

ENVIRONMENTAL ASSESSMENT
Invasive Plant Management

EA Number

BLM Field Office

Date prepared

Insert optional Table of Contents with page numbers here.

CHAPTER 1: INTRODUCTION

Use this paragraph in all EAs:

NOTE: Yellow highlighted areas of this template are provided as examples or directions and should be looked out carefully to address. Remove as needed.

This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental impacts of the invasive plant management as proposed by _____ Field Office (FO). The EA is a field office site-specific analysis of potential effects that could result with the implementation of the Proposed Action. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any “significant” impacts could result from the analyzed actions. “Significance” is defined by NEPA and is found in regulation 40 CFR 1508.27.

An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant Impact” (FONSI). If the decision maker determines that this project has “significant” impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record may be signed for the EA approving the selected alternative, whether the proposed action or another alternative. A Decision Record, including a FONSI statement, documents the reasons why implementation of the selected alternative would not result in “significant” environmental impacts (effects) beyond those already addressed in _____ Resource Management Plan (*mo., day, year*).

Background

Invasive plants are defined as “non-native plants whose introduction does or is likely to cause economic or environmental harm or harm to human health,” based on the definition provided in Executive Order 13112¹. **Do not use any other term besides invasive plants.** Invasive plants are compromising the ability to manage BLM lands for a healthy native ecosystem. Invasive plants can create a host of environmental and other effects, most of which are harmful to native ecosystem processes, including: displacement of native plants; reduction in functionality of habitat and forage for wildlife and livestock; increased potential for soil erosion and reduced water quality; alteration of physical and biological properties of soil; loss of long-term riparian area function; loss of habitat for culturally significant plants; high economic cost of controlling invasive plants; and increased cost of keeping systems and recreational sites free of invasive species.

¹ EXECUTIVE ORDER 1311 INVASIVE SPECIES (1999) - directs federal agencies to prevent the introduction of invasive species and provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species cause.

Integrated pest management² methods for invasive species control that will be analyzed in this EA include the following:

Biological - Biological control involves the intentional use of domestic animals, insects, nematodes, mites, or pathogens (agents such as bacteria or fungus that can cause diseases in plants) that weaken or destroy vegetation. Biological control is used to reduce the targeted weed population to an acceptable level by stressing target plants and reducing competition with the desired plant species.

Chemical - Herbicides are chemicals that kill or injure plants. Herbicides can be categorized as selective or non-selective. Selective herbicides kill only a specific type of plant, such as broad-leaved plants, while non-selective herbicides kill all types of plants.

Physical - Manual treatment involves the use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous and woody species. Treatments include cutting undesired plants above the ground level; pulling, grubbing, or digging out root systems of undesired plants to prevent sprouting and re-growth; cutting at the ground level or removing competing plants around desired species; or placing mulch around desired vegetation to limit competitive growth.

Purpose and Need for the Action

The need for the action is to reduce and control (list species) invasive plants on XXX acres in the XXXX area.

The purpose of the action is to determine whether or not BLM-approved herbicides should be used alone or jointly with other integrated pest management methods such as biological or physical methods (list other methods considered such as hand pulling, grazing, etc.)

Public Participation, Scoping and Issues

Summarize the scoping activities and their results, including any issues raised internally or by the public as well as scoping conducted with other Federal agencies, the State, local government, and tribes. Describe how the EA is being circulated for public review.

Issues identified through the process described above: (list them here)

Tiering to Existing Land Use Plan/Environmental Impact Statement

Tiering allows an EA to capitalize on work done in the RMP and prevents repetition. This allows the EA to focus directly on the site specific issues and effects of the actions while benefiting from the broader analyses in the Resource Management Plan (RMP) and the

² INTEGRATED PEST MANAGEMENT - a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks (DOI Departmental Manual 517)

Final Programmatic Environmental Vegetation Treatment Using Herbicides on Bureau of Land Management Land in 17 Western States (PEIS). In addition, tiering to a Field Office Programmatic EA for Integrated Weed Management is appropriate when additional site specificity is needed. Tiering to relevant portions of the RMP, PEIS, or other EISs saves work and repetition in your site specific EA.

Tiering also provides a basis for narrowing the scope of the EA to the unresolved issues and limiting the number of alternatives considered to those not already considered in the document to which the EA is tiered. ***In tiering, it is important to summarize conclusion and identify on what pages the information can be found in the RMP, PEIS, and/or Field Office specific EAs.***

An example of tiering is shown below is an RMP objective that can be tiered to and used for the site specific EA:

Minimize the likelihood for introducing new species of noxious weeds and other invasives. In areas where invasive weeds are established, maintain areas where infestations have adequately controlled. Institute measures to substantially decrease the area and density of the infestation. (RMP pg. 2-100)

An example of tiering to a PEIS objective follows (there are many more objectives in the PEIS that can and should be used!):

The PEIS identifies priorities including protecting intact systems; maintaining conditions that have led to healthy lands; reducing the impact of ongoing activities such as improving grazing management; and applying mitigation measures to new projects to minimize soil and vegetation disturbance and avoid introductions of invasive species.

- Use effective nonchemical methods of vegetation control where feasible.
- Use herbicides only after considering the effectiveness of all potential methods. (PEIS pg. 2-7)

Several management objectives are considered when determining appropriate treatment of an infestation:

- Containment to prevent weed spread from moving beyond the current infestation perimeter;
- Control to reduce the extent and density of a target weed;
- Eradication to completely eliminate the weed species including reproductive propagules (this is usually only possible with small infestations); and
- Restoration of native plant communities and habitats using native species that are adapted to the project site to compete with invasives. (PEIS pg. 2-7)

The management objectives listed above are just a few of those that may be applicable to your project.

Relationship to Statutes, Regulations, and Plans:

Only those statutes, regulations, and plans relevant to the proposed action need to be discussed in this section- do not try to list all laws, regulations and policy that we follow- just the ones that affect or guide the analysis in some way. The ones listed below are to give you an idea of the level of detail needed to describe them; the ones applicable to your project may or may not include those listed below as well as others not mentioned.

Endangered Species Act

Example:

The Endangered Species Act of 1973 (ESA) requires federal agencies to complete formal consultation with the U.S. Fish and Wildlife Service (FWS) for any action that “may affect” federally listed species or critical habitat. The ESA also requires federal agencies to use their authorities to carry out programs for the conservation of endangered and threatened species.

Formal consultation was completed on the _____ RMP and a _____ (date) Biological Opinion (BO number) was issued by the FWS.

Or

Formal consultation was not required because...

Master MOU between BLM and the California Department of Fish and Game (applicable for State listed Species)

This project may also provide habitat for State listed fish, wildlife, and plant species. In a Master MOU between BLM and the California Department of Fish and Game (CDFG), BLM agrees to notify the Department of all projects involving impacts to, or manipulation of, State listed rare and endangered fish, wildlife and plants and to obtain State recommendations for the project-specific management of such populations. The _____ RMP was designed to be compatible with State listed species and other State Species of Special Concern.

Wilderness

The Wilderness Act (P. L. 88-577) in Sections 2 and 4 directs managers to protect and preserve wilderness character. Non-native invasive plants threaten the natural quality of wilderness character as defined by the act. Section 4(c) of the Wilderness Act prohibits motorized equipment or motorized/mechanical transport except where necessary to meet the minimum requirements for the administration of the area for the purpose of the Act. A minimum requirements analysis is typically applied to projects that are considered under this provision of the Act.

WSA

The “Interim Management Policy for Lands Under Wilderness Review (H-8550-1)” -- Provides direction for the BLM to manage and protect Wilderness Study Areas (WSAs) in such a manner that does not impair their suitability for wilderness until they are

designated as wilderness or released for other uses by Congress. Section C(2)(3) allows for control of noxious weeds using chemical, mechanical or biological means when there is no effective alternative and when control of the noxious weed is necessary to maintain the natural ecological balance of the WSA.

Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701-1712) - The act states that the BLM must manage public lands according to the principles of multiple use and sustained yield. These principles are further qualified in the act by the statutory duty that the BLM prevent unnecessary degradation of the public lands.

Public Rangelands Improvement Act of 1987 (43 U.S.C. 1901 et seq.) - The act states the BLM must manage, maintain, and improve public lands suitable for livestock grazing so that they become as productive as feasible.

The Federal Insecticide, Fungicide, and Rodenticide Act, as amended (Public Law (P.L.) 92-516) - The act requires all pesticide to be registered with the Environmental Protection Agency (EPA). The Federal Environmental Pesticide Control Act of 1972 amends the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, and requires the basis for registration to be whether or not a pesticide causes unreasonable adverse effects on man or the environment. The act also makes it illegal to use a registered pesticide in a manner inconsistent with its labeling. It also requires the certification of all personnel who supervise or apply restricted pesticides. The degree of certification must meet the classification requirements for proper storage, transportation, or disposal of pesticides. The responsibility for administering the act is vested in the EPA.

Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11001), also known as the Emergency Planning and Community Right-to-know Act - Provides that workers must be given information such as Material Safety Data Sheets and Technical Data Sheets on pesticides that they will be handling or applying.

Carlson Foley Act of 1968 (P.L. 90-583) - Provides for the authorization for reimbursement of expenses to State or local agencies for weed control on Federal lands.

Federal Noxious Weed Act of 1974 (7 U.S.C. 2801-2813), as amended by Sec. 15, Management of Undesirable Plants on Federal Lands, 1990 - This bill requires that each Federal Agency: (1) Designates a lead office and person trained in the management of undesirable plants; (2) Establish and fund an undesirable plant management program; (3) Complete and implement cooperative agreements with State agencies; and (4) Establish integrated management systems to control undesirable plant species.

Departmental Manual 517 - Prescribes the Department's guidance for the use of pesticides on the lands and waters under its jurisdiction and for compliance with the Federal Insecticide, Fungicide, and Rodenticide Act, as amended.

CHAPTER 2: PROPOSED ACTION AND ALTERNATIVES

Alternative 1 - Proposed Action – Integrated Weed Management

The proposed action is to reduce invasive plants on XXX acres annually on BLM administered lands in XXX area of the Field Office using a combination of physical, chemical (herbicides), biological, and prescribed fire. (If BLM is treating on private lands, you also need to analyze these also.)

Standard Operating Procedures for Applying Herbicides (SOPs) listed in the PEIS (Table 2-8 pg. 2-30-2-24 need to be included as part of the proposed action when herbicides are used. Include all that apply to this site-specific analysis.

Example description of physical treatments: Physical treatments such as mowing and disking would be used as a primary control method to control invasive species on XXXX acres. Annual weed species such as poison hemlock, wild mustard (*Sinapis arvensis*), wild radish (*Raphanus raphanistrum*), and other species would be mowed during the budding or flowering stage of plant development to reduce or eliminate viable seed production and to reduce competition with native plants for resources such as sunlight, water, and soil nutrients. This control method has been used successfully to help native plant species survive infestations of weed species. Mowing would also be used as a method to pre-treat biennial and perennial weed species such as perennial pepperweed, yellow star thistle, and fennel (*Foeniculum vulgare*). The advantage of mowing perennial weed species at the flowering or budding stage is that the plants have used much of the stored energy in their root systems.

Mowing alone is commonly used in swales within managed wetland ponds to remove excessive buildups of vegetation such as common cattail (*Typha latifolia*) and bulrush (*Scirpus* spp.). It is also used to open dense growths of vegetation and create habitat diversity that waterfowl prefer and in upland areas to pre-treat species like perennial pepperweed before herbicidal treatments can occur.

Approximately 100 acres will be mowed annually along with approximately 100 acres being disked.

Table XXX- Weed Treatment Summary

Weed	Location	Priority	Acres	Method of treatment	Time of Year	Notes

Alternative 2 – Herbicide Use Only

Standard Operating Procedures for Applying Herbicides (SOPs) listed in the PEIS (Table 2-8 pg. 2-30-2-24 need to be included as part of this alternative when herbicides are used. Include all that apply to this site-specific analysis.

Alternative 3- Physical Treatment Only

Alternative 4 - No Action

Use following language:

Other Alternatives

Make an honest effort to brainstorm other action alternatives in order to have a good range of alternatives and make sure you have a good set of choices. If other reasonable alternatives are identified through scoping, they should be analyzed in the EA. It may also be appropriate in this section to consider alternatives proposed by interested public.

Alternatives Considered but Eliminated from Detailed Analysis (see NEPA handbook p. 52 for valid reasons to eliminate an alternative)

CHAPTER 3 and 4: AFFECTED ENVIRONMENT/ENVIRONMENTAL EFFECTS

The 20 individual resource templates below combine, by resource, the affected environment, and environmental impacts, including cumulative, for each alternative and consultation sections. This EA should address all relevant supplemental authorities listed in Appendix 1 of the NEPA Handbook and any other resource elements commonly affected by integrated pest management.

Substantive responses are not required for each supplemental authority unless there's something specific to address. However, this is not intended to be a "checklist".

If a resource is not present or not affected within the project area, state that, including why that's the case, in the Affected Environment section of the resource template. This can be done individually or in combination (i.e. a list of resources not present and not affected at the beginning of the chapter). The remaining sections (alternatives, environmental consequences, etc) of the template do not need be completed in this case and may be deleted.

Example: "The proposed action would have no effect on prime farm lands because prime farm lands are not present in the project area."

For each of the tools (chemical, physical, and biological) identified in any of the alternatives, make sure that the site specific impacts are analyzed.

For each of the resources included in this section, sample language has been provided based on guidance developed at earlier workshops. These "templates" are intended to fit the "typical" integrated weed management EA. Field Offices may modify as necessary.

The EA should include all maps that assist in understanding the affected environment and impact analysis for the EA. A separate map for each resource is not necessary.

This part of the EA need only address the site specific information required to understand the impacts of the alternatives. Types of more global information (e.g., info on typical impacts of a certain chemical, for instance) that come from the RMP and PEIS should be tiered to and summarized, with page references from the RMP or PEIS.

Do not use the term significant in discussion of impacts. Significance is reserved for the FONSI and DR. Stick with quantitative vs qualitative characterizations of impacts, e.g., “XXX acres of vegetation will be removed due to this treatment” vs “the treatment will cause moderate loss of vegetation”

Identify incomplete or unavailable information and follow it up with why we don't need it for the decision maker to make an informed decision.

For each resource, identify what aspects of that resource may be affected, for example, if CO emissions are the key concern for air quality. Then go to the PEIS and see how that aspect was analyzed. If the site specific impacts for this issue are equal to or less than those anticipated in the PEIS, then a site specific EIS would not be triggered because the PEIS already analyzed that adequately.

No Action- make sure you show how resources may be damaged with this alternative- use it to “sell” action. For example, native species may be replaced/outcompeted by invasive species under this alternative.

Include References and Citations: The EA must cite important literature, studies, surveys, etc that are key to the analysis, FONSI. Provide citation within the text and compile the complete literature citations in section D. You may also compile all references and include a separate reference section. These supporting documents are part of the administrative record and should be identified in the EA.

AIR QUALITY

A. Affected Environment

Refer to page 3-4 and 3-5 of PEIS for information.

Questions to answer: What is the federal area designation of the project area and are there any emission thresholds? (Information on area designations can be found at www.arb.ca.gov/desig/adm.htm.)

The following text to be used for federal non-attainment/maintenance areas:
The project area is currently classified as federal non-attainment area(s) for ozone, PM10 Carbon Monoxide under the National Ambient Air Quality Standards. The project area is

within the (name the EPA Planning Area). A state implementation plan (SIP) has been prepared for the planning area which identifies sources of emissions and control measures to reduce emissions.

The following text to be used for areas outside federal non-attainment/maintenance areas):

The site has not been classified as a federal non-attainment/maintenance area. Federal actions are not subject to conformity determinations under 40 CFR 93.

B. Environmental Effects (PEIS section 4-5 through 4-12)

1. Impacts of Proposed Action (Question- are site specific impacts the same or less than those identified in the PEIS? See PEIS air impacts- pp 4-5 through 4-11)

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the air basin.
2. List other activities/projects in the air basin that impact air quality, specifically PM 10 if that's the aspect of air quality affected by this weed treatment project.
3. How do the above projects affect air quality
4. How do the above projects combine with this project to cumulatively affect air quality?

D. Maps

Maps of air basins are not a requirement.

E. References

List references cited in the affected environment or environmental consequences sections.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) (not addressed in the PEIS, so you're on your own!)

A. Affected Environment

Questions to answer: Date ACEC established? Size? (Total acres and public land acres) What are the specific values for which the ACEC was established? Condition and trend of key resource values? Amount of current use, trends, and extent of any conflicts or impacts? Monitoring results?

B. Environmental Effects

1. Impacts of Proposed Action

Questions to answer: What are the effects to the ACEC values of IPM? What other effects might result from proposed treatments?

Note: There is a potential overlap with other elements since the ACEC was established to protect relevant and important values (including cultural resources, riparian, T&E species, etc.). The discussion under this ACEC element should not duplicate those other discussion(s). One solution is to discuss those potentially impacted values in the other sections of this chapter, and reference that here. If there are no relevant values, or none that would be potentially impacted, then dismiss this element up front.

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the ACEC boundary.
2. List other activities/projects that could impact the ACEC.
3. How do the above projects affect the ACEC?
4. How do the above projects combine with this project to cumulatively affect the ACEC?

D. Maps

Include maps of ACECs related to project area in the EA.

E. References

List references cited in the affected environment or environmental consequences sections.

CULTURAL RESOURCES

A. Affected Environment (PEIS section 3-44 through 3-56)

Questions to answer: Discuss past surveys, intensity/level of survey, other research, site types and general locations in the project area. Include current condition of cultural resources within the project area. Add any findings from field visit to this section with date and determination if immediate/further action is required.

Discuss any eligibility determinations (or assumption of eligibility) for sites.

B. Environmental Effects (PEIS section 4-146 through 4-152)

1. Impacts of Proposed Action

Don't assume worst case scenario. Identify what impacts you reasonably think will occur. Be very specific about describing impacts from IPM and their severity. The proposed action described in Chapter 2 must identify measures to protect sites, monitoring schedule and other details (don't use the term 'mitigation' if it is not an adverse effect). If impacts have been identified as an adverse effect, SHPO consultation is required.

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects, including a rationale for that geographic scale- e.g., historical district, lakebed, etc.
2. List other activities/projects that could impact the resource.
3. How do the above projects affect the resource?
4. How do the above projects combine with this project to cumulatively affect the resource?

D. Maps

Do not provide maps of sites.

E. References

List references cited in the affected environment or environmental consequences sections.

ENVIRONMENTAL JUSTICE

If this resource is not present or not affected, include a negative declaration statement, and a BRIEF supporting rationale. The remaining sections (alternatives, environmental consequences, etc) of the template do not need be completed in this case and may be deleted.

A. Affected Environment (not addressed in the PEIS, so you're on your own!)

Questions to answer: are any low-income or minority populations living on or near the project area as defined in Executive Order 12898? Are they currently being affected by IPM differently than other groups?

B. Environmental Effects (not addressed in the PEIS, so you're on your own!)

1. Impacts of Proposed Action

Questions to answer: what effects result to low-income or minority populations? Are these effects “disproportionate” with respect to the population group?

Note: there are three possible conclusions: IPM would have no effect, an effect but not a disproportionate effect, or a disproportionate effect. You must ensure that the supporting discussion provides a reasonable basis for your conclusion.

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local community.
2. List other activities/projects that could impact communities.
3. How do the above projects affect the resource?
4. How do the above projects combine with this project to cumulatively affect the resource?

D. Maps

List any maps included as part of this EA

E. References

List references cited in the affected environment or environmental consequences sections.

ESSENTIAL FISH HABITAT

Note: This supplemental authority applies to field offices which manage anadromous fish habitats which support commercially fished species including Chinook, coho, chum, or pink salmon (not steelhead). Arcata, Redding, Ukiah, Hollister, Bakersfield, and Mother Lode FOs contain waters identified as Essential Fish Habitat (EFH).

A. Affected Environment (PEIS section 3-34)

Questions to answer: Does the project area contain streams, lakes, ponds, wetlands, and other water bodies currently or historically accessible to salmon? The question excludes areas upstream of certain impassable man-made barriers and longstanding, naturally-

impassable barriers (i.e. natural waterfalls in existence for several hundred years). The exact USGS hydrologic units containing EFH and a list of man-made barriers defining upstream limits of EFH are listed in the Pacific Fishery Management Council, Pacific Coast Salmon Plan, August 1999, Appendix A. The plan is available at:

<http://www.pcouncil.org/salmon/salfmp/a14/99efh1.pdf>

B. Environmental Effects (PEIS section 4-76 through 4-92)

1. Impacts of Proposed Action

Adverse Effects under EFH can occur through a variety of mechanisms. Evaluate the proposed action to determine if any of the following effects to riparian habitat may accrue through management (cross-reference with applicable other section(s) in the EA):

- Change, reduction, or elimination of riparian vegetation
- Widening or aggrading of the stream channel
- Lowering of water table
- Soil compaction
- Sediment delivery into the stream channel
- Decrease in shading and/or increase in stream temperature
- Decrease in bank stability
- Increase in sediment transport rates
- Invasion of exotic plants

Note that some effects, e.g. sediment delivery, may result from management distant (upland) from water. Consider the contribution of upland management in the effects determination.

If there is no adverse effect, document this finding here and the EFH requirement has been met. If it is determined that there would be an adverse effect, document those effects here and initiate consultation with National Marine Fisheries Service. “Adverse Effect” is not to be confused with a “May Affect” determination which might be made under the Endangered Species Act (ESA), where the particular fish stock in question is also federally listed. An EFH “Adverse Effect” is consistent with an ESA determination of “May Affect, Likely to Adversely Affect” (LAA), but not with a “May Affect, Not Likely to Adversely Affect” (NLAA). An NLAA under ESA would not trigger consultation under EFH, but would still trigger consultation under ESA. In the event of an “Adverse Effect” determination under EFH, consultation would be triggered.

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local watershed.
2. List other activities/projects that could impact EFH.
3. How do the above projects affect the EFH?
4. How do the above projects combine with this project to cumulatively affect EFH?

D. Maps

Provide maps of EFH water bodies if appropriate.

E. References

List references cited in the affected environment or environmental consequences sections.

Consultation procedures – 50CFR600.920

EFH habitat description, USGS hydrologic units, list of man-made barriers, effects from non-fishing activities - Pacific Coast Salmon Plan, 1999
<http://www.pcouncil.org/salmon/salfmp/a14/99efh1.pdf>

BLM-specific direction – WO-IM-2007-201

<http://web.blm.gov/internal/wo-500/directives/dir-07/im2007-201.html>

NEPA and ESA adequacy in meeting EFH requirements: Direction letter from NOAA Fisheries Regional Administrator to California State Director (ref # F/SWR4:MH, Sept 21, 2000)

FARMLANDS, PRIME OR UNIQUE

A. Affected Environment (not addressed in the PEIS, so you're on your own!)

Questions to answer: Prime or unique farmlands are designated by the Natural Resource Conservation Service (NRCS). Consult with NRCS regarding prime and unique farmlands occurring on the allotment (public lands)? Where? How extensive (acres)?

B. Environmental Effects (not addressed in the PEIS, so you're on your own!)

1. Impacts of Proposed Action

Questions to answer: what effect does integrated pest management have on prime or unique farmlands, including accelerating erosion or compaction?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the floodplain.
2. List other activities/projects that could impact the resource.
3. How do the above projects affect the resource?
4. How do the above projects combine with this project to cumulatively affect the resource?

D. Maps

Provide maps with locations of prime and unique farmlands occur on the allotment in the EA.

E. References

List references cited in the affected environment or environmental consequences sections.

FLOOD PLAINS

A. Affected Environment (not addressed in the PEIS, so you're on your own!)

Questions to answer: What flood plains are designated by Federal Emergency Management Agency (FEMA) on the allotment? What is the mileage or acreage involved? What flood problems have occurred on the allotment? Are any improvements located or proposed in flood plains?

Consult with FEMA for flood hazard maps.

B. Environmental Effects (not addressed in the PEIS, so you're on your own!)

1. Impacts of Proposed Action

Questions to answer: what is the impact of livestock grazing on flood hazard, including accelerating soil erosion and compaction in heavy livestock use areas, physical damage to stream banks and channels which may lead to increased flooding? Will there be any loss of floodplain function. How significant are the effects of grazing in increasing flood hazard?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the floodplain.
2. List other activities/projects that could impact the floodplain.
3. How do the above projects affect the floodplain?
4. How do the above projects combine with this project to cumulatively affect the floodplain?

D. Maps

Provide maps with floodplain designations in this EA.

E. References

List references cited in the affected environment or environmental consequences sections.

INVASIVE SPECIES

A. Affected Environment (PEIS section 3-25 through 3-28)

Questions to answer: What invasive (noxious weeds) or non-native species are present on the allotment? Where? How extensive (acres)? Trend? What is the cause of their occurrence if known (cite research)? How are these species affecting native species or contributing to other environmental problems, such as fire hazard, increased erosion, etc? (Identify any monitoring studies.)

B. Environmental Effects (PEIS section 4-44 through 4-70)

1. Impacts of Proposed Action

Questions to answer: what is the impact of integrated pest management on the spread of invasive species? How significant is this effect? Would the proposed action promote/enhance/maintain/reduce/increase the levels of invasive species within the project area? Would the proposed action increase or decrease competition with the abundance or cover of the native species? Would the proposed action increase or decrease the fire regime, type conversion of the plant community, etc.?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local watershed.
2. List other activities/projects that could impact invasive species.

3. How do the above projects affect invasive species?
4. How do the above projects combine with this project to cumulatively affect invasive species?

D. Maps

Provide maps of invasive species locations in the allotment.

E. References

List references cited in the affected environment or environmental consequences sections.

NATIVE AMERICAN CULTURAL VALUES (See CA IM-2009-030)

<http://web.ca.blm.gov/dir/pdfs/2009/im/CAIM2009-030.pdf>

A. Affected Environment (PEIS pg. 3-52-3-54)

Questions to answer: Native American cultural values shall be identified through consultation with federally recognized Tribes, non-federally recognized tribes, tribal organizations, and traditional practitioners shall also be contacted to acquire cultural data associated with the allotment.

B. Environmental Effects (PEIS pg. 4-147-4-150)

1. Impacts of Proposed Action

Questions to answer: what is the impact of integrated pest management on Native American values (materials gathering, food, spiritual places, etc.?) (Document your conclusion through consultation with affected tribes.)

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource as identified through tribal consultation.
2. List other activities/projects that could impact Native American values.
3. How do the above projects affect Native American values?
4. How do the above projects combine with this project to cumulatively affect Native American values?

D. Maps

Do not include any maps for this section.

E. References

List references cited in the affected environment or environmental consequences sections.

RECREATION

A. Affected Environment (PEIS pg. 3-59-3-60)

Questions to answer: What conflicts with recreation such as hiking, OHV use, facilities, campgrounds, scenic values, water quality, bare ground, etc. result from IPM? What kind(s) of recreational use are currently occurring in the project area, how much use (if known) is occurring and what are the expected trends over the next ten years?

B. Environmental Consequences (PEIS pg. 4-159 through 4-163)

1. Impacts of Proposed Action

Questions to answer: What is the impact of IPM on the recreation activities and opportunities discussed above? Clarify different short term (temporary interruption in recreation access) vs long term impacts.

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource e.g., a recreation site or larger recreation area.
2. List other activities/projects that could impact recreation.
3. How do the above projects affect recreation?
4. How do the above projects combine with this project to cumulatively affect recreation?

D. Maps

Provide maps in EA of areas of recreation use in the allotment.

E. References

List references cited in the affected environment or environmental consequences sections.

SOCIAL AND ECONOMIC VALUES

A. Affected Environment (PEIS pg. 3-61-3-69)

Questions to answer: What social and economic factors are associated with the project area? For example, to what extent does the project area provide a source of income and employment to the community and region? To what extent do the uses of the area, including livestock grazing, recreation, forest products and other uses contribute goods or services to the area? How important are these goods and services to the economy?

B. Environmental Consequences (PEIS Section 4-163 through 4-174)

1. Impacts of Proposed Action

Questions to answer: what is the impact of the proposed action on social and economic values or opportunities of the community and region?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local community.
2. List other activities/projects that could affect the local community.
3. How do the above projects affect the local community?
4. How do the above projects combine with this project to cumulatively affect the local community? This cumulative effects analysis may be similar to the one for environmental justice.

D. Maps

No maps required.

E. References

List references cited in the affected environment or environmental consequences sections.

SOILS

A. Affected Environment (PEIS 3-7-3-11)

Questions to answer: What soil groups are present that may be affected (productivity, erosion, compaction) by IPM and vegetation removal? (Identify on map their geographic

location and extent) To what extent are soils being affected by invasive species? How do the chemicals adhere to soils or not?

B. Environmental Consequences (PEIS pg. 4-13-4-24)

1. Impacts of Proposed Action

Questions to answer: what is the impact of IPM on the specific soil factors discussed above?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local watershed.
2. List other activities/projects that could impact soils.
3. How do the above projects affect soils?
4. How do the above projects combine with this project to cumulatively affect soils?

D. Maps

List any maps included as part of this EA. (You may also reference reader to where a soils map and watershed map can be found – i.e., project file, NRCS website, etc.)

E. References

List references cited in the affected environment or environmental consequences sections.

VISUAL RESOURCES

A. Affected Environment (PEIS PG. 3-56)

Questions to answer: What are the visual resource inventory and management classes? Describe the characteristic landscape of the project area.

B. Environmental Consequences (PEIS pg. 4-152-4-155)

1. Impacts of Proposed Action

Questions to answer: what is the impact of IPM on the specific visual resource elements (form, line, color, and texture) discussed above? What is the level of contrast with the

characteristic landscape? Describe short and long term contrast? Does this long term contrast conform with visual resource objectives?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

5. Identify the geographic and temporal scale for cumulative effects for this resource- typically the viewshed.
6. List other activities/projects that could impact the viewshed.
7. How do the above projects affect the viewshed?
8. How do the above projects combine with this project to cumulatively affect the viewshed?

D. Maps

List any maps visual resource inventory and management class maps included as part of this EA.

E. References

List references cited in the affected environment or environmental consequences sections.

WASTE, HAZARDOUS OR SOLID

A. Affected Environment (Not addressed in PEIS, you are on your own.)

Questions to answer: What hazardous or solid waste occur in the area, such as motor vehicle fuel or other fluid leaks, or chemical spills? Include survey or reportable spill data where available.

B. Environmental Consequences Not addressed in PEIS, you are on your own.)

1. Impacts of Proposed Action

Questions to answer: what is the potential for releases of hazardous or solid waste? What other resource values may be affected? What effects are predicted? Where? (Reference discussions from other sections of the EA if appropriate.)

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

WATER QUALITY

A. Affected Environment (PEIS pg. 3-15-3-18)

Questions to answer: Discuss the following by watershed. Where are the streams and other water bodies located in the watershed by stream class (perennial, intermittent, ephemeral)? Are any of the channels tributary to or part of State 303d listed stream and if so what are the parameters that are not meeting State Standards? What are the designated Beneficial Uses (refer to the State's Basin Plans)?

Has water quality monitoring/inventory been conducted in the project area and if so why and what did you find out (sometimes bar graphs over time are very helpful along with tables to portray your findings)? Are the water bodies meeting the S&G Water Quality Standard? (In the case of the Desert District the question is: Are the water bodies meeting State Water Quality Standards?) Are there any roads or other improvements that are contributing to water quality problems? Are there any other activities impacting water quality, e.g., recreation, wild horses, etc.?

B. Environmental Consequences (PEIS pg. 4-24-4-36)

1. Impacts of Proposed Action

Questions to answer: what are the effects of IPM on water quality (increased temp, turbidity, sediment, nutrients, dissolved oxygen). Discuss cause(s) of these effects (soil exposure, chemicals reaching the water, etc.). Where are these problems likely to occur? What are the effects on beneficial uses? What are the Best Management Practices and how are they going to be implemented?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local watershed.
2. List other activities/projects that could impact water quality.
3. How do the above projects affect water quality
4. How do the above projects combine with this project to cumulatively affect water quality?

D. Maps

Include watershed maps showing stream classification (perennial, intermittent, ephemeral) and water quality maps in this EA.

E. References

Must identify appropriate basin plans. List references cited in the affected environment or environmental consequences sections.

WETLANDS/RIPARIAN ZONES

A. Affected Environment (PEIS pg. 3-18-3-19)

Questions to answer: What wetland and riparian areas occur within the project area? What is their current condition? What is the existing and desired habitat for each wetland?

B. Environmental Consequences (PEIS pg. 4-36-4-43)

1. Impacts of Proposed Action

Questions to answer: What are the impacts of IPM on wetland/riparian zones (decreased vigor, change in species composition, stream bank erosion, etc)?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local watershed.
2. List other activities/projects that could impact the watershed.
3. How do the above projects affect the watershed?
4. How do the above projects combine with this project to cumulatively affect the watershed?

D. Maps

Include riparian and wetland maps in the EA.

E. References

List references cited in the affected environment or environmental consequences sections.

WILD AND SCENIC RIVERS

A. Affected Environment (PEIS pg. 3-57)

Questions to answer: What designated or eligible wild and scenic rivers occur in the project area? Mileage by segment? What is the status of eligibility studies, management plans? What are the “outstandingly remarkable” values of each? What WS&R management policies apply to the project area

B. Environmental Consequences (PEIS pg. 4-155-4-159)

1. Impacts of Proposed Action

Questions to answer: What are the impacts of IPM grazing on the outstandingly remarkable values?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the local watershed.
2. List other activities/projects that could impact the watershed.
3. How do the above projects affect the watershed?
4. How do the above projects combine with this project to cumulatively affect the watershed?

D. Maps

Include maps of wild and scenic maps as part of this EA

E. References

List references cited in the affected environment or environmental consequences sections.

WILDERNESS/WILDERNESS STUDY AREAS/LANDS WITH WILDERNESS CHARACTERISTICS

A. Affected Environment (PEIS pg.3-56)

Questions to answer: What wilderness study area or designated wilderness areas occur in the project area? What is the acreage involved, including the portion within the project area and the total area of the unit? What are the wilderness values of the unit? What is the date of designation and what was the status of invasive species, if known, at the time

of designation? What is current status of invasive species? How does any wilderness management plan address IPM?

B. Environmental Consequences (PEIS section 4-155 through 4-159)

1. Impacts of Proposed Action

Questions to answer: What are the impacts of proposed IPM on the wilderness values? For wilderness discuss impact to wilderness qualities including untrammeled undeveloped, naturalness, primitive recreation/solitude, and supplemental values? Will it include any prohibited acts such as use of motorized vehicles (if so complete minimum requirements analysis)

For WSAs, is it consistent with the Interim Management Policy for Lands Under Wilderness Review H-8550-1.

For lands with wilderness characteristics discuss will it impact all or a portion of the area so that it will no longer have wilderness characteristics?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the special designated unit.
2. List other activities/projects that could impact the unit.
3. How do the above projects affect the unit?
4. How do the above projects combine with this project to cumulatively affect the unit?

D. Maps

Include any maps of affected wilderness areas or WSA as part of this EA

E. References

List references cited in the affected environment or environmental consequences sections.

WILD HORSES AND BURROS

A. Affected Environment (PEIS pg.3-44)

Questions to answer: What herd management units occur in the project area (location, size, season of use). What water sources are used by the animals, including developed water? What conflicts occur with livestock? What is status of any herd management plans?

B. Environmental Consequences (PEIS pg. 4-136-4-146)

1. Impacts of Proposed Action

Questions to answer: What are the impacts of proposed IPM on the populations of free roaming wild horses and burros, specifically forage impacts?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the HMA.
2. List other activities/projects that could impact the HMA.
3. How do the above projects affect the HMA?
4. How do the above projects combine with this project to cumulatively affect the HMA?

D. Maps

Include WH&B herd area maps in this EA.

E. References

List references cited in the affected environment or environmental consequences sections.

WILDLIFE/SPECIAL STATUS/THREATENED AND ENDANGERED SPECIES

A. Affected Environment (PEIS pg. 3-35-3-43)

Questions to answer: What species and habitat affected by IPM occur in the project area? What special status or federally and state listed T&E species and habitats occur (discuss under separate sub heading; see below)? What is the extent of each habitat type (acres)? What proportion of the affected habitat is in the allotment?

B. Environmental Consequences (PEIS pg. 4-118-4-124 (special status wildlife)

1. Impacts of Proposed Action

Questions to answer: What are the impacts of proposed IPM on the wildlife populations and habitat categories discussed above? How will the project affect the ability of a species to persist in an area? Will the population be reduced or benefit from the project?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the population extent or species range.
2. List other activities/projects that could impact the species/population.
3. How do the above projects affect the species/population?
4. How do the above projects combine with this project to cumulatively affect the species/population?

D. Maps

Include designated critical and non-critical habitat maps in the EA.

E. References

List references cited in the affected environment or environmental consequences sections.

VEGETATION/SPECIAL STATUS/THREATENED AND ENDANGERED SPECIES

A. Affected Environment (PEIS pg. 3-19-3-30)

Questions to answer: What key plant species or plant communities are affected by the project? Provide a separate breakout for T&E species (if none are present, dismiss with a negative declaration). What survey or monitoring studies have been completed? Where and how extensive are these populations in the project area?

B. Environmental Consequences [PEIS pg. 4-47-4-76)

1. Impacts of Proposed Action

Questions to answer: What are the short and long term impacts of IPM on the key species and plant communities (loss of vigor, change to less desirable vegetation, spread of noxious weeds)?

2. Impacts of Alternative 2

3. Impacts of Alternative 3

4. Impacts of Alternative 4

C. Cumulative Impacts

1. Identify the geographic and temporal scale for cumulative effects for this resource- typically the veg type or habitat.
2. List other activities/projects that could impact the veg type.
3. How do the above projects affect the veg type?
4. How do the above projects combine with this project to cumulatively affect the veg type?

D. Maps

List any maps included as part of this EA

E. References

List references cited in the affected environment or environmental consequences sections.

CHAPTER 4: CONSULTATION AND COORDINATION

Persons, Groups, and Agencies Consulted

This applies only to those consulted whose information assisted in the preparation of the EA, not those who commented on the EA during a public comment period. Maintain specific consultation results in the project file.

Summary of Public Participation

Describe in detail the process used to involve meaningful participation by the public- scoping, public comment on the EA, public meetings, etc.

List of Preparers

The EA should include a list of the resource specialists and others who prepared the EA, and their area(s) of expertise. It is not necessary to include a sign off sheet for internal review but may help the decision maker feel comfortable that the EA has been approved through the ID team.

CHAPTER 5: ACRONYMS (also glossary, if necessary)

List of Acronyms Used in this EA

Glossary of Terms (optional section)

Appendices