

APPENDIX B: BEST MANAGEMENT PRACTICES

BMPs are innovative, dynamic, and improved environmental protection practices applied to resource management activities to help ensure that those activities are conducted in an environmentally responsible manner. When incorporated into standard operating procedures, BMPs can protect resource values and public health by avoiding, minimizing, and/or mitigating impacts.

Some BMPs are as simple as careful siting of facilities so that they blend in with the natural surroundings, others involve safe application of herbicides, while others involve careful monitoring of cultural and natural resources. BMPs are based on past experience and practices and continue to improve over time, building on new techniques and creative strategies for resource management. BMPs are not one size fits all. They should be developed in response to specific requirements of an activity or project and the site-specific conditions and needs. The following sections provide general guidance on BMPs that will be appropriate for the YFO.

1.1 SPECIAL DESIGNATIONS

BLM manages designated Wilderness according to requirements of the Wilderness Act and provisions of designating legislation. Guidelines and operating procedures for all management activities in Wilderness Areas are provided in *BLM Manual 8560—Management of Designated Wilderness Areas*, and in Wilderness management plans, where completed for specific Wilderness Areas. Requiring the completion of a *Minimum Requirements Decision Guide* prior to completing non-emergency actions within Wilderness will further ensure that impacts to wilderness values are minimized.

In Wilderness Areas minimum impact suppression tactics will be applied and coordinated with Wilderness Area management objectives and guidelines when fire suppression actions are required (National Interagency Fire Center 2007).

1.2 VEGETATION TREATMENTS

The following chemical, mechanical, manual, biological, and fire treatment methods will be used to achieve vegetation management objectives in the planning area.

A. CHEMICAL TREATMENT

YFO will use Environmental Protection Agency-approved herbicides in accordance with the Endangered Species Pesticide Program covered in the BLM's Vegetation Treatment on BLM Lands in Thirteen Western States FEIS (USDO IBLM 1991) and further limited to those approved for use by this document's ROD. These herbicides are Atrazine; Bromacil; Bromacil + Diuron; Chlorsulfuron; Clopyralid; 2,4-D, Diacamba; Dicamba +2,4-D; Diuron; Glyphosate; Glyphosate + 2,4-D; Hexazinone; Imazapyr; Mefluidide; Metsulfuron Methyl; Picloram; Picloram + 2,4-D; Simazine; Sulfometuron Methyl; Tebuthiuron; and Triclopyr. This list may be amended to accommodate subsequent updates to the herbicide EIS. Treatments will follow Standard Operating Procedures on pages 1-19 through 1-32 and project design features on pages 1-33 through 1-37 of the *Environmental Impact Statement for Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the BLM in the Western United States, including Alaska* (USDO IBLM 1991). Additionally, project design features, including buffer strips described on page 10 of the above mentioned ROD, as follows: Buffer zones will be used adjacent to dwellings, domestic water sources, agriculture land, streams, lakes and ponds. A minimum buffer zone of 100 feet wide will be provided for aerial application, 25 feet for vehicle application and 10 feet for hand application (USDO IBLM 1991). Any deviations must be in accordance with the label for the herbicide. Herbicides will be hand wiped on individual plants within 10 feet of water where application is critical. Additionally, in order to protect listed, proposed, and candidate species, these buffer strips will be used.

YFO will work closely with the USFWS to ensure that herbicide applications will not affect listed or proposed, threatened, and endangered species on a project-level basis. If adverse effects are anticipated during informal consultation, YFO will formally consult on these projects. If USFWS develops herbicide guidance for particular species that improves protection beyond the current BLM design features, YFO will consider and incorporate that guidance as it consults with USFWS on a project-level basis. The chemicals can be applied by many different methods, and the selected technique depends on a number of variables. Some of these are (1) the treatment objective (removal or reduction); (2) the accessibility, topography, and size of the treatment area; (3) the characteristics of the target species and the desired vegetation; (4) the location of sensitive areas in the immediate vicinity (potential environmental impacts); (5) the anticipated costs and equipment limitations; and (6) the meteorological and vegetative conditions of the treatment area at the time of treatment.

Herbicides are applied in several ways, depending upon the treatment objective, topography of the treatment area, target species, expected costs, equipment limitations, and potential environmental impacts. Herbicide applications will be timed to have the least impact on non-target plants and animals consistent with the objectives of the vegetation management program.

The chemicals will be applied aurally with helicopters or fixed-wing aircraft, or on the ground using vehicles or manual application devices. Helicopters are more expensive to use than fixed-wing aircraft, but they are more maneuverable and effective in areas with irregular terrain and in treating specific target vegetation in areas with many vegetation types. Manual applications are used only for treating small areas, areas with sensitive cultural resources, or those inaccessible by vehicle.

Rates of herbicide application will depend on the target species, other vegetation present, soil type, depth of the ground water table, and presence of other water sources. When target species occur in riparian areas, the application rate will be reduced to reduce injury to non-target species.

The size of areas that will be treated may vary from 10 feet in diameter to 100 acres, but, most such areas will vary from 10 feet in diameter to less than five acres. The normal area of treatment by helicopter will be less than 100 acres.

During aerial applications, nozzles to reduce drift will be used for all liquid applications. Liquid herbicides will not be applied when wind speeds exceed five miles per hour (mph), and granular herbicides will not be applied when wind speeds exceed 10 mph. Herbicides will not be applied when conditions stated on the herbicide label cannot be met and when air turbulence significantly affects the desired spray pattern. Buffer zones (see Glossary) to protect water resources will be provided according to individual State regulations and guidelines and herbicide labels.

Vehicle-mounted sprayer (hand gun or boom) applications will be mainly used in open areas that are readily accessible by vehicle. The boom will be used only where feasible to treat concentrated weed infestations. The hand gun will be used for spot treatment of weeds and only up to the high water line near water bodies. Neither hand guns nor booms will be used in riparian areas where weeds are closely intermingled with shrubs and trees. Under both hand gun and boom methods, sprays will be applied in a manner that gives the best possible coverage with the least amount of drift, and only when wind velocity is below eight mph, except in riparian areas where treatment will be applied only at wind velocities below five mph. Boom sprayers will not be used within 25 feet of water bodies.

Hand applications could involve backpack spraying, hand wiping application, and cyclone broadcast spreading (granular formulations). Backpack sprayers are operated at low pressure and low volume and release herbicide through a single nozzle held from 0.5 to 2.5 feet above the ground when wind velocities do not exceed eight mph. Near water, wind velocities cannot exceed five mph. Contact systemic herbicides (see Glossary), such as glyphosate, wiped on individual plants, will be used up to the existing high water line. Granular formulations will be applied through broadcast spreaders at about 3.5 feet above the ground and no closer than 10 feet from the high water line of streams and other water bodies.

Herbicide applications are scheduled and designed to minimize potential impacts on non-target plants and animals, while remaining consistent with the objective of the vegetation treatment program. The rates of application depend on the target species, presence, and condition of non-target vegetation, soil type, depth to the water table, presence of other water sources, and the requirements of the label.

In many circumstances, the herbicide chosen, time of treatment, and rate of application of the herbicide are different than the most ideal herbicide application for maximum control of the target plant species in order to minimize damage to the non-target plant species and to ensure minimum risk to human health and safety.

B. MECHANICAL TREATMENT

Mechanical methods of vegetation treatment employ several different types of equipment to suppress, inhibit, or control herbaceous and woody vegetation. The goal of mechanical treatments is to kill or reduce the cover of undesirable vegetation and thus encourage the growth of desirable plants. YFO uses wheel tractors, crawler-type tractors, mowers, or specially designed vehicles with attached implements for mechanical vegetation treatments. The use of mechanical equipment to reduce fuel hazards will be conducted in accordance with BLM established procedures. Re-seeding after a mechanical treatment has been applied and is important to help ensure that desirable plants will become established on the site and not invasive species. The mechanical treatment and re-seeding should occur at a time to best control the undesirable vegetation and encourage the establishment of desirable vegetation. The best mechanical method for treating undesired plants in a particular location depends on the following factors:

- Characteristics of the undesired species present such as plant density, stem size, woodiness, brittleness, and re-sprouting ability
- Need for seedbed preparation, re-vegetation, and improve water infiltration rates
- Topography and terrain
- Soil characteristics such as type, depth, amount and size of rocks, erosion potential, and susceptibility to compaction
- Climatic and seasonal conditions
- Potential cost of improvement as compared to expected results

Bulldozing is conducted with a wheeled or crawler tractor with a heavy hydraulic controlled blade. Vegetation is pushed over and uprooted, and then left in windrows or piles. Bulldozing is best adapted to removing scattered stands of large brushes or trees. There are several different kinds of blades available depending on the type of vegetation and goals of the project. The disadvantage of bulldozing is soil disturbance and damage to non-target plant species.

Disk plowing in its various forms can be used for removing shallow-rooted herbaceous and woody plants. Disk plows should only be used where all of the vegetation is intended to be killed. There are several different kinds of root plows that are specific for certain types of vegetation. In addition to killing vegetation, disk plowing is effective in loosening the soil surface to prepare it for seeding and to improve the rate of water infiltration. The disadvantage of disk plowing is that it may be expensive and usually kills all species. Also, plowing is usually not practicable on steep slopes (greater than a 35 to 45 percent slope) or rocky soil. Plant species that sprout from roots may survive.

Chaining and cabling is accomplished by dragging heavy anchor chains or steel cables hooked behind tractors in a U-shape, half circle or J-shaped manner. Chaining and cabling is effective on rocky soils and steep slopes. Chaining and cabling is best used to control non-sprouting woody vegetation such as small trees and shrubs. However, desirable shrubs may be damaged in the process. Herbaceous vegetation is normally not injured by this control method. This control

method is cost effective, as large areas can be readily treated. The chains or cables also scarify the soil surface in anticipation of seeding desirable species. The disadvantage is that weedy herbaceous vegetation can survive this treatment.

There are various tractor attachments that are used for mowing, beating, crushing, chopping, or shredding vegetation depending on the nature of the plant stand and goals of the project. The advantage in using this type of equipment is that selective plants may be targeted to achieve specific goals. For example, mowing is effective in reducing plant height to a desirable condition and it usually does not kill vegetation. Mowing is more effective on herbaceous than woody vegetation. On the other hand, a rolling cutter can kill woody non-sprouting vegetation by breaking stems at ground level but leave herbaceous vegetation. Mowing, beating, crushing, chopping, or shredding usually does not disturb the soil. Rocky soil and steep slopes may limit this use of equipment.

Debris management after a mechanical control treatment application is critical in fuel reduction projects. Vegetation material that is left onsite will dry and become more hazardous than before the treatment. Herbaceous material is usually not a problem, because it will decompose relatively fast depending on soil moisture, ambient humidity, and temperature. Woody vegetation should be piled and burned under acceptable fire management practices.

Efforts repeated every 21 days during the growing season can deplete the underground food supply of some perennials. This method will be required for at least a three-year period to attain satisfactory control and will be considered only in areas where slope is less than 10 percent and where a small percentage of the vegetation consists of shrubs. This method will also weaken non-target species in treated areas.

C. MANUAL TREATMENT

Hand-operated power tools and hand tools are used in manual vegetation treatment to cut, clear, or prune herbaceous and woody species. In manual treatments, workers will cut plants above ground level; pull, grub, or dig out plant root systems to prevent subsequent sprouting and re-growth; scalp at ground level or remove competing plants around desired vegetation; or place mulch around desired vegetation to limit the growth of competing vegetation. Hand tools such as the handsaw, axe, shovel, rake, machete, grubbing hoe, mattock (combination of axe and grubbing hoe), brush hook, and hand clippers are used in manual treatments. Axes, shovels, grubbing hoes, and mattocks can dig up and cut below the surface to remove the main root of plants such as prickly pear and mesquite that have roots that can quickly resprout in response to surface cutting or clearing. Workers also may use power tools such as chain saws and power brush saws.

Manual methods are highly labor intensive, requiring periodic retreatment, ranging from every three weeks during the growing season to annually, depending on the target species. These methods have been successful in controlling annuals and biennials, but are ineffective in controlling creeping perennials.

D. BIOLOGICAL TREATMENT

Biological methods of vegetation treatment could employ grazing by cattle, sheep or goats, but will not include the use of invertebrates or microorganisms. YFO will only use cattle, sheep, or goats when grazing, which will not adversely affect federally listed, proposed, or candidate species. The use of grazing as a biological control agent will be conducted in accordance with BLM procedures in the *Use of Biological Control Agents of Pests on Public Lands* (USDOI BLM 1990a). Grazing cattle, sheep, or goats will control few plant species.

Biological control methods using cattle, sheep, or goats will avoid erosion hazard areas, areas of compactable soils, riparian areas susceptible to bank damage, and steep erodible slopes. Domestic sheep and goats will not be used within nine miles of bighorn sheep habitat, per AGFD.

Biological control methods using cattle, sheep, or goats will be applied to treat areas for short periods. When considering the use of grazing animals as an effective biological control measure, several factors will be taken into consideration including:

- Target plant species present
- Size of the infestation of target plant species
- Other plant species present
- Stage of growth of both target and other plant species
- Palatability of all plant species present
- Selectivity of all plant species present by the grazing animal species that is being considered for use as a biological agent
- Availability of the grazing animal within the treatment site area
- Type of management program that is logical and realistic for the specific treatment site

These factors will be some of the options taken when developing the individual treatment for a specific site.

Although discussed as biological agents, cattle, sheep, and goats are not truly biological agents, but are domestic animals used to control only the top growth of certain noxious weeds. The following are some advantages of using domestic animals, mainly sheep or goats, for noxious weed control: (1) they use weeds as a food source, (2) following a brief adjustment period, they sometimes consume as much as 50 percent of their daily diet of this species, (3) average daily gains of offspring grazing certain weed-infested pastures can sometimes be significantly higher than average daily gains of offspring grazing grass pastures, and (4) sheep or goats can be used in combination with herbicides.

Some of the disadvantages of using domestic animals are that (1) they also use non-target plants as food sources, (2) the use of domestic animals, like sheep or goats, requires a herder or temporary fencing, (3) the animals may be killed by predators such as coyotes, (4) heavy grazing of some weed species, such as leafy spurge, tends to loosen the stool of the grazing animals,

- (5) most weed species are less palatable than desirable vegetation and will cause overgrazing,
- (6) they may accelerate movement of nonnative plants through seed ingestion and excretion, and
- (7) domestic livestock may transmit parasites and/or pathogens to resident native wildlife species.

E. PRESCRIBED BURNING

Prescribed burning is the planned application of fire to wild land fuels in their natural or modified state, under specific conditions of fuels, weather, and other variables to allow the fire to remain in a predetermined area and to achieve site-specific fire and resource management objectives.

Management objectives of prescribed burning include the control of certain species; enhancement of growth, reproduction, or vigor of certain species, management of fuel loads, and maintenance of vegetation community types that best meet multiple-use management objectives. Treatments will be implemented in accordance with BLM procedures in Fire Planning, Prescribed Fire Management, and Fire Training and Qualifications.

Prior to conducting a prescribed burn, a written plan must be prepared that takes into consideration existing conditions (amount of fuel, fuel moisture, temperatures, terrain, weather forecasts, etc.) and identifies people responsible for overseeing the fire. Potential effects to sensitive cultural resources, including sites that are especially susceptible to damages from fire, such as rock art or historic sites with wooden components, must also be considered. Planning and implementation for a specific prescribed fire project entails the following four phases:

Phase 1. The Information/Assessment Phase includes identifying the area to be treated, inventorying and assessing site specific conditions (live and dead vegetation densities, dead down woody fuels loadings, soil types, etc.), analyzing historic and present fire management, identifying resource objectives from LUPs, and analyzing and complying with NEPA.

Phase 2. The Prescribed Fire Plan Development Phase includes developing a site specific prescribed fire plan to BLM Standards. It also includes reviews of the plan and obtaining plan approval from local BLM field office administrators.

Phase 3. The Implementation Phase includes ignition of the fire according to the plan's prescribed parameters. Implementation includes prescribed fire boundary area preparation to ensure that the fire remains in prescribed boundaries. Site preparation may take place in the form of fire line construction, road improvements, wildlife and stock trails, tree limbing, and debris clearing.

Phase 4. The Monitoring and Evaluation Phase includes assessment and long-term monitoring of the fire treatment to ensure that the prescribed fire has met the objectives of the approved prescribed fire plan. BLM fire monitoring policy is described in the BLM prescribed *Fire Management Handbook*, October 2003, Chapter 2 and Appendix 7. This policy applies to prescribed fire and wildland fire use.

1.3 APPROPRIATE MANAGEMENT RESPONSE TO WILDLAND FIRES

The AMR concept represents a range of available management responses to wildland fires. The entire planning area will be managed as non-fire use. Responses range from full fire suppression to managing fires for resource benefits (fire use). Management responses applied to a fire will be identified in the fire management plans and will be based on objectives derived from the land use allocations; relative risk to resources, the public and fire fighters; potential complexity; and the ability to defend management boundaries. Any wildland fire can be aggressively suppressed, and any fire that occurs in an area designated for fire use can be managed for resource benefits if it meets the prescribed criteria from an approved fire management plan.

1.4 WILDLIFE WATERS

Wildlife water developments will be constructed according to AGFD specifications (AGFD 2007).

1.5 SPECIES REINTRODUCTIONS AND TRANSPLANTS

Reintroductions and transplants are conducted pursuant to procedures in Manual Section 1745 and Master MOUs with AGFD and CDFG, as appropriate, for animals, and applicable agencies for plants. Reintroductions and transplants for federally listed species are done in cooperation with State agencies and the USFWS.

Typically, a suitability analysis is conducted to determine if sufficient habitat of appropriate quality is available. The cooperating agencies develop a proposed action for the reintroduction or transplant and incorporate agency (State and Federal) procedures. The NEPA process and other environmental compliance is initiated after the proposed action is developed. Upon completion of environmental compliance and approval process, the State agency takes the lead in trapping/acquiring (based on individual species requirements) wild animals from the healthy source population, transports captures to the reintroduction site (based on individual species transport requirements), and conducts a release. Follow-up monitoring ensues until agencies are satisfied the project was successful or until adaptive management is required (e.g., predator control, supplemental stocking, or other measures).

1.6 SPECIAL STATUS SPECIES

A. FLAT-TAILED HORNED LIZARD

1. Prior to project initiation, an individual shall be designated as a field contact representative. The field contact representative shall have the authority to ensure compliance with protective measures for the FTHL and will be the primary agency contact dealing with these measures. The field contact representative shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
2. All project work areas shall be clearly flagged or similarly marked at the outer boundaries to define the limit of work activities. All construction and restoration workers shall restrict their activities and vehicles to areas that have been flagged to eliminate adverse impacts to the FTHL and its habitat. All workers shall be instructed that their activities are restricted to flagged and cleared areas.
3. A biological monitor shall be present in each area of active surface disturbance throughout the work day from initial clearing through habitat restoration, except where the project is completely fenced and cleared of FTHLs by a biologist. The monitor(s) shall perform the following functions:
 - a) Develop and implement a worker education program. Wallet-cards summarizing this information shall be provided to all construction and maintenance personnel. The education program shall include the following aspects at a minimum:
 - biology and status of the FTHL
 - protection measures designed to reduce potential impacts to the species
 - function of flagging designating authorized work areas
 - reporting procedures to be used if a FTHL is encountered in the field
 - importance of exercising care when commuting to and from the project area to reduce mortality of FTHLs on roads
 - b) Ensure that all project-related activities comply with these measures. The biological monitor shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
 - c) Examine areas of active surface disturbance periodically (at least hourly when surface temperatures exceed 85°F) for the presence of FTHLs. In addition, all hazardous sites (e.g., open pipeline trenches, holes, or other deep excavations) shall be inspected for the presence of FTHLs prior to backfilling.

- d) Work with the project supervisor to take steps, as necessary, to avoid disturbance to FTHLs and their habitat. If avoiding disturbance to a FTHL is not possible or if a FTHL is found trapped in an excavation, the affected lizard shall be captured by hand and relocated.
4. Sites of permanent or long-term (greater than one year) projects where continuing activities are planned and where FTHL mortality could occur, may be enclosed with FTHL barrier fencing to prevent lizards from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing should be in accordance with the standards outlined in the *Rangewide Management Strategy*. After clearing the area of FTHLs, no on-site monitor is required.
5. Construction of new paved roads shall include a lizard barrier fence on each side of the road that is exposed to occupied FTHL habitat. Exceptions may occur in accordance with the following evaluation, to be applied separately to each side of the road. This prescription may also be applied to canals or other fragmenting projects.

Side is made nonviable for FTHLs even if connected to the other side:

- Compensate for the entirety of the fragmented parcel.

Side is viable only if connected to the other side:

- Compensate for the entirety of the fragmented parcel, or
- Provide fencing and effective culverts or underpasses that will maintain connectivity.

Side is viable even if not connected to the other side:

- Provide fencing (no culverts).

Specifications for barrier fences are provided in the *Rangewide Management Strategy*. The FTHL Interagency Coordinating Committee will make the determination of FTHL population viability based on the size, configuration, and habitat condition of the isolated parcel, threats from adjacent lands, and existing scientific evidence of edge effects on FTHL. Culvert design will be provided by the FTHL Interagency Coordinating Committee.

B. GILA MONSTERS

If any Gila monsters or desert tortoises are observed, their location shall be recorded and the sighting along with any information concerning the sighting shall be reported to the BLM wildlife biologist at the YFO.

C. SONORAN DESERT TORTOISES

a. Project activities shall be scheduled when tortoises are inactive (typically November 1 to March 1).

Within all categories of desert tortoise habitat, a desert tortoise protection education program shall be presented to all employees, inspectors, supervisors, contractors, and subcontractors who carry out proposed activities at the project site. The education program shall include discussions of the following:

- The legal and sensitive status of the tortoise
- A brief discussion of tortoise life, history, and ecology
- Mitigation measures designed to reduce adverse effects to tortoises
- Protocols to follow if a tortoise is encountered, including appropriate contact points

The project proponent shall designate a field contact representative (FCR) who shall be responsible for overseeing compliance with these mitigation measures and for coordination on compliance with the BLM. The FCR and authorized/qualified biologist(s) shall have the authority and the responsibility to halt all project activities that are in violation of these mitigation measures. The FCR shall be responsible for oversight of compliance with these mitigation measures, coordination with permitting agencies, land managers, and State Game and Fish Departments; and shall serve as a contact point for personnel that encounter desert tortoises. The FCR shall be on site during project activities and shall be familiar with and have a copy of these mitigation measures.

Prior to implementation of any BLM-authorized surface-disturbing activities, work sites shall be surveyed for desert tortoises by a qualified biologist approved by the BLM. Surveys shall be in accordance with standardized protocol approved by the BLM. For surface-disturbing activities occurring during the desert tortoise season (March 1 through November 1), surveys shall be conducted within 24 hours of initiation of surface-disturbing activities. The 100-percent surveys of new areas of disturbance shall be conducted a maximum of three times, or two consecutive times if no desert tortoises are found. During surveys, occupied desert tortoise burrows in or within 40 feet of areas to be disturbed shall be excavated using hand tools by an authorized biologist. Burrows discovered in areas to be disturbed by project activities shall be collapsed or blocked to prevent entry by tortoises (any tortoises in those burrows shall be relocated first). Desert tortoises and any desert tortoise eggs found in areas to be disturbed shall be relocated and handled in accordance with the following measures.

If a tortoise is found in a project area, activities shall be modified to avoid injuring or harming it. If activities cannot be modified, tortoises shall be moved from harm's way. Upon discovery of a desert tortoise in harm's way, the authorized biologist shall translocate the animal the minimum distance possible (but not more than 2 miles) within appropriate habitat to ensure its safety from death, injury, or collection associated with the project or other activities. The authorized biologist shall be allowed some discretion to ensure that survival of each relocated desert tortoise is likely. Desert tortoises shall not be translocated to lands outside the administration of the Federal government without the written permission of the landowner.

Handling procedures for desert tortoises shall adhere to protocols outlined in the *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona*.

Only biologists authorized by the BLM and the appropriate State Fish and Game Department shall handle desert tortoises. The holder shall submit the name(s) of the proposed authorized biologist(s) to the BLM for review and approval at least 45 days prior to the onset of activities that could result in a take.

The authorized biologist shall maintain a record of all desert tortoises encountered during project activities. This information shall include for each desert tortoise:

- The locations and dates of observation
- General condition and health, including injuries and state of healing and whether animals voided their bladders
- Location moved from and location moved to
- Diagnostic markings; i.e., identification numbers of marked lateral scutes

No notching of scutes or replacement of fluids with a syringe is authorized.

Vehicle use shall be limited to existing or designated routes.

Areas of new construction or disturbance shall be flagged or marked on the ground prior to construction. All construction workers shall strictly limit their activities and vehicles to areas that have been marked. Construction personnel shall be trained to recognize markers and understand the equipment movement restrictions involved.

Blading of new access or work areas shall be minimized. Disturbance to shrubs shall be avoided. If shrubs cannot be avoided during equipment operation or vehicle use, they shall be crushed rather than excavated or bladed and removed.

Project features that might trap or entangle desert tortoises such as open trenches, pits, open pipes, etc., shall be covered or modified to prevent entrapment. This may only be necessary during the tortoise active season and may be unnecessary if an on-site biologist is monitoring activities.

Construction sites shall be maintained in a sanitary condition at all times. The project proponent shall be responsible for controlling and limiting litter, trash, and garbage by immediately placing refuse in predator-proof, sealable receptacles. Trash and debris shall be moved when construction is complete.

After completion of the project, trenches, pits, and other features in which tortoises could be entrapped or entangled, shall be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises.

After project completion, measures shall be taken to facilitate restoration, where practicable. Restoration techniques shall be tailored to the characteristics of the site and the nature of project

impacts identified in the mitigation plan as developed by project biologists, AGFD, and permitting State and Federal agencies. Techniques may include removal of equipment and debris, recontouring, replacing boulders that were moved during construction, seeding, planting, transplanting of cacti and yuccas, etc. Only native plant species shall be used in restoration.

The project proponent shall submit a monitoring report to the BLM within 60 days of project completion. For long-term or ongoing projects that may result in continuing impacts to tortoises and habitat, annual monitoring reports shall be prepared. Monitoring reports shall briefly document the effectiveness of the desert tortoise mitigation measures, actual acreage of desert tortoise habitat disturbed, the number of desert tortoises excavated from burrows, the number of desert tortoises moved from construction sites, and other applicable information on individual desert tortoise encounters. The report shall make recommendations for modifying or refining the mitigation program to enhance desert tortoise protection and reduce needless hardship on the project proponents.

In accordance with *Compensation for the Desert Tortoise* (Desert Tortoise Compensation Team 1991), signed by the Desert Tortoise Management Oversight Group, authorizing agencies shall require compensation for residual impacts to desert tortoise habitat.

Oil, fuel, pesticides, and other hazardous material spills shall be cleaned up and properly disposed of as soon as they occur in accordance with applicable State and Federal regulations. All hazardous material spills must be reported promptly to the appropriate surface management agencies and hazardous materials management authorities.

Workers shall check under vehicles for desert tortoises before vehicles are moved. If tortoises are found, they shall be allowed to move out of harm's way on their own or shall be moved by an authorized biologist prior to moving the vehicle.

No unleashed pets (e.g., dogs) shall be allowed on the construction site.

On long-term or permanent projects in which continued encounters with desert tortoises are expected, such as construction of schools, factories, power plants, office buildings, and other permanent or long-term projects in moderate to high density desert tortoise habitat, the site shall be enclosed with desert tortoise barrier fencing to prevent tortoises from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing shall consist of wire mesh with a maximum mesh size of one-inch (horizontal) by two-inch (vertical) fastened securely to posts. The wire mesh shall extend at least 18 inches above the ground and preferably 12 inches below the surface of the ground. Where burial is not possible, the lower 12 inches shall be folded outward, away from the enclosed site, and fastened to the ground so as to prevent tortoise entry. Any gates or gaps in the fence shall be constructed and operated to prevent desert tortoise entry (such as installing tortoise guards similar to cattle guards, and/or keeping gates closed). Specific measures for tortoise-proofing gates and gaps shall be addressed project by project. Fencing is a relatively expensive mitigation measure and may not be appropriate in areas of very low tortoise density.

In desert tortoise habitat, project-related vehicles shall not exceed 25 miles per hour on unpaved roads.

New paved roads and highways or major modifications of existing roads through desert tortoise habitat shall be fenced with desert tortoise barrier fencing. Culverts, to allow safe passage of tortoises, shall be constructed approximately every one mile of new paved roads and railroads (culverts can also serve the more typical purpose of conducting water under roads and railroads). The culvert diameter needed to encourage tortoise use is correlated with culvert length, but generally short culverts of large diameter are most likely to be used. Culvert design shall be coordinated with the AGFD and authorized State and Federal agencies. The floor of the culvert shall be covered with dirt and maintenance shall be performed as necessary to maintain an open corridor for tortoise movement.

Use of roads constructed for specific nonpublic purposes such as access routes to microwave towers shall be gated to limit access.

Temporary access routes created during project construction shall be modified as necessary to prevent further use. Closure of access routes shall be achieved by ripping, barricading, posting the route as closed, and/or seeding and planting with native plants.

b. Projects Conducted During Tortoise Activity Period (Typically March 1 to November 1)

Within all categories of desert tortoise habitat, for projects conducted during normal tortoise activity period (typically March 1 to November 1), construction and operation activities shall be monitored by a qualified biologist (approved by the BLM). The biologist shall be present during all activities in which encounters with tortoises may occur. The biologist shall watch for tortoises wandering into construction areas, check under vehicles, check at least three times per day any excavations that might trap tortoises, and conduct other activities necessary to ensure that death and injury of tortoises is minimized.

Temporary fencing, such as chicken wire, snow fencing, chain link, and other suitable materials shall be used in designated areas to reduce encounters with tortoises on short-term projects, such as construction of power lines, burial of fiber optic cables, etc., where encounters with tortoises are likely.

D. SOUTHWESTERN WILLOW FLYCATCHER

To avoid disturbing birds during migration, activities in SWFL migratory habitat shall be avoided during spring migration (May 1 to June 30) and fall migration (August 15 to October 7).

1.7 LIVESTOCK GRAZING ACTIVITIES

Desired plant community objectives will be quantified for each allotment through the rangeland monitoring and evaluation process. Ecological site descriptions available through the USDA NRCS and other data will be used as a guide for addressing site capabilities and/or potentials for change over time. These desired plant community objectives are vegetative values that YFO is managing over the long term. Once established, desired plant community objectives will be updated and monitored based on indicators for the Land Health Standards. These standards were developed through a collaborative process and identify the characteristics of and the management actions needed to promote and sustain healthy ecosystems on public lands.

Monitoring studies would be used to determine conformance with the *Land Health Standards and Guidelines for Grazing Administration*. Monitoring studies generally include actual use, utilization, trend, and climate. The three management categories will be used to set priorities. These studies will be analyzed through the evaluation process to determine management actions needed to achieve standards and meet multiple-resource management objectives.

Rest rotation, deferred rotation, seasonal or short duration use, or other grazing management systems may be implemented where the need has been identified through monitoring. Monitoring will be used to assess the effectiveness of changes brought about by new management practices.

Intensity, season and frequency, and distribution of grazing use should provide for growth and reproduction of the plant species needed to reach desired plant community objectives.

Deferment of livestock will be considered where possible in cooperation with lease and permit holders. This deferment may allow for the use of prescribed fire or other vegetative treatments, or the use of the area as a grass bank to allow for rest in other grazing allotments.

Administrative vehicular access to repair range improvements by the grazing lessee will be authorized through issuance of the grazing permit.

One-time travel to access sick or injured livestock away from designated routes could be authorized to transport the individual to a medical facility.

Any compensation for a loss of range improvements within the pastures will be made in accordance with 43 CFR 4120.3-6.

Livestock management changes may be made when sufficient assessment, inventory, or monitoring data are available.

Fence construction and maintenance will follow guidance provided in the *BLM Handbook on Fencing* No. 1741-1.

1.8 TYPICAL RANGE OF HABITAT IMPROVEMENTS

Following is a discussion of typical design features, construction practices, and implementation procedures for range or habitat improvements. The extent, location, and timing of such actions will be based on allotment-specific management objectives adopted through the evaluation process, interdisciplinary development and analysis of proposed actions, and funding.

A. FENCES

All new fences will be built to BLM manual specifications. Fences will normally be constructed to provide exterior allotment boundaries, divide allotments in pastures, protect streams, and control livestock. Most fences will be three-wire or four-strand with steel posts spaced 16.5 feet apart with intermediate wire stays. Existing fences that create wildlife movement problems will be modified. Proposed fence lines will usually not be bladed or scraped. Gates or cattle guards will be installed where fences cross existing roads.

All new or reconstructed fences in big game habitat, including desert bighorn sheep habitat, will meet specifications in BLM Handbook 1741-1 or be designed to allow for the movement of big game, including desert bighorn sheep. YFO will consult with AGFD and CDFG on the design and location of new fences.

B. PIPELINES

Wherever possible, water pipelines will be buried. The trench will be excavated by a backhoe, ditch witch, or similar equipment. Plastic pipe will be placed in the trench and the excavated material will be used to backfill. Most pipelines will have water tanks spaced as needed to achieve proper livestock distribution.

C. RESERVOIRS

Stock pond sites will be selected based on available watershed and hydrologic information. All applicable State laws and regulations will be followed.

D. WELLS

Well sites will be selected based on geologic reports that predict the depth to reliable aquifers. All applicable State laws and regulations that apply to groundwater will be observed.

E. SUPPLEMENTAL FEEDINGS

Supplemental feed must be authorized in advance. Supplemental feed means a feed that supplements the forage available from the public lands and is provided to improve livestock nutrition or rangeland management.

If used, salt should be placed at least 0.25 mile from water sources to disperse impacts.

1.9 WILD HORSE AND BURRO ACTIVITIES

A. SUPPLEMENTAL WATER

In response to restricted or prohibited access to the Colorado River, and to enhance management opportunities for wild horses and burros within the Cibola-Trigo HMA, supplemental water may be developed within the HMA. Such developments may include wells, water catchments, and earthen tanks. Locations will be determined on a case-by-case basis and dependent upon available funding. Wells will likely be redevelopment of an existing well. Water catchments will use current underground storage techniques currently employed by AGFD. Earth tanks will require moving the soil and constructing a dam with an impoundment behind it.

B. CAPTURE TECHNIQUES

There are three capture techniques utilized to gather wild horses and burros. There are two methods that are helicopter assisted, and one is bait trapping. Because the primary water source is the Colorado River, water trapping is not a viable option for capturing these animals in a majority of the HMA.

Bait traps utilize feed, generally alfalfa hay, to entice the animals to a specific location. This method is not used for capturing wild horses but is a very efficient method for wild burros. Hay is placed within a trap constructed of portable panels, with a bayonet gate. Burros enter the trap to eat, but cannot see a hole big enough to exit. This is an efficient method to capture a small number of burros, and is regularly employed in nuisance situations.

Helicopter assisted gathers use a low flying helicopter to herd the animals to either a group of riders who will rope them or into a wing trap where they are captured in a trap constructed of portable panels. During helicopter herding, the animals are moved at their own pace toward the trap or ropers. If they are being roped, they are led to stock trailers and loaded. If they are trapped, the animals are moved to a back pen adjacent to the trap so that additional animals can be gathered. When capture operations are done for the day, the animals are loaded onto stock trailers. Roping is a method best suited for large open washes and when a few animals are targeted for removal. Wing traps are an efficient means of gathering large numbers of animals and is easily moved to a new location.

During helicopter assisted gathers, various safeguards to ensure the health and safety of the wild horses or burros and personnel are employed. Animals will not be herded from more than four miles away from the trap. Mothers with young foals are allowed to drop away from the others if the foal is unable to keep up. In the summer months, once the temperature reaches 105 degrees, herding operations are ceased. YFO has not had any incident of serious injury or death to captured animals in the last 14 years.

C. TRANSPORT

Captured animals are transported in stock trailers from trap locations to either temporary holding or to holding facilities in Kingman, Arizona. All stock trailers have skid proof floors, are closed top, and safe for transport of wild horses and burros. At temporary holding, the animals are separated by sex, fed, and watered. Once capture operations are completed or if a load needs to be shipped, the animals are taken to Kingman, Arizona, where they will be vaccinated, freeze branded, and available for adoption.

1.10 RECREATION

YFO applies BMPs to ensure that recreational facilities and activities comply with all applicable natural and cultural resource management laws, regulations, and policies, and to further promote sustainable land use ethics. Two sets of supplementary rules have been established by the YFO to regulate public occupancy, use, and conduct within the LTVAs and seven other developed recreation fee sites. These supplementary rules address a variety of natural and cultural resource and public health and safety protection measures. The YFO continuously monitors and updates these Supplementary Rules as needed and according to the guidance set forth in 43 CFR 8365.1-6. The YFO develops stipulations for activities authorized through the YFO's SRP program, including organized groups, commercial uses, and competitive events. Stipulations are typically established to protect natural and cultural resource values, public health and safety, and limit the displacement of existing recreational uses.

1.11 TRAVEL MANAGEMENT

The route evaluation criteria set forth in this Approved RMP (see Section 2.11.2.B) will ensure that all of the public lands' various resource values are considered during the future travel management planning process. The implementation of future route designation decisions will comply with the BLM policies set forth in IM No. AZ-2006-043, Section 106 *Compliance for Designating Off-Highway Vehicle Routes and Areas in Land Use Plans* (August 14, 2006) and IM No. 2007-030, *Clarification of Cultural Resource Considerations for OHV Designation and Travel Management* (December 15, 2006). In addition, the YFO will continue using its authority under 43 CFR 8364.1 to enact closure or restriction orders to protect persons, property, and public lands and resources.

1.12 VISUAL RESOURCES

There are numerous design techniques for visual resources that can be used to reduce the visual impacts from surface-disturbing projects. These techniques should be used in conjunction with BLM's visual resource contrast rating process wherein both the existing landscape and the proposed development or activity are analyzed for their basic elements of form, line, color, and texture. Design techniques are discussed in the BLM VRM *Manual* 8431 in terms of fundamentals and strategies. The fundamentals and strategies are all interrelated, and when used together, can help resolve visual impacts from proposed activities or developments.

Design fundamentals are general design principles that can be used for all forms of activity or development, regardless of the resource value being addressed. Applying these three fundamentals will help solve most visual design problems:

- Proper siting or location
- Reducing unnecessary disturbance
- Repeating the elements of form, line, color, and texture

Design strategies are more specific activities that can be applied to address visual design problems. Not all of these strategies will be applicable to every proposed project or activity:

- Color selection
- Earthwork
- Vegetative manipulation
- Structures
- Reclamation/restoration
- Linear alignment design considerations

These techniques are only a portion of the many design techniques available to help reduce the visual impacts resulting from surface-disturbing activities or projects. Additional design techniques are utilized as BMPs to avoid or minimize impacts to visual resources. Consultation with planners, landscape architects, and other design professionals will help to further reduce the visual impacts of any development.

1.13 CULTURAL RESOURCES

Management of cultural resources involves inventory to discover and record cultural resources, evaluation to determine their scientific and public importance, planning to determine their most appropriate uses, protection to safeguard the uses, and authorizing or otherwise accommodating their proper use.

A cultural resource inventory is maintained for all BLM-administered land. This inventory includes three classes: (1) Class I – synthesis of existing information, (2) Class II – sample field survey, and (3) Class III – intensive field survey. Cultural resources discovered through inventory are evaluated against the criteria of eligibility for the NRHP, and are nominated for listing.

Native American comments, concerns and perspectives are sought on all BLM actions potentially affecting cultural resources. YFO consults specifically with Native American tribes and traditional religious practitioners in accordance with the American Indian Religious Freedom Act, Section 106 of the NHPA, EO 13007, and the Native American Graves Protection and Repatriation Act.

Cultural resource protection efforts include both physical and administrative measures. Administrative measures include such actions as withdrawals, closures to public access, special designations, land acquisitions, easements, and protective covenants or stipulations to provide for protection of sensitive resources. Physical protection includes measures such as site-specific stabilization, signs, fencing, adaptive reuse, law enforcement surveillance and patrols, public awareness activities, site interpretation, and other actions.

YFO also protects cultural resources by following the NHPA Section 106 process for all undertakings with the potential to affect cultural resources. Avoidance is the preferred course of action when a proposed project may affect an archaeological or historic site. In some cases, it is not possible to avoid NRHP-eligible sites; those important primarily for the scientific information they contain are then conserved through data recovery.

1.14 PALEONTOLOGICAL RESOURCES

Management of paleontological resources emphasizes the non-renewable nature of fossils, their usefulness in deciphering ancient and modern ecosystems, the public benefits and public expectations arising from their scientific, recreational and educational values, BLM's interest in the continued advancement of the science of paleontology, and the importance of minimizing resource use conflicts within a multiple use framework.

Paleontological resources are considered in all levels of planning, such as RMPs, EISs, resource- or area-specific activity plans, and land tenure adjustments. For paleontological resources, this includes:

1. Identifying areas and geological units, i.e., formations, members, etc., containing paleontological resources
2. Evaluating the potential of areas to contain vertebrate fossils or uncommon non-vertebrate fossils
3. Assessing the impacts to paleontological resources from the planned actions

4. Developing strategies to mitigate resource use conflicts and loss of paleontological resources and related information
5. Developing management recommendations to promote the scientific, educational and recreational uses of fossils on public lands

Surface disturbing actions may adversely impact paleontological resources. Where areas containing fossils are identified during environmental (NEPA) review of land-use actions, land-use authorizations or transfer of title, existing data is used to assess potential impacts to paleontological resources. A paleontological field survey is carried out by a qualified paleontologist whenever analysis of existing data indicates that vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils are, or are likely to be, present in an area proposed for surface disturbance. Compliance with NEPA may involve mitigation where vertebrate fossils, or noteworthy occurrences of invertebrate or plant fossils, are known. Mitigation may be accomplished, for example, by (1) collection of data and fossil material, (2) obtaining representative samples of the fossils, (3) avoidance, or (4) in some cases by no action. In some cases, surface disturbance may have a beneficial impact on paleontological resources where it exposes additional outcrop areas for study, or public education/interpretation. Based on the formal analysis of existing data and the field survey, a decision whether or not to mitigate is made by the Authorized Officer.

Paleontological Resource Use Permits are issued to qualified applicants for the purpose of facilitating collection of fossils for scientific research and educational uses, or mitigating adverse impacts resulting from surface disturbing projects. Protection measures to prevent or detect unauthorized uses of paleontological resources, include patrol/surveillance, signs, special designations, and public information and education programs.

1.15 MINERAL RESOURCE ACTIVITIES

Unless otherwise restricted, all Federal mineral estates administered by YFO within the planning area are available for orderly and efficient development of mineral resources. Mineral exploration and development is generally encouraged on public land in keeping with BLM's multiple use concepts. Overall guidance on the management of mineral resources appears in the Mining and Mineral Policy Act of 1970, Sec. 102(a)(120) of FLPMA, National Materials and Minerals Policy, Research and Development Act of 1980, and BLM's Mineral Resources Policy of May 29, 1984.

Exploration and development of all mineral resources will be conducted in accordance with all applicable laws and regulations. Acquired lands will be opened to mineral entry, unless critical resource values (threatened and endangered species, riparian habitat, scenic values, cultural resources, etc.) or public health and safety require closure.

Issuing ROWs where there are active mining claims is routine and covered by legislation and regulation. The ROW purchaser or permittee is informed of the rights of the mining claimant. Mining might intermittently or temporarily obstruct the ROW.

A. LOCATABLE MINERALS

The 43 CFR 3715 and 3809 regulations provide for the management of surface disturbance associated with mineral exploration and development including mining claim use and occupancy. YFO reviews mining notices and plans in the time allotted as identified in the regulations. For notice-level operations, if time permits, a site visit will be conducted by YFO staff. A site visit will always be conducted by YFO staff during the processing of a plan of operations.

When occupancy is proposed under mining plans and notice-level operations, proper NEPA documentation will be required. YFO will work with operators to ensure that notices and plans are processed efficiently and in a timely manner. Reclamation plans and bonds are required for each notice and plan per regulation. The amount of such bonds is for the full amount required to complete 100 percent of the required reclamation as if YFO were required to hire independent contractors to do the work.

In addition to the requirements of 43 CFR 3715 and 43 CFR 3809, State and Federal law provides for numerous other permits including but not limited to: an Aquifer Protection Permit and a National Pollution Discharge Elimination System permit both issued by ADEQ, a Section 404 permit issued by the U.S. Army Corps of Engineers and a flood control permit issued by the county. Also, Arizona State law requires mining claimants to keep mining property in a safe condition. The State Mine Inspector's Office is responsible for enforcing this law. YFO will cooperate with all interested agencies to ensure that operations conducted on BLM-administered lands are in full compliance with all Federal, State, and local health, safety, and environmental laws as required by 43 CFR 3715.5.

All occupancy of mining claims must meet the requirements of 43 CFR 3715 and the specific requirements of 43 CFR 3715.2. At a minimum, all occupancies will meet the requirements and standard stipulations for occupancy contained in the *BLM Arizona Programmatic Environmental Assessment for Mining Claim Use and Occupancy*.

Surface disturbing activities at a level greater than casual use in Wilderness areas, national monuments, ACECs, and other areas identified in 43 CFR 3809.11 will require a plan of operations before mining can begin. Operations proposed for lands that are withdrawn from mineral entry will cause BLM to initiate a validity examination and will be allowed only on claims with a valid discovery and location existing before designation. Before BLM can approve mining plans of operation submitted for work in areas withdrawn from mineral entry, a BLM mineral examiner must verify that a valid claim exists. The mineral examination and mineral report must confirm that minerals have been found and the evidence is of such character that a person of ordinary prudence will be justified in the further expenditure of his labor and means with a reasonable prospect of success in developing a valuable mine.

B. LEASABLE MINERALS

Lease applications will be considered on a case-by-case basis. Leases will be issued with necessary restrictions to protect resources. Stipulations to protect important surface values will be based on interdisciplinary review of individual proposals and environmental analyses.

C. MINERAL MATERIALS

The Mineral Materials Act of 1947 and 43 CFR 3600 regulations provide for the disposal and regulation of mineral materials. It is BLM's policy to make mineral materials available to the public and local governmental agencies. Applications for mineral materials are considered on a case-by-case basis and require either a sales contract or a free use permit from the appropriate BLM office. Disposal of mineral materials is a discretionary action and will be authorized in accordance with appropriate laws, regulations, and policies, in conformance with the Approved RMP. Appropriate measures will be taken to protect the environment and minimize impacts to public health and safety.

1.16 PUBLIC HEALTH AND SAFETY

A. HAZARDOUS MATERIALS

Hazardous materials incidents in the planning area have resulted from leaking underground storage tanks, mining sites, occupancy trespasses, drug labs, wire burning sites, industrial waste, and illegal dump sites.

Although illegally dumped materials are not routinely classified as hazardous materials, the problem of discarded used tires, household trash, and commercial waste and materials has increased as the result of increased fees at county and private landfills and transfer stations. Also of concern are incidents of unexploded military ordnance and explosives from abandoned mining operations. YFO will clean up any hazardous materials that are illegally dumped on public land.

- Minimize releases of hazardous materials through compliance with current regulations.
- When hazardous materials are released into the environment, assess their impacts on each resource and determine the appropriate response, removal and remedial actions to take.

YFO will evaluate all actions (including land use authorizations and disposals, mining and milling activities, and unauthorized land uses) for hazardous materials, waste minimization, and pollution prevention.

- Identify appropriate mitigation for surface-disturbing and disruptive activities associated with all types of hazardous materials and waste management and all types of fire management.

Site-specific inventories of lands being disposed of or acquired will be completed. It is departmental policy to minimize potential liability of the USDOJ and its bureaus by acquiring property that is not contaminated, unless directed by Congress, court mandate, or as determined by the Secretary of the Interior.

Mining and milling sites will be inspected to determine appropriate management for hazardous materials. Parties responsible for contamination will be identified and held liable for cleanup and resource damage costs, as prescribed by law.

B. ABANDONED MINE LANDS

YFO will educate the public about the risks associated with AML₁ sites and unexploded ordnance through signs, bulletin boards, and/or kiosks.

As funding is available, the Management Activities listed below will continue:

- Inventory AML₁ in high-use areas to determine mines that pose the greatest risk to public health and safety and identify the sites that should be closed to protect biological and cultural resources. Through the information gathered from the inventories, YFO will attempt to close all mines within 0.25 mile of developed recreation areas, campgrounds, access roads, and trails that pose the greatest risk to visiting public and mines that have significant cultural and biological resources. The method of closure will vary and be identified during site-specific NEPA analysis.
- Assess the impacts to waters of Arizona and California from abandoned mines, tailings, or mineral deposits within one mile of surface waters and reclaim sites presenting water quality concerns.
- Inspect AML₁ sites to identify all physical hazards presenting a safety risk to the public and take appropriate action to mitigate many hazards.
- Prevent public access to AML₁ contaminated areas.
- Notify the public of the conditions at an AML₁ site in close proximity to populated areas.

Where surveys indicate the potential for important bat habitat, YFO and its partners would take appropriate actions, such as the installation of bat gates, to preserve the habitat while addressing the public hazards.

In cases where AML₁ remediation actions may affect biological, cultural, or historical resources, the impacts are mitigated by avoiding the characteristics that make cultural sites eligible to the NRHP, recording the resources, relocating the resources, or stabilizing significant resources, consistent with reducing the threat to public health and safety.

C. UNEXPLODED ORDNANCE

The following actions will be appropriate with regard to the discovery of UXO.

- If UXO is discovered on public lands in the planning area, appropriate measures will immediately be taken to restrict access to the site.
- The appropriate military response unit will be notified of the UXO. For the planning area, that unit is currently 710th EOD, San Diego, California (619) 553-8500 (FAX 619-553 8095).