United States General Accounting Office

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Report to the Honorable Harry Reid, U.S. Senate

September 2000

FEDERAL FACILITIES

Further Review of Hawthorne Army Depot Land Management Proposals Needed

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United States General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-285864

September 21, 2000

The Honorable Harry Reid
United States Senate

Dear Senator Reid:

This report responds to your request regarding federal land near Hawthorne, Nevada, that was set aside for exclusive use by the Department of Defense as an ammunition depot. Lands set aside in this manner are referred to as withdrawn, indicating the lands are withheld from public use and activities within them are limited by restrictions on settlement, sale, or entry. Four executive orders signed between October 1926 and February 1935 withdrew about 173,000[1] acres from the General Land Office, the predecessor office of the Bureau of Land Management, to be used for depot purposes. Today, the withdrawn land totals about 113,000 acres because about 60,000 acres has been returned to the Bureau and to Mineral County, Nevada, where the land is located. The withdrawn land in question has been under Army control since 1977 and includes the Hawthorne Army Depot. At the depot, the Army receives, renovates, stores, and ships usable conventional ammunition such as bombs and land mines, and it removes the explosives from and disposes of unserviceable, obsolete, and surplus ammunition.

The Bureau of Land Management is an agency in the Department of the Interior responsible for managing public lands, including reviewing the need to continue withholding lands from public use. The Bureau's field office in Carson City, Nevada, in 1991, started a review of the need to continue the land withdrawal for depot purposes. As a result of that review, the office asked the Hawthorne Army Depot to justify their need for the continued withdrawal of lands at Hawthorne. In November 1991, the depot notified the Bureau's field office in its justification report that it would be willing to give up control over about 3,150 acres of the land. The field office proposed in April 1996 that the depot give up control over about 44,000 acres of land because it said the depot was not using the land for the purpose for which it was withdrawn. The field office's proposal would end

[1] The total would be about 208,000 acres if the part of the withdrawn area covered by Walker Lake was included. The lake is directly north of the depot.

the depot's control over Mount Grant, which contains a watershed that supplies most of the depot's drinking water. Army officials, in their October 1996 response to the Bureau, disagreed with the field office's proposal because they said they were using the land for its intended purpose, and they were concerned that increased public access to the mountain and its watershed would contaminate the depot's water supply. While a public meeting and other exchanges of information between the Bureau and the Army have occurred, no decision has been made on what should be done with the withdrawn lands.

As agreed with your office, this report describes the status of the Bureau of Land Management's proposal to reduce the amount of withdrawn land near Hawthorne and discusses possible approaches for addressing use of this land. In appendix I, we provide additional information discussing the watershed, Walker Lake, and contaminated withdrawn lands.

Results in Brief

The Bureau of Land Management's Carson City field office and the Hawthorne Army Depot have not reached agreement on the Bureau's proposal to terminate Army control and exclusive use of a large portion of the lands at Hawthorne, including the Mount Grant watershed. The Bureau's field office has requested about $175,000 to prepare a detailed plan for managing the watershed for multiple uses such as recreation, mining, and livestock grazing. Bureau officials in Nevada have agreed to develop the plan because local community and depot officials questioned terminating the withdrawal without having a specific management plan in place. The Bureau's headquarters office has funded a general plan for a large area of Nevada for fiscal year 2001, but the general plan will not contain detail on the management of Mount Grant. The Bureau's State Director in Nevada told us they could develop a detailed plan in 2001 if fully funded. Bureau officials in Nevada also say they will not proceed with terminating the withdrawn lands until they develop the plan and attempt to obtain the depot's concurrence.

Differing approaches have been proposed for managing lands involving the Mount Grant watershed. One approach would be for the Army to continue to limit public access to the watershed. A second approach would have the Bureau manage the land and open portions of the watershed to multiple uses, with some restrictions to protect the depot's water supply. Specifically, this approach would allow public access, livestock grazing, and mineral mining on the mountain and would consider placing additional natural resource protections on some of the land. Other approaches could involve joint cooperative agreements. The Departments of Defense, Interior, and Agriculture have developed a draft guide that discusses joint land management between the military services and land management agencies. Where the military has used joint agreements with the Bureau at other locations, our work has shown both advantages and disadvantages to this approach.[2]

Given the differing views that exist over the land management approaches at Hawthorne, we are recommending that the Army and the Bureau set specific goals and milestones to review the advantages and disadvantages of using a cooperative agreement approach and determine whether such an approach would be useful in this situation. In comments on a draft of this report, the Departments of Defense and Interior generally concurred with our report.

[2] *Natural Resources: Defense and Interior Can Better Manage Land Withdrawn for Military Use* (GAO/NSIAD-94-87, Apr. 26, 1994).

Background

The military requires large tracts of land for such activities as training soldiers and testing, repairing, and storing weapons. The majority of the land used by the military was not originally under their control but was withdrawn from other federal land-managing agencies for military use. The bulk of the withdrawn land is on long-term loan from the Bureau of Land Management. The Bureau of Land Management has overall responsibility (under Department of Interior policy) to review land withdrawn by the military to determine whether it should be continued or terminated.[3] The Bureau's field office in Carson City, Nevada, started the Hawthorne Army Depot withdrawal review, which continues today, in 1991 under authority of the Federal Land Policy and Management Act of 1976.[4] The act requires a review of existing withdrawals in 11 western states to determine which lands should be returned to Bureau management.[5] Section 204(l) of the act defines the roles of the Secretary of the Interior, the President, and the Congress for major decisions in the withdrawal review process. It specifies that the Secretary of Interior shall report his/her recommendations to the President, along with the concurrence or nonconcurrence from the agency administering the land. The President shall forward the report, along with any recommendations, to the Congress. The Secretary of the Interior may terminate withdrawals 90 days after submission of the President's report to the Congress, unless the Congress directs otherwise or unless the Congress itself originally made the withdrawal. As of August 2000, no withdrawals using Section 204(l) of the act have been terminated.

In 1993, the Bureau completed a draft manual for the review of withdrawals and implementation of review recommendations, which Bureau staff continue to use, but it did not issue the manual in final form. A Bureau

[3] In commenting on a draft of this report, the Department of Interior stated that the Bureau has two distinct withdrawal review authorities. One is the general withdrawal authority of the Secretary as provided in Sec. 204 (a) of the Federal Lands Policy and Management Act of 1976 and delegated to the Bureau, with policy guidance, in Part 603 of the Department Manual. A withdrawal revocation may be processed under this authority only with the consent of the agency for which the lands were withdrawn. The other authority is the stand alone statutory authority in Sec. 204 (l) of the act that allows the Department of Interior to make a recommendation for termination even if the agency with the withdrawn lands disagrees with the Department's recommendation. It is this authority that is being used by the Carson City field office to review the Hawthorne Army Depot withdrawal.

[4] P.L. 94-579.

[5] Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

official said they planned to finalize it after some experience was gained processing withdrawal reviews through the President and the Congress; however, no reviews have been processed that far. The Bureau's policy is to obtain the concurrence of the agency having control of the withdrawn land before terminating the withdrawal. If the agency does not concur, the Bureau strives to resolve differences at the lowest organizational level. If local officials cannot resolve these differences, the Bureau's state office may submit a report to its Washington, D.C., office in an attempt to resolve the differences at a higher level.

The Bureau of Land Management calculates the withdrawn land at the Hawthorne Army Depot as 113,260 acres. The Army calculates a total of 147,236 acres because it includes an area that lies on the surface of Walker Lake, which is next to Mount Grant. The area covered by the lake becomes part of the withdrawal as the lake recedes and exposes dry land. The lake has lost 80 percent of its volume over the past century because water has been and is still being diverted from Walker River (which feeds the lake) for agricultural use in California and Nevada. The lake has become a major local concern because it is deteriorating, and the water has become too salty to be potable. If the trend continues, Bureau officials in Nevada believe the lake's ecosystem could collapse.

Besides the Army and the Bureau, there are other groups who have an interest in the Mount Grant watershed. For example, Mineral County, Nevada, where all of the withdrawn lands that make up the depot are located, has been actively involved in the issue of who should manage the mountain. The Walker River Paiute Indian Tribe, whose reservation includes the northern part of Walker Lake, has sacred sites on the mountain it would like protected. The State of Nevada has offered to acquire and manage the lands on Mount Grant, and public interest groups in and outside the state have requested more access to the lands on the mountain.

No Agreement on Proposed Termination

The Bureau of Land Management's field office in Nevada and the Hawthorne Army Depot have not reached agreement on the Bureau's proposal to terminate Army control and exclusive use of a large portion of the lands at Hawthorne. In April 1996, the Bureau's field office submitted a withdrawal report to the depot in which it recommended terminating the withdrawal of 44,223 acres currently administered by the Hawthorne Army Depot. The depot did not concur. In response to depot and community concerns, the Bureau has proposed and is awaiting funding to prepare a

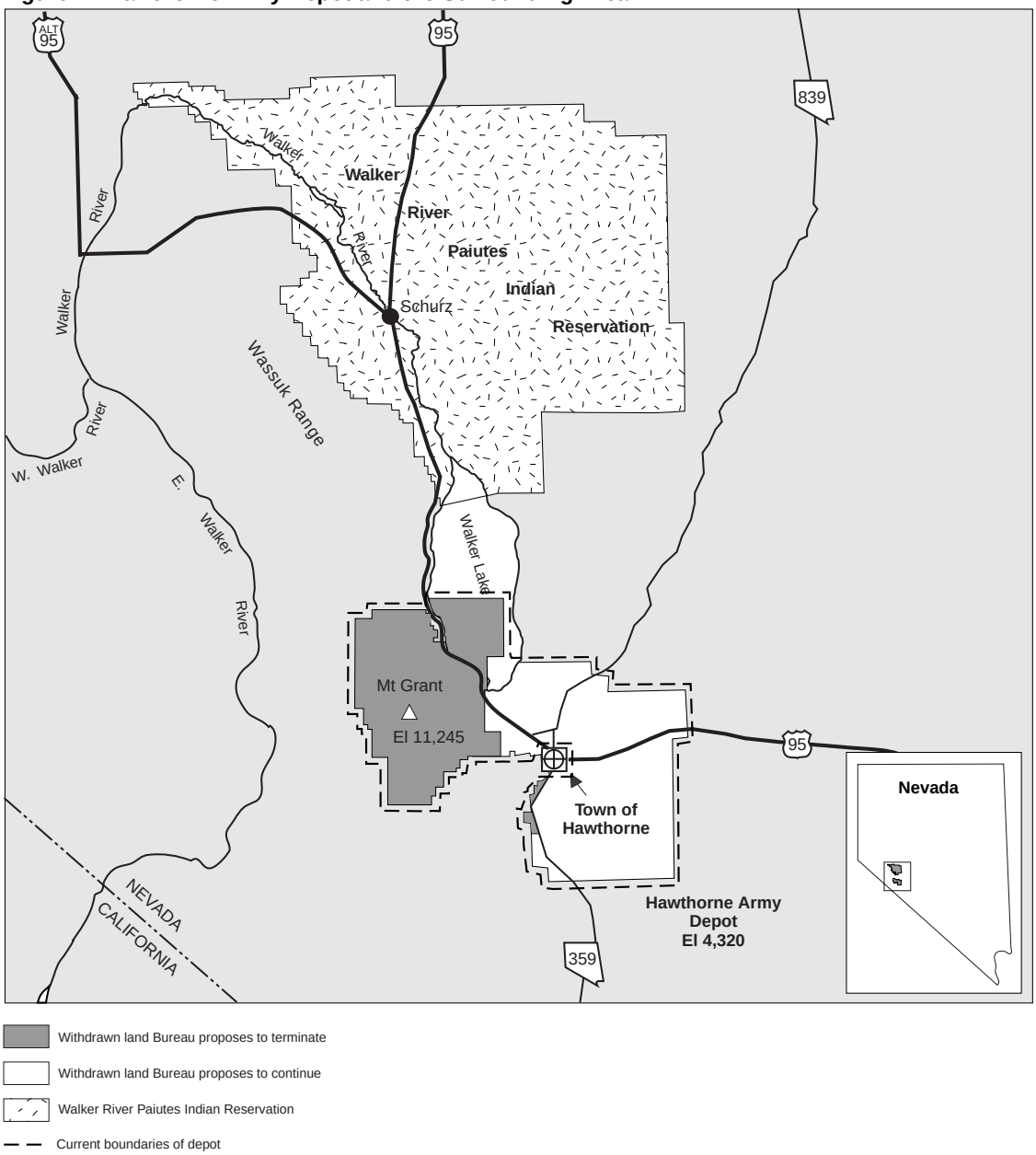
detailed plan for managing the Mount Grant area for multiple uses such as recreation, mining, and livestock grazing.

Withdrawn Land Termination Proposal

The Bureau field office's April 1996 withdrawal report recommends terminating the withdrawal because it states that the depot is not using the land for the purpose for which it was withdrawn. Specifically, it stated that the Army was managing public recreation, wildlife habitat, and watershed, and that these do not represent the purposes of the withdrawal. In addition, the withdrawal report recommends limiting the withdrawal of the remaining 69,037 acres to 20 years rather than indefinitely as stated in the executive orders setting up the withdrawal.

Figure 1 shows the depot and the surrounding area, and figure 2 shows the Army and Bureau proposals for the withdrawn lands. Note that the area the Bureau proposes for termination has various distinctions. Contained within the withdrawn land is military-acquired land, which was purchased from farmers and miners who owned the lands when the surrounding land was originally withdrawn. This land is not subject to termination under the act, but the Bureau proposes that the land be transferred to the Bureau. Also, land under a portion of Walker Lake is not currently withdrawn but would become so as the lake recedes. Finally, as discussed in appendix I, some portions of the proposed termination are reported to have environmental contamination.

Figure 1: Hawthorne Army Depot and the Surrounding Area



Note: Elevation in feet.

Source: GAO design based on data from the State of Nevada, Hawthorne Army Depot, the Bureau's Carson City field office, and *Walker River Paiutes, A Tribal History*, Edward C. Johnson.

Figure 2: Army and Bureau Proposals for the Withdrawn Lands

Note: All boundaries are approximate.

[a]The Bureau does not consider the surface of Walker Lake withdrawn until the waters recede and expose lake bed.

Source: GAO design based on data from Hawthorne Army Depot and the Bureau's Carson City field office.

Depot Response to Proposal

In its October 1996 response to the field office's report, the depot disagreed with the proposed withdrawal termination of 44,223 acres and then proposed a 75-year continuation of the withdrawal for all but 3,150 acres. The depot's response cited the fourth of four executive orders, which reserved most of the Cottonwood Creek watershed[6] for exclusive use by the Navy, emphasizing the order's choice of words, "in connection with" the depot.[7] (In contrast, the first three executive orders stated that the purpose of those withdrawals was for the development of and use "as an ammunition depot.")[8] The depot's response further stated that the water on Mount Grant has been critical to meeting the depot's mission since the water delivery system was installed in 1931 and 1932. The response stated that the depot's other actions, such as providing permits for public access and working with the State of Nevada, followed as a result of their control of the land.

The depot's response also maintained that uncontrolled access to Mount Grant would eventually lead to an increase in water contamination. The depot's state water permit requires it to maintain a watershed control program limiting human activity in the watershed and to seek approval of any changes in the program from the Nevada Bureau of Health Protection Services. If water does become contaminated, the depot could be required to install a filtration plant. Because of the purity of the water from Mount Grant, the depot's water permit includes a waiver of filtration requirements, which allows the depot to only chlorinate the water. However, should the depot' s public water system fail to meet requirements for coliforms and turbidity,[9] it could be required to build a filtration system. According to depot officials, such a system could cost $10 million to build and $200,000 a year to maintain.

[6] The Cottonwood Creek watershed is a large part of the Mount Grant watershed.

[7] E.O. 6958 (Feb. 4, 1935).

[8] E.O. 4531 (Oct. 27, 1926); E.O. 5664 (July 2, 1931); and E.O. 5828 (Mar. 30, 1932).

[9] Coliforms refer to animal or human waste; turbidity refers to sediment or foreign particles.

Public Comments on the Proposals to Terminate the Withdrawal

Following the depot's nonconcurrence in October 1996 with the proposed termination, the Bureau's field office published a notice in the *Federal Register* in February 1997,[10] describing each party's position and soliciting public comment. Public response to the Bureau's notice in the *Federal Register* varied from support for the depot's continued management of the land to support for management of the land by the Bureau. Because the affected land is in Mineral county, the Mineral County Board of Commissioners sent a letter to the Bureau in response to the *Federal Register* notice in April 1997, which among other issues, expressed its concern with the adverse economic impact to the county should the depot's missions and responsibilities be reduced. The Bureau requested a public meeting and in June 1997 a public meeting was held before the commission, which was attended by members of the public, as well as depot and Bureau officials. Commission members and depot officials at the meeting expressed concern about the possible land degradation that may result from the multiple uses proposed by the Bureau's field office and about the Bureau's lack of specific plans for managing these multiple uses. (Comments for and against the Bureau's proposal by the State of Nevada, Native Americans, and other interested parties are discussed later in this report.)

Although a Bureau field official stated at the public meeting that Bureau policy is to prepare such plans only after a withdrawal is terminated, officials from the Bureau's state and field offices have since modified this position. These officials believe they could resolve concerns about the proposed termination by developing a detailed management plan together with other stakeholders, including the Army. These officials told us that they have requested about $175,000 to develop a detailed land management plan for Mount Grant. Bureau headquarters staff in Washington, D.C., have approved fiscal year 2001 funds for a general plan for a large area of Nevada, but this plan will not contain detail on the management of Mount Grant. In October 1999, the Bureau's State Director in Nevada told us they could develop a detailed plan in 2001 if fully funded. Bureau officials in Nevada say they will not proceed with the process for terminating the withdrawn lands until they develop the plan and attempt to obtain the depot's concurrence.

[10] 62 Fed.Reg. 5839-03.

Proposals for Managing Mount Grant Lands

Differing approaches for land use management have been proposed for the Mount Grant watershed. Under the Army depot's approach, it would continue the current practice of limiting public access. Under the Bureau's approach, it would manage the land and open various portions of the watershed to multiple uses. The Bureau would restrict access to some areas to protect the depot's water supply. Hawthorne community leaders have endorsed the Army proposal and the Walker River Paiute Tribe has endorsed any proposal that will protect their sacred sites on Mount Grant. Concurrently, public interest groups and the State of Nevada have endorsed the Bureau's land management proposal. The Army depot and the Bureau field offices have taken steps to reach an agreement, but their differences on how to manage the Mount Grant watershed remain unresolved.

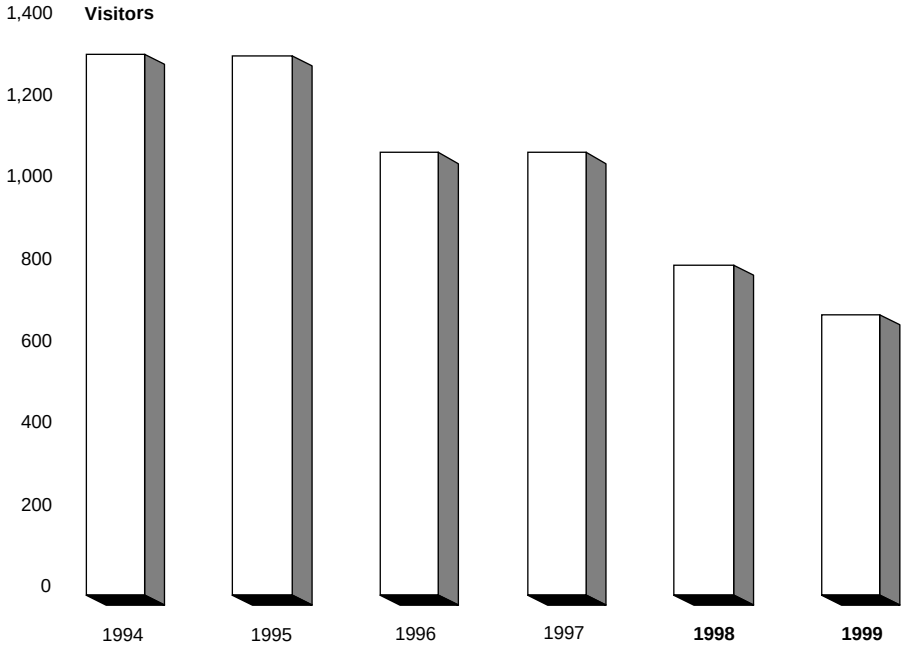
Army's Proposed Land Management Approach

The Army Depot's proposed land management approach to the withdrawn depot lands would continue the current practice of limiting public access to the Mount Grant watershed area. The depot currently controls access to the mountain through a system of gated roads. Visitors must obtain the depot's permission to unlock the gates and enter the area. In addition, the Army controls access to various parts of the watershed through roughly 2,000 acres of land in separate parcels transferred to it by the Navy, which had purchased it at various times between February 1929 and October 1955. The Bureau's proposal for terminating the withdrawal on Mount Grant includes transfer of these lands to the Bureau. Army officials say that they will not transfer this land to the public domain and that they have no plans to sell or release these lands.

The depot grants public access to the watershed for recreational purposes such as sightseeing, fishing, and hunting and natural resources research such as identifying rare Nevada plants. In 1999, for example, 683 individuals visited the mountain for sightseeing, fishing, and hunting. From 1995 through 1999, various private groups (such as the Nature Conservancy of Nevada, the Toiyabe Chapter of the Sierra Club, and the Great Basin Bird Observatory) conducted research there. According to Army records, since 1984 the mountain has averaged 1,227 visitors per year. Figure 3 shows the number of visitors to Mount Grant over the last 6 calendar years. According to Army officials, the downward trend in visitors since 1994 is due to a similar downward trend in the populations of Mineral County, the city of Hawthorne, and the depot as well as to restricted access during periods of increased wildfire danger. According to a depot official, about one half of the visitors were active duty or retired military personnel, depot federal

employees, contractor or subcontractor employees, or retired civil service employees living in Mineral County. Visitors pay user fees for fishing or hunting on Mount Grant to help defray the cost of stocking fish in Rose Creek Reservoir, the only location where fishing is currently allowed on the mountain. The depot does not limit visitors to Mount Grant; however, they also do not publicize the fact that visitors are allowed on the mountain and the security procedures visitors must go through to enter the watershed area.

Figure 3: Number of Visitors to Mount Grant Over the Last 6 Years



Source: Hawthorne Army Depot.

Bureau's Proposed Land Management Approach

The Bureau's approach would increase public access to Mount Grant and introduce other commercial activities, such as mining and grazing. Although the Bureau does not yet have a management plan for Mount Grant, it says it intends to develop one that may adapt an existing plan prepared and currently being implemented by the depot that covers all withheld lands at the depot. The depot's Integrated Natural Resources Management Plan was prepared and approved in September 1998 in response to the Sikes Act Improvement Act of 1997,[11] which requires the plans for each military installation. The plan's purpose states that it is to ensure that natural resource conservation and Army mission activities are integrated and are consistent with federal stewardship requirements on depot lands. Local Bureau officials said that in the process of preparing their own management plan for the Mount Grant area, they would consider the following actions:

- Continue the withdrawal of 69,037 acres used by the Army for depot purposes and add mineral restrictions to prevent future mining claims.
- Revoke the withdrawal of 44,223 acres on Mount Grant, placing the land under Bureau management; the roughly 2,000 acres of Navy-acquired federal land purchased between 1929 and 1955 would also be transferred to the Bureau.
- Issue rights-of-way so the Army can visit and maintain facilities associated with the depot's water system. Allow road maintenance for access to facilities and authorize minimum fencing of some key facilities to protect them from vandalism.
- Open the lands to the public without restrictions except where needed to protect the depot's water.
- Limit off-road vehicle use to existing roads and trails. Some areas such as reservoirs could be closed to vehicles, with public access only on foot and for day use. This would be similar to current Army management.
- Delegate management of wildlife, including fisheries, to the Nevada Division of Wildlife. This would be similar to current Army management.
- Allow Walker River Paiute Indians unrestricted access to their spiritual sites.
- Assess roads not associated with the water system to determine which would be maintained. The others would be left to return to a natural state.

[11] P. L. 105-85, Div.B, Title XXIX (Nov. 18,1997).

- Exclude livestock from grazing in unique ecological areas and in areas with water quality concerns.
- Conduct a mineral inventory of the area and close the lands to mining in areas where water quality is a concern, and open remaining lands to mining, with restrictions to protect water quality or other "important values."
- Assess suitability of the area, and possibly of Walker Lake, for a special designation to further protect natural resources.

Community and Public Opinions on Army and Bureau Management Approaches

The Mineral County Board of Commissioners has endorsed continued management of the watershed by the Army, although the Commission chair has also acknowledged that cooperation between the Bureau and the Army through some form of joint management is a reasonable alternative.

Representatives of the Walker River Paiute Tribe told us that they would like to see current restrictions on public access to Mount Grant maintained, regardless of who manages the area. They did express concern about the Bureau's ability to adequately protect their sacred sites on the mountain; they feared that uncontrolled access would lead to destruction and looting of their sites. The representatives added that they would like unrestricted access to the mountain to visit their sacred sites. They currently must follow the same procedures as the general public to visit the mountain.

Various public interest groups have endorsed management by the Bureau. In an August 1999 letter, these groups requested that the Secretary of the Interior support the Bureau's proposal to terminate the land withdrawal.[12] They expressed concern that Mount Grant might be used for intensive military maneuvers in the future; urged that protection, enhancement, and public enjoyment of the area be ensured; and called for a special area designation to ensure conservation of the area's biodiversity for future generations.

[12] Signers of the letter include the leaders of the following organizations: National Airspace Coalition; Nevada Trappers Association; Rural Alliance for Military Accountability, Military Land and Airspace; Citizens Alert Northern Nevada; Nevada Wildlife Federation; Great Basin Green Alliance; Lahontan Audubon Society; Military Toxics Project; Nevada Public Land Access Coalition, Inc.; Public Resource Associates; League of Women Voters of Nevada; Friends of Nevada Wilderness; Pacific Studies Center; Sierra Club, Great Basin/High Desert Ecoregion Task Force; and Nevada Outdoor Recreation Association.

The state of Nevada has also endorsed Bureau management and has also offered to manage the lands on Mount Grant. In a December 15, 1999, letter to us documenting the state's position, the Administrator with the Division of State Lands reemphasized the fact that the state still endorses Bureau management. However, in the same letter she expressed appreciation for the military's protection of the pristine natural conditions found on the mountain and the state's strong belief that these conditions should be protected in the future. In a July 1996 letter to the Bureau's State Director, the Coordinator of the State Clearinghouse, Department of Administration, commented that under the continued Army management approach, the federal government could not ensure that the site would remain protected. She expressed concern about public access, the protection of state interests, and the uncertainties surrounding possible use of Mount Grant for future defense activities.

Another Approach to Land Use Management

To facilitate collaboration and development of cooperative land use agreements, the Department of Defense, Interior, and Agriculture, in May 1998, developed a draft management guide. The guide provides key concepts and principles for land use where both the military service and the nonmilitary land management agencies have stewardship responsibilities that must be accommodated. They plan to complete the guide by the summer of 2001. Our work has shown that such cooperative land use agreements have both advantages and disadvantages.

Both the military and the Bureau have entered into cooperative agreements with various organizations and agencies to jointly manage withdrawn lands at Hawthorne and at other military locations. For example, the depot currently has cooperative agreements to manage the natural resources on Mount Grant with the Fish and Wildlife Service and with the Nevada Division of Wildlife to protect, develop, and manage fish and wildlife resources. In 1988, the depot signed a cooperative agreement with the Nevada Division of Wildlife in which the depot agreed not to allow domestic sheep grazing on Mount Grant. It signed another agreement with the Division to help re-introduce the Nelson Desert Bighorn Sheep in the area. Finally, the depot, the Fish and Wildlife Service, and the National Wetland Inventory worked together to provide a wetland map of the depot that is currently being used by the Nature Conservancy to help research rare Nevada plants.

In the past the military and the Bureau have negotiated joint agreements to manage natural resources at other locations as mandated by the Military Lands Withdrawal Act of 1986.[13] The purpose of the act was to remove from public use more than 7 million acres of land and devote them to the military services for training and for weapons and equipment testing purposes. These agreements between the Army and the Bureau include those at Fort Greely and Yukon Maneuver areas in Alaska and the McGregor Range in New Mexico.[14] We also reported previously on a management agreement between the Air Force and the Bureau for the Barry M. Goldwater Range in Arizona—an arrangement that participants believed worked particularly well.[15] There, Bureau officials said that joint military-Bureau resource management, including the sharing of expertise and funding, enabled the Bureau to make good progress in implementing a resource plan. For their part, Air Force officials said that the public is more likely to accept resource management strategies at military locations if agencies such as the Bureau are involved. Joint management plans at all four of these military locations provide direction for managing the withdrawn lands and guide resource actions. The plans also spell out the responsibilities of the parties involved.

At the same time we identified benefits of joint management, we also found that cooperation and communication between the agencies involved did not always work well. For example, at one location its management plan called for the Bureau to manage eight different resources such as wildlife, vegetation, and cultural resources; however, the military saw the Bureau's role as limited to managing the cattle grazing program, assisting with fire suppression, and helping to administer recreation activities. We recommended more cooperative relationships and strengthened management by improved liaison among agencies and reasonable access to withdrawn lands, as well as better baseline data on natural resource conditions. We also suggested schedules and milestones for implementing management plans and more closely monitoring actions.[16]

[13] P. L. 99-606, Secs. 1-15 (Nov. 6, 1986) as amended.

[14] *Natural Resources: Defense and Interior Can Better Manage Land Withdrawn for Military Use* (GAO/NSIAD-94-87, Apr. 26, 1994).

[15] Ibid.

[16] Ibid.

A June 2000 draft version of the Interagency Handbook for the Joint Stewardship of Withdrawn or Permitted Federal Lands Used by the Military discusses both the positive and negative aspects of joint management approaches. The Departments of Defense, Interior, and Agriculture are currently developing the draft handbook. The handbook provides key concepts and principles for the joint stewardship of natural and cultural resources on federal lands and lists potential benefits, such as the following:

- Each could save limited funds and reduce equipment purchases by sharing information and resources with the other.
- By working collaboratively, each could better understand what the other does and why, reducing bureaucratic friction.
- Cooperative relations between the two could foster regional approaches to stewardship issues and provide greater benefits than those obtained individually. (Examples at the depot could include balancing public access with Native American's concern about sacred site security and depot concerns about water purity.)

The handbook also lists three concerns about joint management:

- Conflicting agency missions on withdrawn lands can create disagreement between the agencies.
- How resources and costs are apportioned can create problems. Even if there is a compelling need for increased cooperation, agency budgets are not likely to be increased to address it.
- There are not enough models for developing unique management agreements.

Conclusions

The Bureau's withdrawal review termination is continuing. While differing approaches have been proposed by the Army depot and the Bureau for managing the Mount Grant watershed, differences of opinion still exist on how to manage the land. Other community and state groups have also voiced various opinions on this issue. A joint cooperative agreement approach has been used in resolving land management issues in the past. Our past work has shown that there are both advantages and disadvantages to this approach.

Recommendation

Given the differing views that exist over the land management approaches, we recommend that the Secretaries of the Army and of the Interior direct the Hawthorne Army Depot and the Nevada field offices (the Carson City field office and the Reno state office) of the Bureau of Land Management to set specific goals and milestones to resolve the differences in the proposed approaches and complete the withdrawal review process. The goals should include review of the advantages and disadvantages of a joint cooperative agreement approach to determine whether such an approach would be useful in this situation. In their review, they should consider guidebooks such as the draft Interagency Handbook for the Joint Stewardship of Withdrawn or Permitted Federal Lands Used by the Military to determine the most effective land use management plan for Mount Grant.

Agency Comments and Our Evaluation

The Departments of Defense and Interior provided written comments on a draft of this report (see apps. III and IV). The Department of Defense concurred with the report's recommendation and stated that it looks forward to working with the Bureau of Land Management and the Bureau's Carson City field office to ensure protection for the Mount Grant watershed. The Department of Interior generally agreed with the findings in the report and provided us with additional information on the Bureau's withdrawal review authorities. We added this information to the report.

We will provide copies of this report to the Honorable William Cohen, Secretary of Defense; the Honorable Bruce Babbitt, Secretary of the Interior; the Honorable Louis Caldera, Secretary of the Army; the Honorable Tom Fry, Director, Bureau of Land Management; and representatives from the State of Nevada. We will also provide copies to other interested parties on request.

If you have any questions about this report, please call me at (202) 512-8412. Other contacts and major contributors to this report are listed in appendix V.

Sincerely yours,

David R. Warren
Director, Defense Management Issues

Information on Lands and Resources at the Hawthorne Army Depot

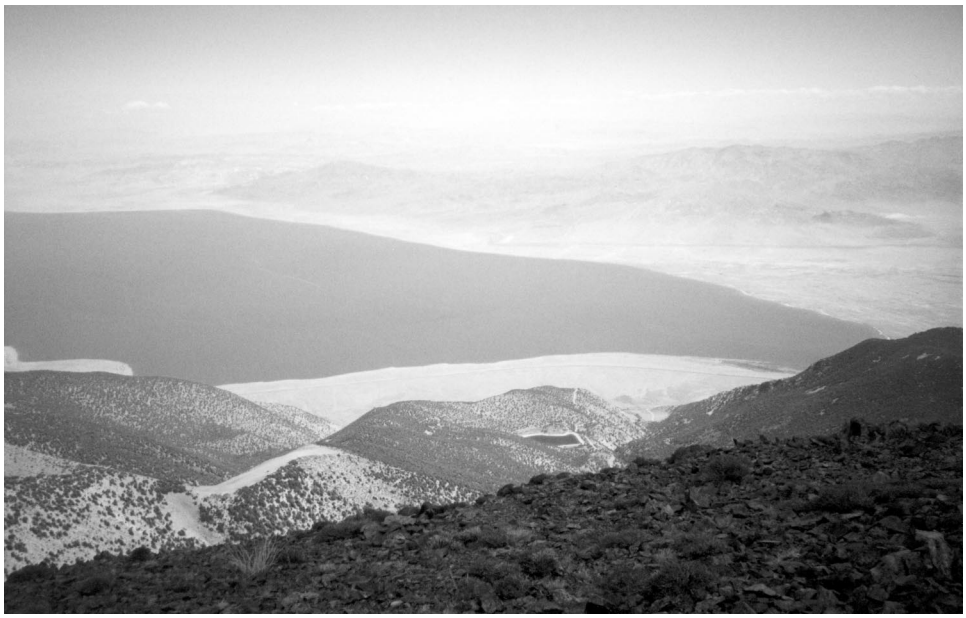
Mount Grant Watershed

Mount Grant contains several creeks that together make up the depot's watershed. The infrastructure that is used to gather and deliver surface water from the mountain consists of a small dam, four reservoirs, four catch basins, and 35 miles of pipe. Water is moved using gravity from the creeks, catch basins, and upper reservoirs to a main reservoir, where the water is stored. From here, the water is chlorinated and used by the depot. The depot uses about 26 miles of roads to maintain water delivery systems on the mountain as well as other facilities to pump and control the water. The Army estimates the current value of this infrastructure at $25 million.

Figures 4 through 7 show portions of the Hawthorne Army Depot and its watershed. Figure 4, taken from near the top of Mount Grant, shows Walker Lake and the depot (to the right) in the background and portions of the area to be released (including Rose Creek Reservoir) in the foreground.

The depot also has two active drinking-water wells on the depot. According to depot officials, however, these are incapable of providing all of the depot's potable water needs. The watershed supplied three quarters (about 245 million gallons) of the depot's water needs in fiscal year 1999. The two potable water wells supplied about 79 million gallons. The depot also purchased about 9 million gallons from Mineral County when one of its wells was down for extended repair. Unused water is released into Walker Lake, a desert terminus lake (i.e., having no outlet) next to the depot. In fiscal year 1999, 285 million gallons were discharged from the depot into Walker Lake. Since 1996, when records were first kept on discharge from the depot to the lake, an annual average of about 488 million gallons have been discharged. Figure 8 shows the amount of surface water from Mount Grant used by the depot and discharged into Walker Lake in 1996-99.

Figure 4: Walker Lake, Depot (to right), and Rose Creek Reservoir From the Top of Mount Grant

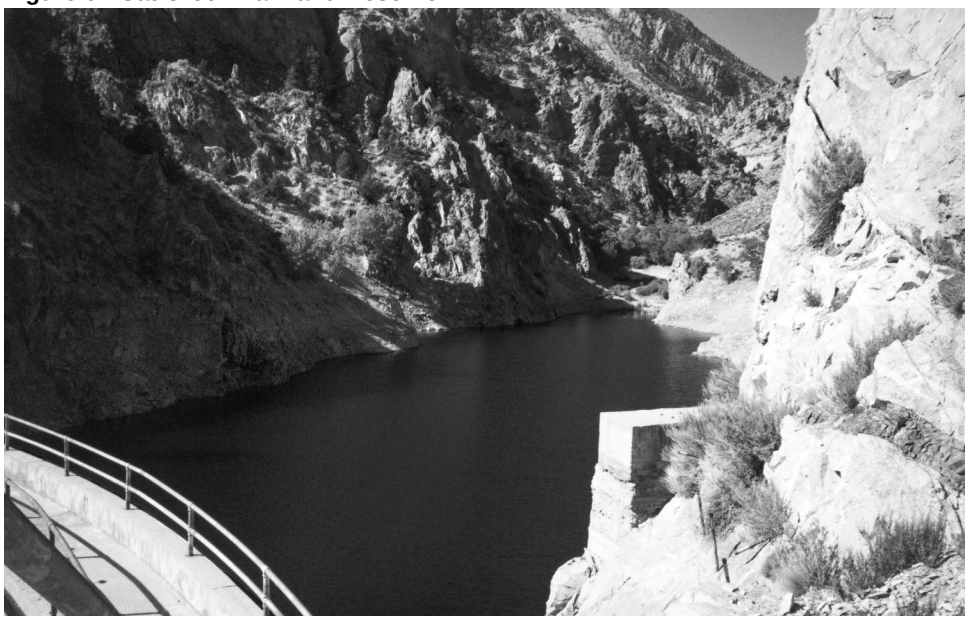


Source: GAO photo.

Figure 5: Rose Creek Reservoir

Source: GAO photo.

Figure 6: Cat Creek Dam and Reservoir

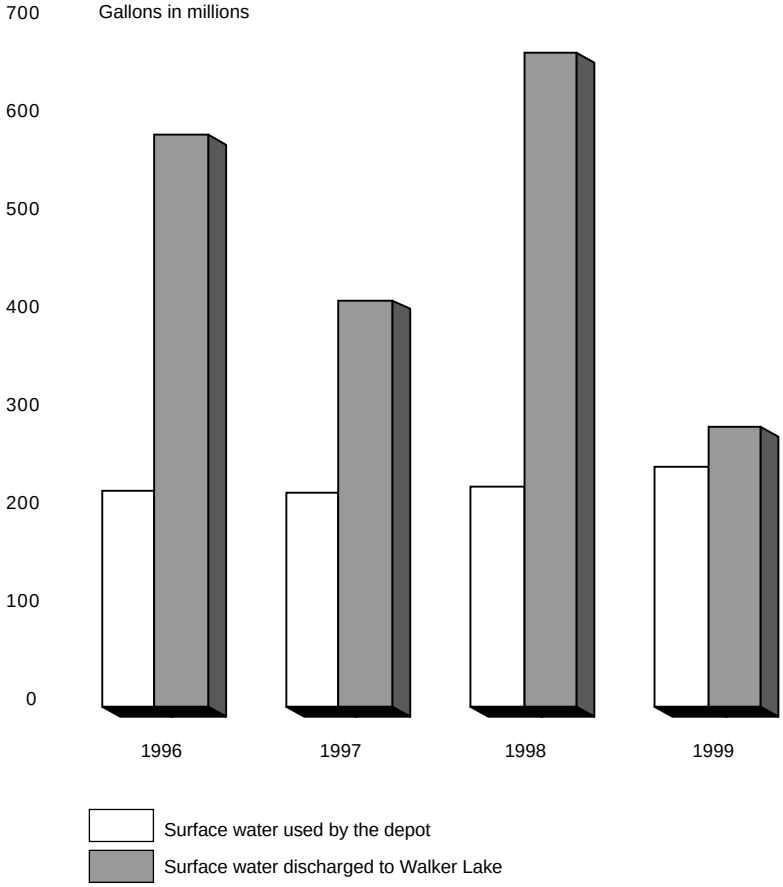


Source: GAO photo.

Figure 7: Black Beauty Reservoir

Source: GAO photo.

Figure 8: Mount Grant Surface Water Used by the Depot Versus Discharged to Walker Lake



Source: Hawthorne Army Depot.

Walker Lake

The Chairwoman of the Mineral County Board of Commissioners expressed concern about Walker Lake's health because Mineral County and the Town of Hawthorne's economy is enhanced by recreational activities associated with the lake, and the lake's health is a major concern in Nevada in general. The lake has dropped in volume by about 80 percent during the last century, mainly because of the diversion of water from the Walker River basin to the agricultural economies of California and Nevada. The low volume of water flowing into the lake and the desert climate have increased salinity levels in the lake, degraded the lake's ecosystem, and

eliminated its potential for use as a source of potable water. The aquatic species in the lake are important sport fishing species and waterfowl prey, especially the Lahontan Cutthroat Trout. This trout is a federally listed threatened and state-protected species whose survival in Walker Lake depends on artificial stocking efforts.

The Bureau of Land Management, along with the Bureau of Indian Affairs, the Bureau of Reclamation, and the Fish and Wildlife Service, are currently preparing an Environmental Impact Statement to study water or water rights obtained for Walker Lake from willing sellers in the Walker River basin. According to Bureau of Land Management officials, a draft statement should be completed in November 2000 and a final statement issued in August 2001.

While the impact statement is the most comprehensive analysis of Walker Lake now under way, numerous other efforts are either ongoing or planned. Mineral County, with the Walker Lake Working Group and other nonprofit conservation groups, has begun efforts to purchase water rights in the river basin. The Walker River Paiute Indian Tribe, the Agricultural Research Service, and the Bureau, are working on a Tamarisk removal program near the lake to reduce the water used by these nonnative trees. The Forest Service holds some basin water rights that it has agreed to designate to benefit the lake. The Nevada Division of Wildlife is considering doing the same with its water rights. Finally, the Nevada Division of Water Planning has discussed the development of a basinwide plan for the river with the U.S. Army Corps of Engineers. According to a Bureau field office, official water for Walker Lake will probably be a key point in the plan.

No formal efforts are under way to obtain additional water for Walker Lake from Mount Grant's surface water. Walker River is the main source of water for the lake, and according to depot officials, all the water from Mount Grant not used by the depot is already going into Walker Lake. Water from Mount Grant would provide only a limited amount of water for the lake. According to the depot's Integrated Natural Resource Management Plan, annual evaporation from the lake is about 42 billion gallons, and the mountain supplies less than 1 billion gallons annually. However, Bureau officials in Nevada would like the Army at Hawthorne to seek additional underground water from a source south of the depot outside of the withdrawn area and send some of the water they now collect from the mountain to Walker Lake.

Environmental Contamination on Withdrawn Lands

About 123 contaminated sites have been identified on the withdrawn lands at the depot. Through 1999, the Army has spent approximately $22 million to cleanup these sites and estimates spending about $52 million more to complete cleanup by 2009.[1] Four sites on Mount Grant have been identified as containing contamination due to military activities, and one historic mining site on Mount Grant is a possible source of mercury contamination. In addition, the southern end of Walker Lake has been contaminated through the military firing live ammunition into the lake waters, and two contaminated water plumes north of the munitions storage buildings pose an unknown hazard to the lake.

According to an Army installation assessment performed at the depot and issued in August 1977, the four sites on Mount Grant contaminated from military activities are

- the Marine Corps Rifle Range,
- the Police Pistol Range,
- the Naval Inshore Operations Training Command Maneuver Area, and
- the Cottonwood Canyon/Camp Dixie Marine Maneuver Areas.

The assessment states that all of these areas contain small arms debris, including live ammunition, spent cartridges, blanks, and ball ammunition. The Naval Inshore area (which lies between the rifle and pistol ranges) is considered to be the most dangerous and hazardous unexploded ordnance area at the depot (one death has been recorded because of intrusion into this posted area). The Naval Inshore area, which has not been used since the early 1970s, is reported to contain high-explosive grenade and mortar rounds in addition to other dangerous ordnance. Army records indicate that, at least on one occasion, munitions other than small arms debris were removed from the Cottonwood Canyon/Camp Dixie area, and reportedly dynamite has also been found in the area, left over from mining operations existing when the lands were originally purchased by the military (between 1929 and 1955).

[1] Fiscal Year 1999 Defense Environmental Restoration Annual Report to Congress, Department of Defense.

As Walker Lake has receded, it created a beach at the southern shore, where from the 1940s through the early 1980s the military tested live ammunition (mostly ground-launched rockets). The Nevada Division of Environmental Protection has placed the area, including part of the lake surface, off limits because of the danger of unexploded ordnance. Many munitions have been removed, and the Army, on the basis of an agreement with the Division, performs quarterly sweeps of the beach area. Navy divers have surveyed the southern portion of the lake and found that additional large quantities of munitions still remain. According to an Army study of the lake, water, sediment, and fish tissue samples collected from the impact area and a control area in the lake did not show any adverse environmental effects from the munitions testing.[2] In addition, two depot groundwater plumes south of the lake and north of the munition storage buildings contain nitrate and hydrocarbons, posing uncertain contamination risk to the lake.

Most of the contaminated sites are on depot lands that the Bureau proposes to remain withdrawn. The Naval Inshore area and the rifle and pistol ranges, while in the area the Bureau proposes to terminate will not be transferred to the Bureau. However, the Bureau's proposal does call for the Cottonwood Canyon/Camp Dixie area to be transferred. This area encompasses a large part of the western side of Mount Grant.

[2] *Receiving Water Biological Study 32-EE-2435-95 Environmental Sampling of Hawthorne Firing Range on Walker Lake, Hawthorne Army Depot, Hawthorne, Nevada*, Army Center for Health Promotion and Preventive Medicine (May 1995).

Objectives, Scope, and Methodology

Our objectives were to identify the status of a land withdrawal termination proposal made by the Carson City field office of the Bureau of Land Management and the different management approaches that could be adopted for the disputed land.

To identify the status of the proposal by the Bureau's field office, we obtained current Bureau and Army documents, including a copy of the field office's withdrawal review report and the Army's response to the report. We interviewed Department of the Interior and Bureau of Land Management officials in Washington, D.C., and officials in the Bureau's state office in Reno, Nevada, and in its field office in Carson City, Nevada. For the Army's response, we interviewed officials from the Deputy Under Secretary of Defense for Environmental Security's office, the Assistant Chief of Staff of the Army for Installation Management's office, and the Army Material Command; the Army Corps of Engineers' offices in Sacramento, California; and Army representatives from Hawthorne Army Depot, Hawthorne, Nevada.

To identify the current and proposed land uses and management approaches for the disputed acreage, we reviewed legislation and regulations governing how public and withdrawn lands can be managed. We reviewed documents such as the Bureau's withdrawal review field report and the Army's response to the report, the Hawthorne Army Depot's Integrated Natural Resource Management Plan and its Cultural Resources Management Plan, and the draft Interagency Handbook for the Joint Stewardship of Withdrawn or Permitted Federal Lands Used by the Military. We interviewed Department of Defense, Department of the Interior, and State of Nevada officials. For additional information and opinions on joint management, we interviewed Bureau officials at the field office, Las Cruces, New Mexico; Army officials at Fort Bliss, Texas; Walker River Paiute Indian Tribe representatives in Schurz, Nevada; and the Chair of the Mineral County Commission, Hawthorne, Nevada.

We performed our review from December 1999 through September 2000 in accordance with generally accepted government auditing standards.

Comments From the Department of Defense

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

August 29, 2000

Mr. David R. Warren
Director
Defense Management Issues
National Security and International Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Warren:

This is the Department of Defense response to the General Accounting Office (GAO) draft report, "Federal Facilities: Proposals for Managing Hawthorne Army Depot," dated August 14, 2000 (GAO Code 7099441/OSD Case 2065).

The Army concurs with the GAO recommendation that Hawthorne Army Depot and the Bureau of Land Management's Carson Field Office consider a cooperative approach to managing the Mount Grant watershed lands. Both organizations should work together to develop goals and milestones and to identify advantages and disadvantages of various uses of the area.

We look forward to reviewing the Carson Field Office's detailed plan for managing the Mount Grant watershed. The Bureau has indicated to the Army and to the general public that management of the area would not change prior to completion of their detailed study. The study would be an excellent tool to consider during our discussions.

The Mount Grant watershed is the critical water source for Hawthorne Army Depot. A degradation in water quality would require the Army to spend millions of dollars to construct, and hundreds of thousands dollars annually to operate, a water filtration system.

We look forward to working with the Bureau and the Carson Field Office to assure protection of this vital resource.

Sincerely,

Paul W. Johnson
Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

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Comments From the Department of the Interior

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

In Reply Refer to:
2100 (350/830)

AUG 30 2000

Mr. David R. Warren
Director, Defense Management Issues
General Accounting Office
Washington, D.C. 20548

Dear Mr. Warren:

Thank you for the opportunity to review and comment on the draft audit report entitled **FEDERAL FACILITIES: Proposals for Managing Hawthorne Army Depot Lands (GAO/NSIAD/RCED-00-251)**. We agree, in general, with the findings and recommend the following change:

Page 3, BACKGROUND, first paragraph:

We recommend rewording this paragraph by adding the following two paragraphs between the fourth sentence ending with ("...continued or terminated.") and the fifth sentence beginning with ("The Bureau's Field Office in Carson City, . . .").

> The BLM has two distinct withdrawal review authorities. One is the general withdrawal authority of the Secretary of the Interior as provided in Section 204(a) of the Federal Land Policy and Management Act of 1976 (FLPMA) and delegated to the BLM, with policy guidance, in Part 603 of the Department Manual. A withdrawal revocation may be processed under this authority only with the consent of the agency for which the lands were withdrawn.
>
> The other authority is the stand alone statutory authority in Section 204(l) of FLPMA that allows the Department of the Interior to make a recommendation for termination even if the agency with the withdrawn lands disagrees with the Department's recommendation. It is this authority that is being used by the BLM Carson City Field Office to review the Hawthorne Army Depot withdrawal.

2

If you have any questions, please contact Dwight Hempel, BLM Realty Specialist, at (202) 452-7778 or Pamela Cleary, BLM Acting Audit Liaison Officer at (202) 452-5196.

Sincerely,

Kathy Kayson

for Sylvia V. Baca
Assistant Secretary, Land and
Minerals Management

GAO Contacts and Staff Acknowledgments

GAO Contacts

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Acknowledgments

In addition to those named above, Brad Hathaway, Richard Meeks, Rudolfo G. Payan, and Mark Dowling made key contributions to this report.

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