

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGIQN 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

FEB 0 5 2008

(b) (6)

Acting Executive Director
Asset Management
U.S. Customs and Border Protection
Department of Homeland Security
Marfa Sector Tactical Infrastructure EA



Deat(b)(6)(b)(7)(C)

The Environmental Protection Agency (EPA) Region 6 has reviewed the Draft Environmental Assessment (EA) for the Proposed Construction, Operation, and Maintenance of Tactical Infrastructure, U.S. Border Patrol Marfa Sector, Texas, prepared by the U.S. Department of Homeland Security, U.S. Customs and Border Protection. The Draft EA contains insufficient information for an adequate review and does not provide a basis for a finding of no significant impact (FNSI). EPA suggests that USBP issue a Notice of Intent (NOI) to prepare an EIS on this project or circulate a revised Draft EA for stakeholder and agency review. Specific comments on the Draft EA are enclosed.

If you have any questions or would like to request assistance, please feel free to contact (b) (6) as primary point of contact for this project. She can be reached at (b) (6) or by email at (b) (6)

Sincerely yours.

(b) (6)

Office of Planning and Coordination

Enclosures: Comments

Cc: (b) (6)

U.S. Army Corps of Engineers Fort Worth District Comments on the Draft Environmental Assessment for the Proposed Construction, Operation, and Maintenance of Tactical Infrastructure, U.S. Border Patrol Marfa Sector, Texas

General Comments

The Draft EA contains insufficient information and analysis to enable informed review or to provide a basis for a finding of no significant impact (FNSI). In some instances, it provides no information on existing conditions in the project area, e.g., whether there are wetlands in the project area. In others, it draws conclusions that are unexplained, e.g., that project impacts will be mitigated without revealing any proposed mitigation measures. Impacts are acknowledged, but not identified, e.g., project effects on threatened or endangered species will be discussed in a Biological Assessment that has apparently not yet been drafted. Conclusions are stated without supporting analysis.

In several instances, the Draft EA states that missing information, e.g., the Biological Assessment, will accompany the Final EA. We understand, however, that USBP does not plan to make the Final EA available to State or federal resources agencies for review and comment prior to issuing the Final FNSI. From our perspective as a resource agency, the current Draft EA has been prematurely released. Unless USBP issues a Notice of Intent (NOI) to prepare an EIS on this project, we suggest a revised Draft EA be circulated for stakeholder and agency review.

The Draft EA has many of the same data and analytical gaps as well as some of the same potentially significant environmental impacts as the Lower Rio Grande Valley Fence EIS. Detailed comments, some of which parallel the Lower Rio Grande Valley EIS comments in many respects, appear below.

Purpose and Need. The EA describes Purpose and Need narrowly as "construction, operation, and maintenance of tactical infrastructure in the form of primary pedestrian fences, roads, lights, and supporting technological and tactical assets." This appears to have limited the range of alternatives considered in the Draft EA and some readers may conclude that USBP has not integrated NEPA in its decisional process, but has instead written the Draft EA to justify an earlier decision.

Recommendation: One means of explaining Purpose and Need would be to summarize USBP discretion under the Secure Fence Act and other enabling authority, then explain how USBP applied that discretion to determine basic project needs. How, for instance, would the fence in the specific locations identified in the Draft EA deter crossings and provide Border Patrol with the tools it needs to carry out its mission?

Section 2 Proposed Action and Alternatives

40 CFR Section 1508.9(b) requires comparative analysis of the environmental impacts of the proposed action and alternatives. An EA need not consider alternatives to the same extent as an EIS, but it should look at various alternatives consistent with enabling

legislation. The Draft EA generally limits its analysis to the preferred design alternative and a "Secure Fence Act" design. The "no action: alternative appears to have been included because "inclusion of the no action alternative is prescribed by the CEQ regulations." Other alternatives the Draft EA identifies and dismissed without analysis as either not meeting project purpose or unidentified "screening criteria."

Other alternatives should have been evaluated. Even if project purpose and need are as limited as the Draft EA suggests, alternatives of constructing each tactical infrastructure section without the other should have been evaluated if they possess independent utility as suggested on pages 1-1 and 2-2 of the Draft EA. Even though Alternative 2.3.1 and 2.3.2 were eliminated, an alternative that combines aspects of these separate alternatives was not investigated. In addition, an alternative that uses strategic partnerships with cities, towns and other agencies with combination of fences, and technology should be investigated. The addition of permanent lighting also creates new alternatives that should be investigated.

Recommendation: Investigate further alternatives in detail, including:

Alt A: Combination of technology and increased number of USBP agents. Alt B: Strategic partnerships for border enforcement. This alternative should include construction of fencing in areas where one or more landowners consent, plus technology, plus the development of memoranda of understanding (MOUs) or other multi-jurisdictional instruments to use local law enforcement resources. For example, a city may enter into an agreement with the Border Patrol (USBP) to provide a specified number of city law enforcement personnel dedicated to patrolling the border area within their jurisdiction. These types of agreements would alleviate the necessity for requiring a 150% increase in USBP agents and constructing fencing in areas that are sensitive environmentally (or for other reasons).

Alt C: A combination of the items listed in Alt A and B plus enforcing immigration laws designed at decreasing the job opportunities in the US. This may not prevent illegal drug operations, but may decrease the number of illegal border crossings for the purpose of obtaining employment in the US.

Alt 2A: Proposed Alternative 2 as described in the Draft EA, but without permanent lighting

Alt 2B: Proposed Alternative 2 as described in the Draft EA, but with permanent lighting

Alt 3A: Proposed Alternative 3 as described in the Draft EA, but without permanent lighting

Alt 3B: Proposed Alternative 3 as described in the Draft EA, but with permanent lighting

Alt 4: A "Lights Only" Alternative that describes the potential effects of the lighting without fence construction

Alt 5: L-1 (near the intersection of Quitman Pass Road and RR 192) tactical infrastructure only

Alt 6: Presidio area tactical infrastructure only

Section 3. Affected Environment and Environmental Consequences

There is no information describing Total Maximum Daily Loads (TMDLs) or how the fence would impact water quality. The Rio Grande is an impaired water body requiring a TMDL.

When describing the environmental consequences of a particular alternative, the majority of this section uses relative terms like minor, major, perceptible, short-term, and long-term (e.g., p. 3-5, lines 4-5). These terms are not defined within the document and it is difficult to determine the whether the potential impacts are significant or insignificant. For several resource areas (e.g., wetlands, wildlife, vegetation, aquatic resources, endangered species), there is a limited attempt to quantify potential impacts. Some potential impacts could be major, but not perceptible, unless field studies are conducted. For example, birds that do not optimally use edge habitat may experience a population decline if the fence is constructed. This could be a major impact, but not generally perceptible, unless ornithologists were actively monitoring.

Recommendation: USBP should provide more quantitative information throughout Section 3, including supporting information like technical studies, methods, and analysis.

There is no information describing the heating effects of the fence, either the fence heating to extreme temperatures and killing small animal species, or causing a heat "umbrella" and differentially heating soil or vegetation.

There is no information describing the effects of the fence on soil and soil organisms if the fence is a solid sheet below ground.

There is no information describing the magnitude of the construction staging areas or their approximate proximity to each segment.

There is no information or assessment describing the potential impacts of a fence to changes to animal movements, access to water resources, or maintenance of genetic diversity.

Section 3.9. There is no information describing the potential impact of the fence on migratory species or impact to their home ranges, in particular, large mammalian species (e.g., deer or carnivores) or avian rookeries.

Section 4. Cumulative Impacts

There is no information describing DHS Phase II (approximately 300 miles of fence in addition to the 225 miles listed on p. 4-1, line 32). Even though the cumulative total miles of fence is listed (225), there does not appear to be information describing the cumulative impacts of these proposed fence projects. For example, would wildlife, bird migration patterns, or endangered species foraging ranges shift based on the potential

impacts of the other proposed fencing (e.g., Lower Rio Grande Valley EIS, El Paso, Del Rio, etc.)?

Subsection headings do not match the headings in Table 4.0.1, making it difficult to review the information and make connections between the identified past, present, and future actions listed on pages 4-1 to 4-3 and to the subsections on the resource areas. For example, it is difficult to determine what the cumulative effect the Giant Reed Removal Project would have on the proposed project and the identified resource areas, since all of the potential impacts of future actions are lumped together.

"Cumulative" impacts in the sense of performing an assessment of the entire length of the project as a whole from California to Texas and the potential impacts project-wide are not considered.

Section 5. Mitigation and Best Management Practices.

There is a lack of specificity in Section 5. BMPs as well as other mitigation measures need to be approved before the Draft EA and FNSI become Final. In order to determine whether USBP has done this, EPA and other stakeholders need an adequate opportunity to comment on changes to mitigation. Most of the mitigation listed uses the language "would be incorporated." In order for the mitigation to offset any significant impact, specific measures for specific resource areas need to be described. Using an electronic database and concluding that there is no significant impact because there was no data in the database does not lead to specific mitigation measures being developed.

Appendix A. There is no information indicating the type of fence that will be used or whether multiple types will be used and their locations. The potential impacts to wildlife could be very different based upon the design of each of the fence types. Figure A-4 shows a fence with openings for small animals (NOTE: there is no scale by which to judge the size of the opening). Figure A-2 could have a different or perhaps greater impact on wildlife. The use of portable or permanent lights is not addressed in the EIS. If they are assessed elsewhere, a short description and incorporation by reference would be helpful.

Appendix H. Biological Survey. Although the survey goes into detail on some of the vegetative characteristics of the proposed project, it does not describe any systematic or quantitative field investigations (particularly with reference to animals). It is unclear what methods were used to determine percentages of vegetative cover, height of vegetation, or habitat quality, etc. The biological survey relies on animal species sighted as surveyors performed "intuitive controlled investigations." Predictably, the majority of species sighted are those that are common and seen during daylight hours (Table 5-2) with the exception of the Indigo snake. It is difficult to understand how Table 5-2 provides a general indication of species richness since nocturnal and more secretive species are not included. There is no invertebrate sampling.

Recommendation: USBP should conduct a scientifically rigorous, systematic sampling of the project corridor.

Environmental Justice. Related to the location of the fence and property of individuals, the maps created by USBP show that the fence could run very close to homes. Many families have lived at these locations for generations and have strong emotional ties to the family land and homes. The fence could cut farmers off from prime farmland close to the water. These impacts would be mitigated by fair compensation for the purchase or relocation assistance to any displaced family.

It would be helpful to encourage and make provisions for community input to monitor progress and identify potential community concerns by forming something such as a Community Advisory Board.

Also, USBP should consider alternative locations for fence placement that will result in the least impacts and cause less disruption on homes, landowners, and the livelihood of residents.

Specific Comments

The comments listed below are representative of the concerns EPA has in the information presented in the Draft EA. The comments are not exhaustive and do not list every instance in which similar language or text occurs.

p. 1-5, lines 23-26. "The proposed locations of tactical infrastructure are based on a USBP Marfa Sector assessment of local operational requirements where such infrastructure would assist USBP agents in reducing illegal cross-border activities."

There is no information that describes what the assessment included, criteria for fence section placement and other information, analysis, and methods that would explain the placement of the sections.

Recommendation: USBP should provide an explanation of how the locations of each section were determined, including any criteria and methods.

p. 1-8, lines 20 "...Step 5 relates to mitigation and is currently undergoing development."

USBP should provide information on possible mitigation measures and to what extent they would be implemented. Best-case and worst-case scenarios should be part of this analysis.

Recommendation: USBP should provide best- and worst-case scenarios and explain what mitigation would occur in each instance.

p. 1-9, lines 3-5 "...also have decisionmaking authority for components of the Proposed Action and intend for this EA to fulfill their requirements for compliance with NEPA..."

It is unclear what specific information is included in the Draft EA upon which these agencies can base a decision. NWI was used to assess potential wetlands impacts and was inconclusive. It is difficult to determine whether the estimates of potential impacts to these resources as listed in the Draft EA are accurate. EPA and other stakeholders need an adequate opportunity to comment on changes that address significant data gaps in the Draft EA.

p. 1-9, lines 19-26 "The USFWS is a coordinating agency regarding this Proposed Action to determine whether any federally listed, proposed endangered...species of their...habitats would be adversely affected by the Proposed Action. As a coordinating agency, the USFWS has assisted in completing the Section 7 consultation process, identifying the nature and extent of potential effects, and developing measures that would avoid or reduce potential effects..."

It is unclear what is meant by "developing the Biological Assessment in coordination with USFWS." Is USFWS helping to prepare the Biological Assessment or is it a different level of involvement? Detailed biological information on both status and non-status species is essential in generating additional alternatives, in selecting the appropriate alternative, in receiving meaningful comments from the public and other agencies, and in determining whether the level of detail necessary for a FNSI has been achieved.

Recommendation: Detailed biological information on status (state or federally-listed species) and non-status species should be included in the Draft EA and evaluated by USBP. Inclusion of this information should be used to generate additional project alternatives and to determine the significance of potential impacts.

Section 2.1, Screening Criteria for Alternatives

On line 12, "screening criteria" were used to develop the proposed action and evaluate alternatives. There is no information describing the details of each criterion in Section 2.1 In nearly all of the topics listed in this section, USBP is working with a specific agency to identify mitigation measures, but there is no information describing what those mitigation measures might include and the extent of the mitigation required. Specific mitigation measures are necessary if significant potential impacts exist.

Recommendation: USBP should provide best- and worst-case scenarios and describe what mitigation would occur in each instance listed for USBP Operational Requirements, threatened and endangered species, Wetlands/Floodplains, Cultural/Historical Resources and Suitable Landscape. Technical studies upon which assessments and mitigation are based should be included as appendices.

p. 2-2, lines 22-25 "...inclusion of the No Action Alternative is prescribed by the CEQ regulations implementing NEPA and will be carried forward for analysis in the EIS..."

There is no information describing current operational activities.

Recommendation: Provide information to support the No Action Alternative. Current educational initiatives, successful prosecutions or convictions, surveillance, and other enforcement activities should be included.

There is no information describing methods of construction or the depth to which the fence would be built.

Recommendation: The depth to which the fence would be built should be specified and the associated potential impacts on the soil and soil disturbance should be described in detail. Potential construction methods should be described in detail.

p. 2-5, line 14 "Designed to reduce or minimize impacts on small animal movements"

There is no information describing the impacts on small animal movements. No fence design (either single or multiple) has been selected. Impacts on biota could be different for each design (Appendix A). The color and materials used could also have an effect on biota. Large animals are not specifically mentioned, nor are "small" animals defined. Since the fence is likely made of metal and will be (b) (7)(E) it has the capacity to get very hot. It is unclear whether small animals, specifically amphibians, reptiles, and mammals would (b) (7)(E) Figures A-4 and A-5 do not have an identified scale and the (b) (7)(E) is unclear.

Recommendation: USBP should select specific fence designs for each segment and assess the potential impacts of those designs on biota, both large and small. There is a large body of scientific literature that addresses small animal movements, home ranges, and behavior. Technical studies should be initiated to determine the potential effect and significance of fence segments on biota.

p. 2-6, lines 1-2 "Section L-1... would be constructed as a atop the
$$(b)$$
 (7) " and placed

There is no information describing the reason this type of fence considered appropriate in this segment compared to other segments (this EA and other locations: Del Rio, Lower Rio Grande Valley, etc.).

Recommendation: Provide information describing the reason this type of fence was selected and its appropriateness in this instance and not in others (e.g., Del Rio, Lower Rio Grande Valley, etc.). Potential effects of this type of fence configuration should be described in the Environmental Consequences Section.

p. 2-6, lines 32-35 "CBP is also proposing to construct and operate permanent lighting in both Presidio sections (L1-A and L-1B). Each light pole would be constructed approximately every (b) (7)(E) Standard design for permanent lights is further discussed in Appendix A."

The addition of permanent lighting creates new alternatives: alternatives with lights and alternatives without lights. The construction, maintenance, and operation of the lights should be described and the potential environmental impacts. Permanent lighting is not described in Purpose and Need.

Recommendation: The purpose and need for the addition of permanent lights should be described in Section 1. New alternatives should be developed based on the presence or absence of permanent lighting. Construction, maintenance, and operation of the lighting should also be described and potential impacts to resources and any mitigation measures, in appropriate sections.

p. 2-6, lines 37-39 "Gates and ramps would be constructed to allow USBP, USIBWC and other landowner's access to land, the Rio Grande, water resources, and infrastructure."

There is no information describing the number of gates per segment, locations of gates, and determination of priority access (e.g., will the gate be located for USBP priority, water access priority, or landowner priority). It is unclear whether the proposed action has been adequately assessed when the locations of the gates have not been determined.

Recommendation: Display the potential locations of the gates on maps similar to those in Appendix F. Indicate the location priority—Border Patrol, water access, landowner access, recreation access, etc. The process should be described so that stakeholders can determine whether they have gate access and a process of appeal if they do not have gate access. The potential impacts to those who do not have gate access on their property should be described in Section 3.

p. 2-10, lines 2-4 "On a case-by-case basis, USACE might purchase the land between the fence and the Rio Grande on behalf of USBP, if operationally necessary."

It is unclear when and under what circumstances this would occur.

Recommendation: The EA should clarify the procedure USBP and USACE would use to determine whether USACE would purchase land.

p. 2-12, lines 9-10 Additional USBP agents in lieu of tactical infrastructure... "was determined not to meet the screening criteria of USBP operational requirements."

There is no information describing the "screening criteria" that led to this alternative being eliminated.

Recommendation: The EA should provide a description of the screening criteria used and the criterion this alternative did not meet in order to be eliminated.

p. 2-12, lines 12-14 "... but the use of additional agents alone, in lieu of the proposed tactical infrastructure, would not provide a practical solution..."

See the general comment above regarding information describing the law enforcement component in the Purpose and Need statement. Compare this to statements on page 2-12, lines 36-38. It would seem that each dismissed alternative contains the reason to dismiss the other (i.e., more agents not practical vs agents do the work, not technology).

Recommendation: Develop an alternative that combines technology and additional agents.

p. 2-12, lines 14-16 "The use of physical barriers has been demonstrated to slow cross-border violators and provide USBP agents with additional time to make apprehensions."

There is no information describing the deterrence time or USBP response time in this document. A reference is provided to a 2000 USACE document. An interested stakeholder wanting to find more information would need to search for particular statements.

Recommendation: Estimate the amount of time each fence section is anticipated to slow a cross-border violator. Estimate the USBP response times to intercept cross border violators both with and without a fence (i.e., the no action alternative). If a reference is used, summarize the information from that document and provide a page reference so that interested individuals can find the information.

p. 2-12, lines 26-28 "Increased patrols would aid in interdiction activities, but not to the extent anticipated by construction of primary pedestrian fence...."

There is no information describing the levels DHS anticipates from the Proposed Action and comparing them to the No Action Alternative.

Recommendation: The EA should describe the anticipated extent DHS expects from the Proposed Action and compare it to the other alternatives, including those that were eliminated from further consideration.

p. 2-13, lines 18-21 "CBP might need to implement this alternative at some point in the future depending on future USBP operational requirements. While CBP believes that this level of tactical infrastructure is not required at this time it is a viable alternative..."

There is no information describing what USBP would do should this situation arise (i.e., Supplemental EA). Would Alternative 2 be removed and Alternative 3 be constructed? Would Alternative 3 be constructed instead of Alternative 2?

Recommendation: Describe the circumstances that would lead to Alternative 3 implementation and what actions USBP would take regarding NEPA.

p. 3-2, lines 7-15 "Products containing hazardous materials (such as fuels, oils ...pesticides, and herbicides) would be procured and used during the proposed construction.... It is anticipated that the quantity of products containing hazardous materials used during construction would be minimal and their use would be of short duration. the quantity of hazardous and petroleum wastes generated from proposed construction would be negligible."

The potential impact on vegetation and animals is dependent upon the toxicity of the material and the exposure pathway of the organism. There is no information describing the potential long-term impacts of continual herbicide application. Accidental spills are not described. Additional analysis as to the potential materials to be used (e.g., examples of chemicals, name brands, etc) or the class of material (i.e., hydrocarbon, organochlorine) and the potential impact on resources should be provided.

Recommendation: USBP should discuss what compounds are likely to be used and their duration of use (e.g., during construction only or for long-term maintenance). USBP should provide specific information on the risk to biota, especially if use is long-term and occurs at regular intervals.

- **p. 3-2, lines 15-17** "Construction contractors would be responsible for the management of hazardous materials and wastes..."
- p. 3-6, lines 13-15 "...future maintenance...would be conducted by contractors..."

The action agency is responsible for the conduct of its contractors. Descriptions of how contractors would be held responsible and the consequences for mishandling wastes or other inappropriate actions should be incorporated into the Draft EA, particularly in the mitigation sections. USBP could state what types of conditions would be required in contracting instruments along with consequences.

Recommendation: Describe what contractors are responsible for and the consequences of mishandling wastes, poor work practices, or in other sections, for contact with resources (e.g., endangered species, cultural resources, wetlands, etc.) and mitigation measures that will be implemented.

p. 3-5 line 40, p. 3-6, lines 4-5 "...the effects would be temporary, fall off rapidly with distance from the proposed construction site, and not result in any long-term impacts."

Recommendation: USBP should include a graphical representation in order to aid stakeholders in visualizing the impacts of particulate matter.

Section 3.3.3 Environmental Consequences (Land Use)

There is no information describing the declines in this area and relating them to the number of illegal border crossings or similar statistics. There is no analysis in as to the estimated magnitude of property value decline or the projected property value decline or beneficial impacts (increases in property values) due to fence construction.

Recommendation: For each alternative, USBP should describe the potential impacts to land use and land value as described above, whether positive or negative.

p. 3-18, lines 1-2 "CBP might be required to obtain a permit or zoning variance based on local restrictions and ordinances."

There is no information describing zoning ordinances and the. USBP should provide detailed information on likely scenarios in terms of locations where permits or variances would be necessary and what would occur if a variance were not granted.

Recommendation: USBP should contact localities regarding zoning ordinances and the process of obtaining permits and variances and that information should be included in the Draft EA. USBP should provide maps and/or text indicating the locations of relevant segments. USBP should provide a description of what would occur if a variance or permit were denied.

p. 3-22, lines 36-38 "...cumulative short- and long-term adverse impacts related to the compaction of soils and increased erosion due to the use of the area by cross-border violators would be expected."

It is unclear what information is provided to support this conclusion. CBP has not provided information in earlier sections with regard to the number of cross-border violators or the number of people intercepted in order to provide a basis for comparison to the other alternatives.

Recommendation: Provide current interdiction statistics as part of the No Action Alternative. Compare current interdiction statistics of areas of "high" traffic to areas of "low" traffic with erosion effects in each area.

p. 3-23, lines 3-6 "...Grading, contouring, and trenching associated with the installation of the fence...would alter the existing topography."

There is no information describing the effect on flooding. If grading, etc. changed the slope then floodwater could potentially flow into Mexico or other areas that may or may not currently be subject to flooding.

Recommendation: USBP should provide a description, including maps that show potential water flow, anticipated changes in topography (.e., best and worst case scenarios) for fence segments and any potential impacts to humans and the environment.

p. 3-23, lines 19-26 "Short-term minor direct adverse impacts on soils would be expected... Soil disturbance and compaction due to grading ...associated with the installation of the fence..."

There is no information describing soil disturbance or the amount of soil displacement and where it would be taken.

Recommendation: USBP should provide information on the potential impacts to soil, including the depth that would be disturbed, the amount of soil displaced, and the location that displaced soil would be taken. If soil is to be removed, potential impacts of the additional soil should be assessed.

p. 3-25, line 20-25 "Substantial quantities of surface water are diverted from the Rio Grande to meet municipal, industrial, and agricultural demands in Texas and Mexico. A significant portion of the Rio Grande flow is used in the Upper Rio Grande Valley for..." different applications.

Recommendation: The EA should provide Rio Grande flow rates, water usage by sector (i.e., urban, agriculture, industrial, etc.) and seasonal variations and any other relevant, specific information to describe the Hydrology and Groundwater.

p. 3-31, lines 1-16 Surface Water Quality.

Recommendation: In addition to the qualitative descriptions, it would be helpful to have a table (similar to that provided in the Air subsection) that shows measured values that USBP collected and compare it to the water quality standard. This would provide stakeholders and decision makers with a quantitative analysis of the water quality data.

p. 3-30, lines 21-22 "Potential adverse effects associated with water contamination due to cross-border violators would continue."

It is unclear what information is included in the EA or in Section 3.6.1 that describes cross-border violators as the source or cause of water quality concerns in the area. Lines 1-3 describe the communities of Ojinaga and Presidio as major contributors, but cross-border violators are not mentioned.

Recommendation: Provide information demonstrating the link between cross-border violators and water contamination.

p. 3-31, lines 6-8 "Fences installed in washes/arroyos would be designed and constructed in a manner to ensure that water flow during excessive rain events would not be impeded or ponded."

There is no information describing whether the designs in Appendix A would meet this criteria or whether some other design would be used.

Recommendation: Schematics of a potential designs should be included in the EA along with any benefits or limitations of the design. Environmental consequences of the design should be evaluated.

p. 3-33, lines 21-22 "Hydraulic studies and modeling would be conducted to confirm this assessment."

Recommendation: Hydraulic studies and modeling should also include the effects of increased imperious cover and loss of vegetation on groundwater recharge, nutrient cycling, and water quality.

p. 3-39, lines 1-4, 32-33 "Dust generated from the existing access roads... would result in insignificant to minor, short- and long-term adverse effects on downwind vegetation due to interference with pollination and photosynthesis."

There is no information describing the potential effects on photosynthesis and pollination.

Recommendation: USBP should provide support for this conclusion with scientific literature reference, field studies, and the like.

p. 3-42, lines 35-37, p. 3-43, lines 1-2 "Some wildlife deaths, particularly reptiles and amphibians could increase due to the improved accessibility of the area and increased vehicle traffic. Although some loss of wildlife could occur, wildlife populations within the proposed project corridor would not be significantly affected through the implementation of the Proposed Project Alternative."

There is no information describing the method USBP used arrive at this conclusion. There is a large body of scientific literature regarding animal movements across roads and the effects of roads on many different species. "Incidental take" is a term of art used in Endangered Species Act determinations. There is no indication whether this section includes endangered species.

Recommendation: If USBP performed quantitative assessments to arrive at these conclusions, the text should reflect those investigations. If USBP did not do these types of studies, then USBP should perform the necessary analysis to support these conclusion. USBP should review the scientific literature regarding roads and their effects on species and incorporate those findings in the EA.

p. 3-42, lines 30-31 "...wildlife species and their habitat would continue to be indirectly impacted through habitat alteration and loss due to illegal trails and erosion."

There is no information quantifying the current levels of illegal cross border activity (i.e., the "no action alternative") on wildlife.

Recommendation: USBP should document the current illegal border activity and address what types of potential impacts could occur. USBP should conduct scientific biological field studies to determine what changes in biota may occur.

p. 3-43, lines 21-24 "Lights along the fence corridor could behaviorally exclude nocturnal wildlife from the illuminated zone, while potentially providing additional food sources for insectivorous bats. As such, lights would have minor to moderate, adverse and beneficial impacts on nocturnal wildlife depending on the species examined."

There is no data, either field studies or citations from the scientific literature, to support the conclusion of minor effects. The lights, while providing an additional food source for bats, could have greater community-wide (i.e., food chain impacts), depending on the species. By increasing the food source for bats, one might expect the number of bats in the area to increase or to be aggregated around the lights. This could lead to animals that prey on bats to increase. If the predators are generalists and had been using a different food source, those populations (e.g., rodents) may increase. If the bats are migratory, there could be significant impacts to creating a permanent food source. There are no operational details regarding the lights in the Draft EA.

Recommendation: Provide data, from field studies, scientific literature, or both, to support the conclusion that the lights will effect (both adverse and beneficial) on biota. Information on type of lights, duration, location, and species affected should be included. This type of information is essential to determine the specific effects and their significance.

p. 3-43, lines 36-38, p. 3-44, lines 14-21 "The following is a list of BMPs recommended for reduction or avoidance of impacts on migratory birds: ... Because not all of the above BMPs can be fully implemented due to time constraints of fence construction, a Migratory Bird Depredation Permit will be obtained from USFWS. Assuming the implementation of the above BMPs to the fullest extent feasible, adverse impacts of the Proposed Action on migratory birds is anticipated to be short- and long-term, and minor due to construction disturbance and associated loss of habitat. Long-term, minor, beneficial impacts would occur due to reduction of foot traffic through migratory bird habitat north of the impact corridor."

This portion of the Draft EA lists potential BMPs, but does not indicate that USBP will perform them. A draft of the permit should be included or a description should be included as to the impacts to migratory birds that USBP anticipates in best-case and worst-case situations.

Recommendation: USBP should list the migratory species that could be impacted. USBP should explain why "time constraints" are a limitation (instead of stopping construction until migration is over). USBP should discuss best-case and worst-case scenarios regarding potential impacts to migratory birds and what USBP will do in each case. This provides for a range of mitigation options.

p. 3-44, lines 22-24, 31-33 "Removal of vegetation and grading during construction could temporarily increase siltation in the river and therefore have short-term minor adverse effects on fish within the Rio Grande."

The duration of the direct impact of construction may be "short" in comparison of the length of time the fence is in place, but the effects on aquatic resources and fish could be longer in duration. There may be effects on the food base of fish, ability to reproduce, and the ability of offspring to survive when young. The Rio Grande is listed as an impaired water body. There is no information describing the additive effect of siltation on the current level of water quality in the Rio Grande.

Recommendation: Investigate best- and worst-case scenarios of increased siltation and other factors on aquatic resources. Provide and analyze data from field studies, scientific literature, technical reports, or a combination of these to quantitatively assess the potential impacts of the Proposed Project on aquatic resources.

p. 3-74, lines 37-41 "Some adverse disproportionate impacts on minority or low-income populations could be expected. Direct beneficial impacts on safety and the protection of children are expected from the projected deterrence of cross-border violators, smugglers, terrorists, and terrorist weapons from entering the United States..."

What are the expected impacts to minority or low-income populations? DHS should describe them. Current data on the number of smugglers and cross border violators interdicted, and weapons confiscated are not provided in the Draft EA. Since this baseline information is not present, it is unclear how the environmental consequences, both negative and beneficial, were assessed.

Recommendation: DHS should provide baseline statistics of the current level of USBP interdiction activities and its affect on the community (i.e., number and type of crimes, environmental damage, etc.). DHS can compare this to estimates or projections of USBP interdiction activities associated with the operation of a fence, both adverse and beneficial.

Section 4. Cumulative and other Impacts

Phase II of border fencing, mining operations, TXDOT projects, NADB projects, South Orient Rail Line.

Recommendation: USBP should display these actions on a map so that the public and agencies can visualize their proximity to the proposed project.

p. 4-2, line 35 SBInet

It's not clear whether SBInet is an activity completely initiated in the future, or if it is going to be used in concert with the fence. It would seem that aspects of SBInet could be incorporated into additional alternatives.