable John McCain  
Ranking Member  
Committee on Armed Services  
United States Senate

The Honorable Daniel K. Inouye  
Chairman  
The Honorable Thad Cochran  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Tim Johnson  
Chairman  
The Honorable Kay Bailey Hutchison  
Ranking Member  
Subcommittee on Military Construction,  
Veterans' Affairs, and Related Agencies  
Committee on Appropriations  
United States Senate

The Honorable Ike Skelton  
Chairman  
The Honorable John M. McHugh  
Ranking Member  
Committee on Armed Services  
House of Representatives

The Honorable John P. Murtha  
Chairman  
The Honorable C.W. Bill Young  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

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The Honorable Chet Edwards  
Chairman  
The Honorable Zach Wamp  
Ranking Member  
Subcommittee on Military Construction,  
Veterans' Affairs, and Related Agencies  
Committee on Appropriations  
House of Representatives

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# Appendix I: Scope and Methodology

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To determine if the Army's report on the Piñon Canyon Maneuver Site addresses the provisions of section 2831 of the National Defense Authorization Act for Fiscal Year 2008, we reviewed all 29 provisions for the Army's responses contained in the act and examined whether the Army's report provided responses to, as well as all the necessary information required by, the provisions. We also obtained and reviewed documents used by the Army to develop responses to the mandate including the Army's 2005 Land Use Requirements Study, both of the Army's Piñon Canyon Maneuver Site reports in response to the National Defense Authorization Acts for Fiscal Year 2007 and Fiscal Year 2008, and the Army's land acquisition proposal requesting the Office of the Secretary of Defense (OSD) approval for acquiring up to 418,577 acres. We interviewed appropriate Army officials, including those directly responsible for developing the 2008 report, to gain a better understanding and document the reasons for the Army's responses to the provisions of the act. During this audit, we met with officials from the Office of the Deputy Assistant Secretary of the Army for Installations and Housing, Washington D.C.; the Department of the Army Management Office (Training Support Systems Division), Washington D.C.; Army Forces Command, Fort McPherson, Georgia; Fort Carson, Colorado; and Piñon Canyon Maneuver Site, Colorado.

To determine the extent to which the Army's 2008 report provides justification for expanding the Piñon Canyon Maneuver Site, we obtained and reviewed key Army policy guidance for managing its training lands and ranges, specifically Army Regulation 350-19, The Army Sustainable Range Program. We compared this guidance to the information provided in the report to determine how it was used by the Army to justify the need for expansion at the Piñon Canyon Maneuver Site. We also examined the analyses used by the Army in developing its 2008 report to understand how the Army justified its need for an additional 100,000 acres. In addition, we obtained and reviewed past justifications for training land expansion at the Piñon Canyon Maneuver Site, including the Army's 2005 Land Use Requirements Study, the Army's response to the National Defense Authorization Act for Fiscal Year 2007, and the Army's land acquisition proposal to request OSD approval for acquiring up to 418,577 acres. We did not review the Army's process for acquiring land, including the use of the Army Range Requirements Model, because these topics are addressed in detail in a concurrent GAO performance audit, the results of which are to be published in a separate report in January 2009.<sup>1</sup> We used information

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<sup>1</sup>See [GAO-09-32](#).

gathered from this GAO review of the Army's overall land acquisition process to supplement our audit work for this report. In addition, we met with appropriate officials from the Department of the Army Management Office (Training Support Systems Division) and Fort Carson to discuss how the addition of 100,000 acres to the Piñon Canyon Maneuver Site would benefit training, as well as the workarounds that will be needed to meet training requirements and potential land management and maintenance costs. We also visited Fort Carson and the Piñon Canyon Maneuver Site to see firsthand existing training facilities and ranges.

We conducted this performance audit from August 2008 through January 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Appendix II: Reporting Categories and Provisions of Section 2831 of the National Defense Authorization Act for Fiscal Year 2008

Section 2831 of the 2008 National Defense Authorization Act for Fiscal Year 2008 required that the Army submit a report to Congress detailing its plans for expanding the Piñon Canyon Maneuver Site. In its report, the Army was required to respond to 29 provisions regarding the potential expansion. These provisions fall under three broad reporting categories: (1) an analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson; (2) a report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson; and (3) an analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion. The Army's 2008 report generally addresses section 2831 of the National Defense Authorization Act for Fiscal Year 2008 by responding to each of the mandate's 29 provisions. Nevertheless, we found that the responses to six of the provisions were not clear and lacked information that would help provide the reader a better understanding of the Army's responses to the mandated provisions. Table 2 lists the three reporting categories and 29 provisions the Army was required to address in its report, and indicates those provisions for which additional information would help clarify the Army's response.

**Table 2: Reporting Categories and Provisions of the National Defense Authorization Act for Fiscal Year 2008 and Whether the Provisions Were Adequately Addressed in the Army's 2008 Report**

Reporting categories and provisions		Adequately addressed in the report
<i>An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson.</i>		
Section 2831(a)(2)(A)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson.	Yes
Section 2831(a)(2)(A)(i)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of any new training requirements or significant developments affecting training requirements for units stationed or planned to be stationed at Fort Carson since the 2005 Defense Base Closure and Realignment Commission found that the base has 'sufficient capacity' to support four brigade combat teams and associated support units at Fort Carson.	Yes



**Appendix II: Reporting Categories and Provisions of Section 2831 of the National Defense Authorization Act for Fiscal Year 2008**

<b>Reporting categories and provisions</b>		<b>Adequately addressed in the report</b>
Section 2831(a)(2)(A)(ii)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a study of alternatives for enhancing training facilities at Fort Carson and the site within their current geographic footprint, including whether these additional investments or measures could support additional training activities.	Yes
Section 2831(a)(2)(A)(iii)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site.	Yes
Section 2831(a)(2)(A)(iii)(I)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site, including the number of brigade-sized and battalion-sized military exercises held at the site since its establishment.	No <sup>a</sup>
Section 2831(a)(2)(A)(iii)(II)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site, including an analysis of the maximum annual training load at the site, without expanding the site.	No <sup>a</sup>
Section 2831(a)(2)(A)(iii)(III)	An analysis of whether existing training facilities at Fort Carson, Colorado, and the site are sufficient to support the training needs of units stationed or planned to be stationed at Fort Carson, including a description of the current training calendar and training load at the site, including an analysis of the training load and projected training calendar at the site when all brigades stationed or planned to be stationed at Fort Carson are at home station.	No <sup>a</sup>
<i>A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson.</i>		
Section 2831(a)(2)(B)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson.	Yes
Section 2831(a)(2)(B)(i)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded.	Yes
Section 2831(a)(2)(B)(i)(I)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include the parcel of land identified as "Area A" in the potential Piñon Canyon Maneuver Site land expansion map.	Yes
Section 2831(a)(2)(B)(i)(II)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include the parcel of land identified as "Area B" in the potential Piñon Canyon Maneuver Site land expansion map.	Yes

**Appendix II: Reporting Categories and Provisions of Section 2831 of the National Defense Authorization Act for Fiscal Year 2008**

<b>Reporting categories and provisions</b>		<b>Adequately addressed in the report</b>
Section 2831(a)(2)(B)(i)(III)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include the parcels of land identified as "Area A" and "Area B" in the potential Piñon Canyon Maneuver Site land expansion map.	Yes
Section 2831(a)(2)(B)(i)(IV)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include acreage sufficient to allow simultaneous exercises of a light infantry brigade and a heavy infantry brigade at the site.	Yes
Section 2831(a)(2)(B)(i)(V)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include acreage sufficient to allow simultaneous exercises of two heavy infantry brigades at the site.	Yes
Section 2831(a)(2)(B)(i)(VI)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include acreage sufficient to allow simultaneous exercises of a light infantry brigade and battalion at the site.	Yes
Section 2831(a)(2)(B)(i)(VII)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including a description of additional training activities, and their benefits to operational readiness, which would be conducted by units stationed at Fort Carson if, through leases or acquisition from consenting landowners, the site were expanded to include acreage sufficient to allow simultaneous exercises of a heavy infantry brigade and a battalion at the site.	Yes
Section 2831(a)(2)(B)(ii)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including an analysis of alternatives for acquiring or utilizing training land at other installations in the United States to support training activities of units stationed at Fort Carson.	Yes
Section 2831(a)(2)(B)(iii)	A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson, including an analysis of alternatives for utilizing other federally owned land to support training activities of units stationed at Fort Carson.	Yes
<i>An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion.</i>		
Section 2831(a)(2)(C)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion.	Yes
Section 2831(a)(2)(C)(i)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the leasing of land on the site or any expansion of the site to ranchers for grazing.	Yes
Section 2831(a)(2)(C)(ii)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the leasing of land from private landowners for training.	Yes

**Appendix II: Reporting Categories and Provisions of Section 2831 of the National Defense Authorization Act for Fiscal Year 2008**

<b>Reporting categories and provisions</b>		<b>Adequately addressed in the report</b>
Section 2831(a)(2)(C)(iii)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the procurement of additional services and goods, including biofuels and beef, from local businesses.	No <sup>a</sup>
Section 2831(a)(2)(C)(iv)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the creation of an economic development fund to benefit communities, local governments, and businesses in southeastern Colorado.	Yes
Section 2831(a)(2)(C)(v)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the establishment of an outreach office to provide technical assistance to local businesses that wish to bid on Department of Defense contracts.	Yes
Section 2831(a)(2)(C)(vi)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of the establishment of partnerships with local governments and organizations to expand regional tourism through expanded access to sites of historic, cultural, and environmental interest on the site.	Yes
Section 2831(a)(2)(C)(vii)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of an acquisition policy that allows willing sellers to minimize the tax impact of a sale.	Yes
Section 2831(a)(2)(C)(viii)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of additional investments in Army missions and personnel, such as stationing an active duty unit at the site.	No <sup>a</sup>
Section 2831(a)(2)(C)(viii)(I)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of additional investments in Army missions and personnel, such as stationing an active duty unit at the site, including an analysis of anticipated operational benefits.	No <sup>a</sup>
Section 2831(a)(2)(C)(viii)(II)	An analysis of alternatives for enhancing economic development opportunities in southeastern Colorado at the current site or through any proposed expansion, including consideration of additional investments in Army missions and personnel, such as stationing an active duty unit at the site, including an analysis of economic impacts to surrounding communities.	Yes

Source: Army's 2008 Report on the Piñon Canyon Maneuver Site and the National Defense Authorization Act for Fiscal Year 2008.

Note. As stated in the report, the Army's 2008 report generally addresses each one of the mandate's 29 provisions. The third column of table 2 indicates those provisions for which additional information would help clarify the Army's response. There were six responses to the mandated provisions, which are indicated by the term "no" in the third column of table 2, for which additional information would help clarify the Army's response.

<sup>a</sup>A response of "no" indicates that the Army's response to the reporting provision lacked information that would help provide the reader a better understanding of the Army's responses to the mandated provisions; it does not indicate that the Army failed to address the mandated provision.

# Appendix III: Comments from the Department of Defense



DEPARTMENT OF THE ARMY  
ASSISTANT SECRETARY OF THE ARMY  
INSTALLATIONS AND ENVIRONMENT  
110 ARMY PENTAGON  
WASHINGTON DC 20310-0110

**DEC 22 2008**

Mr. Brian J. Lepore  
Director  
Defense Capabilities and Management  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Mr. Lepore,

This is the Army and Department of Defense (DoD) response to the GAO draft report with the working title, 'DEFENSE INFRASTRUCTURE: Additional Information Is Needed to Better Explain the Proposed 100,000-Acre Expansion of the Piñon Canyon Maneuver Site,' dated November 20, 2008, (GAO Code 351258/GAO-09-171).

The Army and Department of Defense (DoD) appreciate the opportunity to comment on the draft report. The coordinated Army/DoD comments on the two specific recommendations in the report are outlined in the enclosure. The comments are broken down into both 'general comments' and specific comments. General comments are those which have broad applicability to the entire report (some phrases recur throughout the draft report). The Army/DoD is particularly concerned about the working title of the report, and recommends a title that more closely matches GAO's findings and recommendations. We continue to appreciate the audit work performed by the GAO.

Sincerely,

A handwritten signature in black ink, appearing to read "KEE", is positioned above the typed name of the sender.

Mr. Keith E. Eastin  
Assistant Secretary of the Army  
Installations and Environment

Enclosures:  
As stated

**GAO DRAFT REPORT - DATED NOVEMBER 20, 2008  
GAO CODE 351258/GAO-09-171**

**“DEFENSE INFRASTRUCTURE: Additional Information Is Needed to Better Explain the  
Proposed 100,000-Acre Expansion of the Piñon Canyon Maneuver Site”**

**DEPARTMENT OF THE ARMY  
GENERAL REPORT COMMENTS**

The working title and Highlights section of the GAO report do not match the actual findings of GAO. The body of the GAO report says the Army’s July 2008 Report to Congress adequately addressed 23 of the 29 questions mandated by Congress (pg 14) – including the critically important questions asked by Congress in Section 2831(a)(2)(B): “A report of need for any proposed addition of training land to support units stationed or planned to be stationed at Fort Carson.”

None of the responses to 2831(a)(2)(B) were flagged by GAO as being insufficient in any way. Congress’ intent was to have GAO independently verify whether expanding PCMS was necessary, and whether there were viable alternatives to expansion (see 2831(a)(2)(B)(iii)). On these most important questions, GAO concurred with the Army, yet nowhere in the working title or in the Highlights is this fact noted or referenced.

The current working title leaves the reader with the impression that the Army report failed to address the central questions of Congress. Army recommends changing the title of GAO report to better reflect (and balance) GAO’s concurrence with the vast majority of the Army’s report (including the central question of whether more land was needed). Accordingly, we propose the new title to be: “Additional Land Requirement at Piñon Canyon Maneuver Site is Valid, But Additional Information Could Help Better Explain Contemplated Expansion.”

Recommend adding the following paragraph at the very beginning of the GAO Highlights/summary page under “What GAO Found:”

‘The GAO found that the Army’s report adequately addressed 23 of the 29 of the mandated Congressional reporting provisions, including the key questions of whether the expansion of PCMS was needed to support units stationed or planned to be stationed at Fort Carson, and whether there were any viable alternatives to land expansion that would meet the Army’s training doctrinal requirements.’

As it is currently written and structured, the focus is not on the 80% agreement (23/29) between GAO and the Army, but on the 20% variance between what the Army’s report conveyed, and where GAO thought additional information would be helpful.

**DEPARTMENT OF THE ARMY SPECIFIC REPORT COMMENTS**

1. GAO Highlights, Bullet 2, "The estimated cost..."

The Army strongly disagrees with the inclusion of this bullet and the repeated emphasis throughout the report on "growth in the estimated price per acre." Congress did not include any questions in its reporting requirement about the cost per acre. No appraisals have been done on any property, so there is no evidentiary basis to state what the cost per acre will be to acquire any of the property. Estimated cost figures are used for internal planning and budgeting purposes only. Any discussion of cost per acre will be misleading to the public and should be removed from the report.

2. GAO Highlights, Last paragraph, line 1, "Army officials said..."

Disagree with the phrase "...would be difficult to address..." and recommend changing to, "would be best addressed through the analysis required..."

3. GAO Highlights, Last paragraph, line 7, "This, in the view of the Army ... continue with the process when funds become available."

These two sentences in the GAO "Highlights" are inaccurate and should be deleted or revised. The Congressional appropriations limitation applies only to the MILCON-VA appropriations bills for FY 2008 and FY 2009. It does not affect Defense Appropriations, which fund the Operations and Maintenance (O&M) accounts that pay for EIS efforts in compliance with NEPA. Therefore, the restrictions do not prevent or preclude the Army from starting a NEPA analysis for expansion. Recommend changing to, "Since O&M funds are used to pay for NEPA analyses, the Army is not precluded from further studying the 100,000-acre site or starting the NEPA process, but to date the Army has voluntarily deferred spending other appropriated funds while due to Congressional concerns. Uncertainty over Congressional support for the contemplated expansion made a delay in expending funds to start an expansion NEPA appear to be prudent."

4. GAO Highlights, Last paragraph, line 11, "Without the benefit of the analyses ..."

Disagree with the characterization that, "the Army decided to select the 100,000 acres..." There was never a "decision" to purchase either the 418,000 acres, or in the alternative, to purchase 100,000 acres instead. The Army sought and received authorization to purchase up to 418,000 acres from OSD. The NEPA process is a critical part of the decision process that will determine how much, if any land is purchased. Until the NEPA process is complete, no decisions will be made. Recommend changing to, "Without the benefit of the NEPA analyses it is difficult for Congress and the public to evaluate the full benefits and costs..."

5. Page 2, Line 2

"An increase in training acreage from 66,000 to 161,000 is well over 100 percent."  
Recommend changing this sentence to read: "An increase in training ... is nearly 144 percent."

6. Page 2, Lines 17-19

Disagree with the use of the phrase, "...in their view..." Congressional appropriations language does not restrict the use of O&M funds. Recommend changing to, "...the Army used operations and maintenance funds that were not subject to the above-referenced..."

7. Page 4, Results in Brief

The GAO report gives very short shrift to the fact that GAO concurred with 80% of the Army's responses in its July 2008 report (23/29), including its concurrence with the very significant issue of 'a report of need for more training land' – the central question raised by Congress. Recommend GAO add the following immediately under "Results in Brief" to balance the summary of GAO's results, "The GAO found that the Army's report adequately addressed 23 of the 29 mandated Congressional reporting provisions, including the key questions of whether the expansion of PCMS was needed to support units stationed or planned to be stationed at Fort Carson, and whether there were any viable alternatives to land expansion that would meet the Army's training doctrinal requirements."

8. Pages 6-7, 10 (last line of text)

Regarding NEPA and the Congressional appropriations limitations, see comments above as to why the Congressional limitations do not preclude or limit NEPA analysis related to PCMS expansion. Recommend these portions of the GAO report be deleted or modified as recommended previously.

9. Page 6, Lines 8-13

Recommend GAO delete the phrase, "However, the Army has not fully explained..." and replace with, "The GAO, based on its discussions with Army officials, believes that many of the following additional issues could be better explained and discussed through the analysis required by [NEPA]"

10. Pages 12-13

Nowhere does the GAO report characterize the Army's land acquisition process as essentially reasonable or sound, yet from the discussions with the GAO analysts, this appears to be GAO's overall conclusion. Recommend GAO state this conclusion, given that one of the questions Congress and the public are interested in is whether the Army's land acquisition process at PCMS can be trusted to produce logical and reasoned recommendations.

**DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS**

**RECOMMENDATION 1:** The GAO recommends that the Secretary of Defense direct the Secretary of the Army to provide Congress with additional information explaining the six responses about whether existing training facilities are sufficient to support the training needs and about alternatives for enhancing economic development opportunities for southeastern Colorado, which were lacking in the Army's 2008 report on the maneuver site.

**DOD RESPONSE:** Partially concur

The Army strongly believes the best way to provide additional information to Congress on the remaining issues is through the National Environmental Policy Act (NEPA) process. As NEPA is a critical part of the decision process and the next required step in land acquisition, much of the information GAO recommends requesting will be determined through this process. The Army believes that GAO should emphasize the importance of the NEPA process. The recommendation should be changed to read, "The Army should begin NEPA at the appropriate time, and ensure that the remaining issues be covered and discussed adequately either through NEPA analysis, or through a similar mechanism of the Army's choosing."

The following additional information is provided to further explain the six responses that GAO felt were lacking in the Army's 2008 Report.

1. Section 2831 (a)(2)(A)(iii)(I)

There is no requirement for the Army to keep detailed utilization records for training events that do not involve live fire of munitions. The Piñon Canyon Maneuver Site (PCMS) began keeping utilization records with an automated training scheduling and utilization record for all training events at its installations in 2004 with the current version of the Range Facility Management Support System (RFMSS). While the Army has been using PCMS to conduct training exercises since 1985, there was no system in place to officially track utilization of maneuver training areas prior to 2004. Therefore, the Army chose to provide information on known training rather than relying on institutional memory and interviews with former Fort Carson/PCMS range personnel, which is not auditable. The Army made a decision to emphasize reliability and quality of data verses quantity.

More importantly, as indicated on page 19 of the Army's 2008 report, the historic use of PCMS does not reflect the future projected use, due to changes within Army doctrine and Army force structure changes.

2. Section 2831 (a)(2)(A)(iii)(II)

Currently, PCMS contains approximately 224,000 acres available for maneuver training. This allows for the following training exercises to be conducted to doctrinal standards:

- One Heavy Brigade Combat Team (HBCT) conducting a free flowing exercise (170,000 acres)



- One Infantry Brigade Combat Team (IBCT) conducting a free flowing exercise (112,000 acres)
- Two IBCTs conducting free flowing exercises simultaneously (224,000 acres)

It is not currently possible for an HBCT and an IBCT to conduct free flowing exercises simultaneously and is it also not possible for two HBCTs to conduct free flowing exercises simultaneously.

Currently two HBCTs and one IBCT are stationed at Fort Carson and these units can effectively train. Following the actions discussed on pages 14-16 of the Army's 2008 report, three HBCTs and two IBCTs will be stationed at Fort Carson by 2011.

The Army believes that the July 2008 report does address the issue of "work-arounds", albeit from a broad perspective that is hopefully more understandable for a layperson. However, for clarification, the types of workarounds that are employed by units when training land is restricted include, but are not limited to: reordering the sequence of tasks or events in a training exercise; delaying the training on certain tasks until deployment; not training the task or event to doctrinal standard. Work-arounds decrease the quality of Soldier training which is critical to success on the battlefield.

A specific example of "work-arounds" producing the effects described in the July 2008 report: Lack of Maneuver Depth Causing Exercises/Scenarios to Become Unrealistic. In a common training scenario, a unit is ordered to launch an attack and maneuver aggressively towards opposition force (OPFOR) held positions. The unit then presses the attack for a pre-designated distance. Then the OPFOR launches a counterattack, and the unit must shift quickly from attack to defense, maneuvering while falling back a pre-designated distance. This scenario is critical to instilling basic concepts of 'defense in depth' and teaching unit commanders how hard they can press an attack before their Soldiers become exhausted, out of position, or excessively dispersed (and hence vulnerable to a counterattack). If the scenario calls for the entire attack-counter-attack-recover sequence to be played out within a 15km by 5 km maneuver box, but the actual amount of acreage available is only half or less of what is doctrinally required, one of the 'work-arounds' will be for the US force to attack from one side to the available maneuver box to the other, and then when the OPFOR is ready to launch its counterattack, the exercise will be halted, and all units will move several kilometers backwards so there's enough room for the remainder of the scenario to be completed. Obviously, this is totally unrealistic – there are no "time outs" on the modern battlefield where Soldiers get to rest up and reorganize prior to the enemy launching a counter-attack.

Page 19 of the July 2008 report notes that without expansion, it will "make it difficult to train units to operate on the scale demanded by the contemporary operating environment." This current operating environment was explained on pages 8-9, with a chart depicting the amount of terrain Brigades must secure on the battlefield growing exponentially since World War II. Also, on pages 19-20, is a detailed description of what training 'work-arounds' can do to units and Soldiers if they are not allowed to train in a dispersed manner similar to their contemporary operating environment: "work-around scenarios that train units without

stressing their full operational capability...creates the risk of developing bad habits in training and embeds false expectations as to true battlefield conditions.”

Regarding the costs associated with increased training and use of the existing PCMS, the Integrated Training Area Management (ITAM) program is the Army's premier program for sustaining its training land throughout the Army. ITAM uses an integrated approach to sustaining its training land through four components to provide integration of doctrinal training requirements with sound land management methods, repair of maneuver damage, assessment of land condition, and awareness training for Soldiers and civilians to avoid preventable damage to natural resources in the training area. Types of repair, maintenance and associated costs are a function of weather conditions, intensity and type of training, soil conditions, materials, and labor costs for field crews to repair maneuver land damage. We expect an increase in ITAM requirements over the FY 09 \$2.42M requirement at PCMS. For planning purposes we would estimate the future requirement on the 100,000 acres to be between \$1.2M and \$1.5M. However, this is merely an estimate based on current requirements at PCMS.

3. Section 2831 (a)(2)(A)(iii)(III)

The Army's recent Posture Statements refer to the U.S. waging “The Long War” in an “Era of Persistent Conflict.” The Posture Statement factors into most Army plans as an assumption of regular rotations and deployments for the foreseeable future. Regarding the issue of peacetime vs. wartime deployment assumptions, if the Army did assume peacetime conditions when all or most units would be at home station, it is important to note that this assumption would substantially increase the demand for training calendar space at PCMS, which would strengthen, not weaken, the Army's case for, and need for, training land expansion.

4. Section 2831 (a)(2)(C)(iii)

Regarding the Army's failure to specifically address “biofuels” and “beef,” the Army notes that on this question it interpreted the reporting requirement broadly. Beef and biofuels are two examples; however the Army cannot provide details regarding specific purchases of any particular kind of good or service: (1) prior to NEPA and a decision, and (2) due to the need to determine, from a procurement and fiscal legal perspective, whether such purchases are allowable.

However, the Army did lay out an extensive and specific set of possible economic development opportunities that could be implemented if PCMS were expanded (\$100M+ in new construction, approximately 100 civilians/contractors hired at PCMS with a payroll and operations budget of \$9M/annually, ideas for promoting tourism/cultural heritage) that would broadly benefit the entire local community in and around Las Animas County, Colorado. The Army compared the magnitude of these projected economic benefits against the magnitude of estimated cattle sales from Area A, and the Army's positive economic impact would be significantly greater than any foregone cattle sales.

5. Section 2831 (a)(2)(C)(viii)

Regarding the question of infrastructure requirements to accommodate stationing active duty units at PCMS itself, the Army ruled out stationing units at PCMS during the Programmatic Environmental Impact Statement (EIS) because of the prohibitive cost of replicating the infrastructure at PCMS that currently exists at Fort Carson's cantonment area and surrounding community. An internal Army analysis in June 2007 concluded that it would cost 64 percent more (\$331M+) to station an IBCT at PCMS (\$845M) rather than Fort Carson (\$513M). (Analysis attached)

Stationing an IBCT at PCMS would not only entail a \$330M+ additional cost but the additional civilians and contractors typically increase the nearby communities' population by 8,000 to 10,000 persons total. In Las Animas County, which has a total population of about 15,000 persons, adding an IBCT at PCMS could overwhelm and transform the local community from a ranching heritage to a military bedroom community. Lastly, stationing an IBCT at would require a substantially larger cantonment area at PCMS, which would reduce the number of maneuver acres available for training.

6. Section 2831 (a)(2)(C)(viii)(I)

Regarding the analysis of the operational benefits of stationing an active duty unit at PCMS, the Army did not conduct an analysis of operational benefits due to the fact that the costs to construct the infrastructure to support a BCT at PCMS were prohibitive and simply made the option of stationing completely infeasible. As noted above, any operational benefits, even if cost-benefit considerations were not a factor, would be partially negated by the loss of maneuver acreage in order to build up the PCMS cantonment area and associated infrastructure.

**RECOMMENDATION 2:** The GAO recommends that the Secretary of Defense direct the Secretary of the Army to utilize available funds, if any, or when funds become available to further study the proposed 100,000-acre expansion site, provide Congress with additional information explaining the reasons the Army selected the current 100,000-acre site for the proposed expansion and the growth in the estimated price per acre, as well as how much of the 100,000 acres would actually be used for training, what benefits would be gained from adding the 100,000 acres to the existing maneuver site, what effect sustainment and maintenance activities would have on training on the 100,000 acres, and what the future costs would be for sustaining and maintaining the 100,000 acres.

**DOD RESPONSE:** Partially Concur.

The Army believes that it did adequately explain why it preferred a smaller land acquisition. Page 22 of the Army report, (with which GAO concurred) states "From the outset of the land acquisition process, the Army has placed a priority on the acquisition of Area A" and then the report lists reasons why Area A (approximately 100,000 acres) was a priority.

Pages 23-24 of the Army report (GAO also concurred) explains why Area B, while appearing initially to offer many training advantages, is no longer viewed as feasible. The Army report also notes (pages 4, 23) that from the outset of the Army's contemplated expansion, budgetary constraints would play a very important role in the process. Every training advantage obtained through land expansion also had to be weighed from a cost-benefit standpoint. Along those lines, pages 25-26 of the Army report (GAO also concurred) contain Army responses to several Congressionally-directed training scenarios. An expansion equal to Area A would allow the Army to mostly or fully meet every one of the Congressional training scenarios. In short, the Army believes that Area A (100,000 acres) provides the greatest training benefit, at the lowest cost, the lowest acreage footprint, and with the fewest number of affected landowners and communities.

The Army's land acquisition moratorium waiver request to the Office of the Secretary of Defense (OSD) was never predicated on an 'all or nothing' proposition. The OSD approval memo of February 2007 allows the Army to acquire up to 418,000 acres. The Army report is very clear that all of the 100,000 acres will be used for training and to build a \$100M+ training range complex (described in detail on page 35 of the Army report). The Army must use that assumption until it conducts an in-depth environmental analysis done through NEPA. If NEPA were to uncover a major problem that would preclude the use of most or all of the contemplated 100,000 acres, the Army would reassess the contemplated expansion.

Finally, as stated previously, execution of the ITAM program on the 100,000 acres would permit training land to be accessible and usable. It would be premature to project what future cost would be; however, since the FY 2009 ITAM requirement for PCMS was \$2.42M, Army estimates the future requirement will be between \$1.0M and \$1.5M annually. The Army strongly disagrees with the implication that ITAM and other sustainment costs are a factor of such significance that it could alter the validity or necessity of the expansion itself.

As noted earlier in the comments to the "Highlights" section, the Army disagrees with GAO's assessment that "growth in the estimated price per acre," is a 'problem' that needs to be 'addressed.' The Army has never previously released any information to the public on estimated costs per acre. Cost figures discussed by GAO do not reflect any determination of fair market value, because no appraisals have been conducted. The estimated cost figures generated by the Army are used solely for internal planning and budgeting purposes and include best guesses as to the cost for land, improvements, relocation assistance, and administrative cost, but the discussion of cost estimates in the GAO has strong potential to be confusing and misleading to the public. Additionally, Congress did not ask for a discussion or explanation of cost estimates. Army strongly recommends that discussion of estimated land costs should be removed from the report.

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

Brian J. Lepore, (202) 512-4523 or leporeb@gao.gov

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## Acknowledgments

In addition to the contact named above, Mark Little, Assistant Director; Ron La Due Lake; Mae Jones; Kate Lenane; Josh Margraf; Courtney Reid; and Roger Tomlinson made major contributions to this report.

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## GAO's Mission

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