UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 4, 2006

Chris Horyza, RMP Project Manager
Bureau of Land Management
21605 North 7th Avenue
Phoenix, AZ 85027

Subject: Draft Environmental Impact Statement (DEIS) for the Aqua Fria National Monument and Bradshow-Harquahala Resource Management Plan (RMP), Arizona (CEQ # 20050549)

Dear Mr. Horyza:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Our detailed comments are enclosed.

The project is a management plan that provides guidance on current and future management decisions for the Bureau of Land Management's (BLM) Phoenix Field Office. The planning area consists of the newly designated Agua Fria National Monument and the Bradshaw-Harquahala Planning Area, totaling over 3,000,000 acres of mixed ownership and jurisdictions. The area borders the rapidly-growing Phoenix Metropolitan area and contains unique cultural and natural resources. Alternative E is BLM's preferred alternative.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). EPA is concerned with the health of riparian resources in the planning area, including water quality and soils, and with impacts to air quality from off-highway vehicle use in areas that currently do not meet air quality standards for particulate matter less than 10 microns (PM_{10}). We are also concerned that the resource management plan predicts resource conditions to deteriorate somewhat in the long term as recreation continues to increase in the planning area. While land protections and recreation management actions will help reduce impacts, the cumulative impacts from growth in the Phoenix area might offset the benefits from these management actions. Because of these threats, EPA recommends several changes to the preferred alternative to provide additional protections for resources, including riparian areas, air quality and wildlife.

BLM is to be commended for the extensive scoping that occurred for this project, including the innovative community visioning exercises. The DEIS was well written and impacts were well documented. However, the presentation of alternatives would have benefited from an expanded use of tables to present the differences between the alternatives more clearly,

such as was presented in Table E-1 but with more detail. The comparison of alternatives was facilitated, however, by the excellent collection of maps that were included.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3988 or Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

/s/

Duane James, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosure: EPA's Detailed Comments
Summary of EPA Rating Definitions

EPA DETAILED COMMENTS ON THE DRAFT RESOURCE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT FOR AGUA FRIA NATIONAL MONUMENT AND THE BRADSHAW-HARQUAHALA PLANNING AREA, ARIZONA, APRIL 4, 2006

WATER QUALITY AND RIPARIAN RESOURCES

Riparian health

The Draft Environmental Impact Statement (DEIS) indicates that of the 47 miles of riparian corridor in the Aqua Fria National Monument ("Monument"), over 29 miles of corridor were identified as not being in proper functioning condition (PFC) in a 1995 assessment. Instead, these segments were classified as "functional-at risk" with 13.1 miles showing no trend or a downward trend away from PFC. In Bradshaw-Harquahala, half the riparian corridors were classified as not in PFC (42.5 of 92 miles were functional-at risk and not in an upward trend, and 2.5 miles classified as non-functional) (p. 397). It is not clear from Appendix Q1/Q2 where these non-PFC segments are located. These segments should receive higher protections from livestock grazing, OHV use, road impacts, and mining impacts.

Recommendation:

In the Final Environmental Impact Statement (FEIS), map or provide descriptive information regarding the location of riparian segments in the planning area that are not in PFC. Discuss additional protections for these areas and modify the preferred alternative to include these mitigations. For example, if livestock are a cause of preventing attainment of PFC, year-round restrictions on grazing in these riparian areas should be implemented; if off-highway vehicle (OHV) use is implicated, stricter land designations should be associated with those areas, etc.

Specifically, since 61% of the riparian corridor in the Monument is not in PFC, BLM should modify the preferred alternative to include the designation of the Agua Fria Riparian Corridor Area of Critical Environmental Concern (ACEC), which encompasses the entire river corridor and tributaries within the Monument. This designation would eliminate grazing in the riparian areas of the Monument, encouraging revegetation of disturbed areas and improving hydrologic function (p. 473). This designation would also reduce OHV impacts to native vegetation, streambanks, and water quality, and help maintain Wild and Scenic River (WSR) values (p. 474). Wildlife species and habitat would also benefit, including the Gila chub, yellow-billed cuckoo and other priority species (p. 485).

Water Quality Standards

The Clean Water Act (CWA) requires states to develop a list of water segments which do not or are not expected to meet applicable water quality standards, establish a priority ranking of those segments, and develop action plans called Total Maximum Daily Loads (TMDLs) to improve water quality. The DEIS states that surface water quality in the planning area has been determined by the Arizona Department of Environmental Quality (ADEQ) in most cases to be impaired, containing pollutants above EPA standards, and that turbidity, arsenic, and fecal

coliforms are the most common pollutants contributing to these impaired streams (p. s-xiii). The DEIS also states that prescriptions for soil, air, and water resources would protect water quality to meet Federal and State standards for designated uses (p. 475). The DEIS does not discuss CWA 303(d) listings in the project area, whether TMDLs have been established for those water bodies, how the proposed project will coordinate with existing protection efforts, and what impact the proposed project might have on meeting CWA Section 303 goals.

Recommendation:

The FEIS should provide information about all CWA Section 303(d) impaired waters and efforts to develop TMDLs in the project area, existing restoration and enhancement efforts for those waters and and how the project will coordinate with these efforts. The FEIS should adopt mitigation measures that will be implemented in order to avoid further degradation of impaired waters. For example, if streams are listed for turbidity, roads densities in those watersheds should be reduced, especially roads close to streams that have a higher probability of increased peak flows and sediment yield. Management prescriptions should also focus on reducing the sediment load by eliminating land disposal in these areas, providing more protective designations, and eliminating grazing year-round for associated riparian areas.

Roads

The 2003 recreation use study by Arizona State University West for the Phoenix Field Office area showed respondents have less interest in motorized activities in the Monument. The Monument visitor profile showed a greater interest in hiking and walking, nature study, visiting cultural sites, dispersed camping and wildlife and bird watching. Unregulated OHV use and off-road vehicles ranked first and second respectively for social concerns among respondents. Strong preferences for developing visitor support facilities, services, and interpretation were also expressed.

While designating the Bloody Basin Back Country Byway provides for visitor interpretation preferences, it could also affect segments of the Agua Fria River suitable for WSR designation (428-429) and impact water quality. The DEIS states that the preferred alternative is expected to result in some water quality degradation in the Monument from disturbances created by OHV's entering stream channels near road crossings and from the effects of sediment delivery from roadways into stream channels (p. 472, 474). Since there is less interest in motorized activities in the Monument, road closures that prevent OHV impacts should be maximized. Any additional water quality degradation in corridors that may already be "at-risk" should be avoided.

Recommendation:

BLM should reconsider the designation of the Bloody Basin Back Country Byway in the preferred alternative to prevent water quality degradation and protect WSR values. If the Byway is designated, EPA recommends the impacts be further mitigated with additional road closures in the Monument to prevent water quality degradation. Roads selected for closure should occur near at-risk riparian corridors.

Riparian protections

The preferred alternative protects 1.7 miles of riparian habitat in ACECs and Wildlife Habitat Areas (WHAs) (Table 4-5, p. 485). This is substantially smaller than the amount of riparian protection proposed under Alternatives C or D. Because of multiple risks to riparian resources from cumulative impacts and existing at-risk conditions, BLM should consider designation of additional ACECs and WHAs that provide more protection for riparian corridors.

Recommendation:

EPA recommends the preferred alternative be modified to include additional ACECs and WHAs that will provide protection for additional riparian corridors.

We also recommend that the tributaries to the Agua Fria River be studied to determine eligibility for Wild and Scenic River Designation, as indicated under Alternatives C & D.

SOILS

The DEIS indicates that some road routes in the Monument that would be opened are located in areas with high erodibility potentially (ranging up to very severe potential, p. 450). The DEIS does not indicate where these areas are located or whether all routes in high erodibility areas will be closed.

Recommendation:

In the FEIS, identify locations of high erodibility soils. If routes in these areas will be open, apply additional mitigation to reduce impacts from OHVs such as additional route closures, or changing land designations (from Front Country Recreation Management Zone (RMZ) to Back Country RMZ, for example).

The DEIS states that in the Bradshaw-Harquahala planning area, the permitted recreation activity causing the most disturbance to soils are the 3 motorized competitive races/year (p. 451). The preferred alternative allows for an increase of motorized competitive races to 8 per year. The disturbance from these activities includes: more visible depressions, holes, rills and deep ruts forming; larger gullies forming due to poor drainage in heavy rains; vehicles churning up soils on the routes; breaking soil crusts due to vehicle passing, accidents, and course cutting; and soil berms created at curves leading to increased wind and water erosion. Once arid desert soil crusts are disturbed and barren soil is exposed, they can take a long time to recover (p. 451).

Recommendation:

We recommend reducing the amount of races in the preferred alternative to maintain the current level of 3/year to protect soil and water resources, especially in previously undisturbed areas. If the demand for more motorized competitive races in the future

forces consideration for an increase, this could be evaluated at that time in a subsequent NEPA document.

AIR QUALITY

OHV impacts in PM_{10} nonattainment area

The southern half of Hieroglyphic Mountains Special Recreation Management Area (SRMA) lies in an area designated as nonattainment for the National Ambient Air Quality Standard (NAAQS) for particulate matter less than 10 microns (PM_{10})(Map 2-26, 3-3). The DEIS states that designating this area as an SRMA could concentrate off-highway vehicle (OHV) use, and generate fugitive dust. Alternative D's approach that would phase out motorized uses in the southern half of the Castle Hot Springs Management Unit would reduce air quality impacts from these sources. Since a portion of the southern half of this management unit is designated nonattainment for PM-10, reducing sources of fugitive dust in this area should be a priority.

Recommendation:

BLM should consider adopting the approach outlined in Alternative D that phases out motorized activity in the southern half of the Castle Hot Springs Management Unit. At a minimum, the following mitigation should be adopted to reduce OHV impacts to air quality in the PM_{10} non-attainment area: (1) Motorized competitive races should not occur in the PM_{10} non-attainment area, and (2) BLM should prohibit all OHV use in the PM_{10} non-attainment area of Bradshaw-Harquahala on days the Arizona Department of Environmental Quality forecasts high pollution days in its dust forecasts.

Fugitive dust

The DEIS states that on a countywide basis, OHVs generate much fugitive dust and tailpipe emissions. Most of these emissions occur in remote rural areas and are unlikely to contribute to any meaningful regional air quality impacts affecting nonattainment or sensitive downwind areas (p. 457). The basis for this conclusion is not clear. Because Phoenix may not make its 12/31/2006 attainment date for PM_{10} NAAQS, stricter measures may be warranted for the Phoenix area and it is possible that OHV use might be among the new sources regulated to control dust emissions. As such, more information should be provided in the FEIS to quantify estimated emissions where possible and justify conclusions of insignificance.

Recommendation:

Provide information in the FEIS regarding locations where most OHV emissions occur and how this information was gathered. Estimate PM_{10} emissions from OHV use if possible, and discuss how SRMAs will be managed to reduce air quality effects including fugitive dust. Suggested controls could include the use of gates, fences, and other barriers to exclude use on high pollution days, or requiring permits to limit OHV use.

The DEIS states that utilities permitted in the utility corridor would generate fugitive dust impacts and would implement dust control best management practices. EPA recommends *all* construction associated with the Resource Management Plan, including ongoing maintenance, permitted activities etc., utilize dust control measures. The FEIS should reference Maricopa County's dust control measures, some of which apply to all areas of the county, not just in nonattainment areas.

General Conformity

The DEIS indicates that the General Conformity rule applies to land disposal if such land disposal triggers induced population growth that would increase regional air emissions in the Phoenix nonattainment area for ozone and PM-10. The DEIS then concludes that BLM's land disposal actions satisfy the general conformity rule because the regional air quality plans account for the associated emissions increases. First, we note that land disposal is a type of action that is exempt from the General Conformity rule (regardless of induced population effects) so long as the applicable Federal agency has no practicable control, nor continuing program responsibility, over the land subsequent to its transfer. See 40 CFR 93.153(c)(2)(xiv).

The General Conformity discussion in the DEIS, however, does not address any emissions-generating activities (other than those associated with land disposal), and the General Conformity rule *does* require an applicability determination by BLM for all emissions caused by the adoption and implementation of the RMP that are generated within nonattainment or maintenance areas, that are reasonably foreseeable, and that BLM can practicably control and will maintain control over due to a continuing program responsibility. A formal conformity determination consistent with the criteria set forth at 40 CFR 93.158 is required for any such emissions that exceed the applicable de minimis threshold.

Recommendation:

A complete analysis is required to determine if the emissions associated with the Federal action (both construction and operational emissions) are subject to the requirements for a formal conformity determination under the General Conformity rule codified at 40 CFR 93, subpart B. The "applicability" analysis involves quantification of emissions caused by a Federal action that are generated within nonattainment or maintenance areas, that are reasonably foreseeable, and that the Federal agency can practicably control and will maintain control over due to a continuing program responsibility. A formal conformity determination is then required for all such emissions that exceed de minimis thresholds set forth in the rule.

Emissions-generating activities covered by the rule would presumably include, but not be limited to, construction of new facilities, OHV use, and prescribed burning caused by implementation of the RMP. In this instance, the applicable pollutants and geographic areas include CO emissions generated within the CO "maintenance" area, VOC and NOx emissions generated within the 8-hour ozone nonattainment area, and PM-10 emissions generated within the PM-10 nonattainment area.

The general conformity determination should include the correct de minimis levels. The applicable de minimis thresholds are 100 tons per year for CO, 100 tons per year for 8-hour ozone precursors (VOC or NOx), and 70 tons per year for PM-10. Such an applicability determination (and conformity determination if necessary based on the applicability determination) must be completed for at least the alternative that BLM intends to select prior to BLM's action on the RMP. If the determination is completed before the FEIS is published, it should be included as an appendix to the FEIS.

Updates on Air Quality Status

The Air Quality section of Chapter 3 was out of date. The following updates should be integrated into the FEIS.

Section 3.4.2 – Air Resources
In the discussion of air quality standards (2nd paragraph), the FEIS should note that the Maricopa Association of Governments (MAG) was designated by the Governor as the lead air quality planning agency for the Phoenix metropolitan area, and prepares air quality plans for nonattainment area pollutants.

The second bullet on page 394 should note that ADEQ and Maricopa County develop regulations to reduce emissions from industry, and that Maricopa County develops fugitive dust regulations for construction and commercial operations. MAG also accounts for new Maricopa County air regulations as well as new ADEQ regulations in forecasting future pollutant emissions throughout the region.

The last paragraph of Section 3.4.2 should note that Maricopa County is considered in nonattainment for two criteria pollutants, including PM10 and 8-hour ozone, and has an approved maintenance plan for carbon monoxide and 1-hour ozone, although the 1-hour ozone standard was revoked on June 15, 2005.

Section 3.4.2.1 – PM_{10}
The following information should be added to the discussion on PM_{10} attainment status.

In September 2005, EPA received additional PM_{10} control measures from ADEQ for the Salt River SIP, a portion of the Phoenix nonattainment area. These measures, when approved by EPA, will apply in the entire Phoenix PM_{10} nonattainment area.

As mentioned above, the Phoenix area had a number of exceedances and violations of the PM_{10} NAAQS in November and December 2005 and in January 2006. Based on this preliminary information (quality assured monitoring data will not be available until early April 2006), all indications are that Phoenix will not make its 12/31/2006 attainment date. This means that a CAA section 189(d) plan, or "5% plan" will be due on 12/31/2007. This plan will need to show emissions reductions of 5% per year until attainment of the PM_{10} standard can be shown.

The paragraph on page 395 should note that the MAG 1999 Serious Area Carbon Monoxide Plan, determined complete by EPA on October 9, 2001, set forth required actions for Phoenix to reach attainment with Federal carbon monoxide standards by December 31, 2000. On October 8,

2004, EPA proposed approval of the *Revised MAG 1999 Serious Area Carbon Monoxide Plan* and the *MAG Carbon Monoxide Redesignation Request and Maintenance Plan (May 2003)* at 68 FR 60328. EPA finalized this action on March 9, 2005 at 70 FR 11553.

Section 3.4.2.2 Ozone

The last sentence of the first paragraph should be updated to note that on March 21, 2005, EPA proposed approval of MAG's *Final Serious Area Ozone State Implementation Plan for Maricopa County*, and MAG's *One-Hour Ozone Redesignation Request and Maintenance Plan.* See 70 FR 13425. EPA finalized this action on June 14, 2004 at 70 FR 34362.

EPA designated areas for the new 8-hour ozone standard effective June 15, 2004. The Phoenix metropolitan area was designated as a "basic" Subpart I nonattainment area, with an attainment date of June 2009, and a SIP demonstrating attainment of this standard due in June 2007.

The map set for the RMP included maps identifying the areas of nonattainment for the PM_{10} NAAQS (Map 3-3) and for carbon monoxide (map 3-4), but no map was present that identified the nonattainment area for 8-hour ozone in the planning area. The 8-hour ozone nonattainment area can be seen at http://www.epa.gov/oar/oaqps/greenbk/az8.html. The FEIS should include a map or reference this website in Section 3.4.2.2.

WILDLIFE

Bloody Basin Back Country Byway

In addition to water quality impacts, the designation of the Bloody Basin Back Country Byway could impact wildlife. Bloody Basin Road crosses both arms of the pronghorn antelope movement corridor that connects habitat from Agua Fria to habitat in the Prescott and Tonto National Forests. Increasing use on this road could impede pronghorn movement and behavior (p. 483). The Agua Fria National Monument proclamation prioritizes biological resources when conflicts arise between wildlife management and other land uses (p. 491).

Recommendation:

As recommended above, if the Bloody Basin Road Back Country Byway is designated, additional roads in the Monument should be closed, focusing on those near riparian corridors “at-risk”. Priority closure should also be given to roads that are within the pronghorn movement corridor (Map 2-34).

Land Disposal

The DEIS states that impacts to biological resources from lands and realty actions for the preferred alternative are the same or similar as under Alternative B (pp. 306, 488), which would dispose of over 10,000 acres of desert tortoise habitat (pp. 307, 487). Land disposal is expected to result largely in residential development (p. 616), which could impact vegetation, water quality through increased erosion and sediment yield, and soil productivity (pp. 294, 447, 474).

The scoping that occurred for this RMP showed that the most common comment received by the public for the Bradshaw-Harquahala area concerned lands and reality. According to the DEIS, the public wants public lands to remain public, and the transfer of land title to private land owners is generally considered undesirable (p. s-viii). Map 2-78 shows some parcels suitable for disposal that appear to be adjacent to the Agua Fria River. Land disposal would also reduce available rangeland by 4%.

Recommendation:

EPA recommends the preferred alternative be modified to include purchase restrictions for lands slated for disposal that contain desert tortoise habitat or that are adjacent to the Agua Fria riparian corridor. Disposed lands that contain desert tortoise habitat should be restricted to purchasers that would provide a similar level of habitat protection as BLM-owned land. Lands adjacent to the Agua Fria River north of Glendale should contain development restrictions to protect riparian areas and water resources from development impacts. BLM should reconsider disposing of functional rangeland.

Additional Wildlife Protections

EPA recommends the following changes to the preferred alternative for the protection of wildlife:

- Close Harquahala Mountains ONA ACEC to livestock grazing during Big Horn Sheep lambing season, as identified under Alternative C. This would increase wildlife forage quality and availability and eliminate forage competition between Big Horn Sheep and lifestock during the critical lambing season (p. 498).

- Designate the Upper Agua Fria River Basin WHA to improve pronghorn and mule deer movement, and provide thousands of acres of Category I desert tortoise habitat (p. 308).

- It is not clear if the preferred alternative would restrict motorized events in Category II desert tortoise habitat (p. 309). The preferred alternative should include similar tortoise protections if applicable.

MISCELLEANOUS

The table on page 293, Section 4.8.1 includes acreages for ACECS that are inconsistent with the acreage in Table 4-3.