

Mr. Robert F. Janson  
Acting Executive Director  
Asset Management  
U.S. Customs and Border Protection  
Department of Homeland Security  
c/o e2M  
2751 Prosperity Avenue  
Suite 200  
Fairfax, VA 22031

Dear Mr. Janson:

The Environmental Protection Agency (EPA) Region 6 has reviewed the Draft Environmental Impact Statement (DEIS) for the Construction, Maintenance, and Operation of Tactical Infrastructure, Rio Grande Valley Sector, Texas, prepared by the U.S. Department of Homeland Security, U.S. Customs and Border Protection. The DEIS contains insufficient information for an adequate review. Of particular concern to EPA is the potential for long-term adverse environmental and ecological habitat impacts in the study area. Specific comments are enclosed.

EPA's performed its review pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations in 40 CFR Parts 1500-1508 and Section 309 of the Clean Air Act. The proposed action described in the DEIS includes the construction, maintenance, and operation of tactical infrastructure to include pedestrian fencing, patrol roads, and access roads along approximately 70 miles of the U.S./Mexico international border within the Rio Grande Valley Sector, Texas, from Roma to Brownsville. The proposed action would be implemented in 21 discrete sections ranging from approximately 1 mile to more than 13 miles in length.

Based on review of the DEIS, EPA rates the proposed project and the document as EC-2, Environmental Concerns–Insufficient Information. EPA requests that the DEIS be augmented based on the comments and the fact that the DEIS states that the U.S. Army Corps of Engineers, the International Boundary and Water Commission and the U.S. Fish and Wildlife Service intend for this EIS to fulfill their requirements for compliance with NEPA. If EPA can assist with our comments, please let us know.

EPA appreciates the opportunity to review this DEIS. Please send 5 copies of the Final EIS to the address above when it is filed with EPA's Washington, D.C. office. For your convenience, I also enclose a copy of the "Summary of Rating Definitions," which provides further information on EPA's rating system.

If you have any questions or would like to request assistance, please feel free to contact Cathy Gilmore as primary point of contact for this project. She can be reached at 214-665-6766 or by email at [gilmore.cathy@epa.gov](mailto:gilmore.cathy@epa.gov).

Sincerely yours,

John Blevins, Director  
Compliance Assurance and  
Enforcement Division

Enclosures: Summary of EPA Rating Definitions  
Comments and Analyses

Cc: Mr. Charles McGregor  
U.S. Army Corps of Engineers  
Fort Worth District

**Comments on the Draft Environmental Impact Statement (DEIS)  
for Construction, Maintenance, and Operation of Tactical Infrastructure  
Rio Grande Valley Sector, Texas**

**General Comments**

**Purpose and Need.** There is no text, studies, etc. that provide support for the Purpose and Need. There should be a section describing the amount of drug traffic that occurs along this sector, the number of illegal crossings, the number of Border Patrol responses, decreases in land values over time along the border, crime statistics, maps showing common interdiction locations, or the like. There are none in this document

**Recommendation:** DHS should include information to support the stated Purpose and Need which should include the following types of information listed above. How would the fence in the specific locations identified in the DEIS deter crossings and provide Border Patrol with the tools they need to carry out their mission?

**Section 2 Proposed Action and Alternatives**

It does not appear that the alternatives are equally analyzed. Particularly, Alternative 3 is not listed in Section 3. There is also text that implies that the No Action Alternative is not a viable alternative, but only a CEQ regulatory requirement.

**p. 2-1, lines 13-16** *“The USBP Rio Grande Valley Sector is working to develop the right combination of personnel, technology, and infrastructure to meet its objective to gain effective control of the border in the Rio Grande Valley Sector.”*

There are other alternatives that DHS should be considered. 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.

**Recommendation:** Investigate further alternatives in detail which should include the following:

**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.

### **Section 3. Affected Environment**

The No Action alternative and Alternative 3 are not specifically mentioned in this section. In many subsections, the extent of analysis for Route B is to indicate that it is the same as Route A. It is unclear why the No Action Alternative and Alternative 3 do not have the same level of description.

In several sections (e.g., p 3-21 line 8-26), there are many repetitive statements that describe the affected environment, but are not easily conceptualized by the reader.

**Recommendation:** DHS should provide maps showing the Proposed Alternative Sections and the described resource. For example, the text describes some of the surface water features, but a map displaying the waterbodies and the Routes would help readers visualize proximity from the Sections to the resource.

There is no mention of Total Maximum Daily Loads (TMDLs) or how the fence would impact water quality. The Rio Grande is an impaired waterbody requiring a TMDL. Also there are no maps of hazardous waste sites, etc

There is also no mention of US-Mexico treaties and whether they will be impacted. There is no mention of any Executive Orders regarding the effect of U.S. actions on foreign governments.

### **Section 4. Environmental Consequences**

The majority of this section uses relative terms like minor, major, perceptible, short-term, and long-term. There are qualitative descriptions of these terms, but there is no quantitative description or attempt to quantify these impacts. Additionally, the use of these terms is not supported by analysis or technical studies. Some potential impacts could be major, but not perceptible, unless detailed 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:** DHS should provide more quantitative information throughout Section 4, including supporting information like technical studies, methods, and analysis.

Best professional judgment is appropriate as long as there are technical studies or other factual information to support the judgment.

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

There is no real analysis on the potential effects on tourism. There is no quantitative analysis of the contribution of tourism and associated services to the economy and the relative impact if many of the recreational opportunities are restricted.

**Section 4.8.** There is no discussion of the fence’s potential impact on migratory species or impact to their home range, in particular, large mammalian species (e.g., deer or carnivores) or avian rookeries.

### **Section 5. Cumulative Impacts**

There is no discussion of the U. S. Fish and Wildlife Service (FWS) initiative to purchase land to connect units of the Lower Rio Grande Valley National Wildlife Refuge (LRGVNWR) (p. 3-30 line 4-10) or the potential impacts of the fence to this large scale effort to increase connectivity and reduce habitat fragmentation. Although private reserves such as Sabal Palms and The Nature Conservancy (TNC) reserves are listed on the maps in Appendix F, there is no text that describes how the fence would impact these locations or the future plans of these organizations (e.g., TNC portfolio sites). There is also no text discussing DHS Phase II (approximately 300 miles of fence in addition to the 225 miles listed on p. 5-1, line 31).

“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.

**Scoping and Appendix B.** For the most part, the DEIS does not specifically address many of the comments that the public raised in the scoping process (Table 4-1). Out of 106 comments listed in Table 4-1, 20 are addressed, 22 are somewhat addressed (i.e., may be generally addressed or only part of the scoping comment is addressed), and 60 are not addressed. Four comments concern the website or submitting comments. EPA is concerned that if approximately 56% of the comments during the scoping period were left unanswered, then comments submitted during the DEIS comment period may also remain unanswered in the Final EIS.

**Recommendation:** DHS should prepare a Response to Comments Document to indicate the resolution of each comment. (i.e., what page it appears in the DEIS, why it was not further considered, etc.)

**Appendix E.** The DEIS does not indicate the type of fence that will be used or whether multiple types will be used and their locations. Based upon the design of each of the fence types, potential impacts to wildlife could be very different. For example, Figure

E-4 shows a fence with openings for small animals (Note that there is no scale by which to judge the size of the opening); however, Figure E-7 would have a much more significant impact on wildlife. In addition, 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 I. 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 (e.g., listed as “good” or “medium”), etc. The biological survey relies on “animal species sighted” as surveyors performed “intuitive controlled investigations.” As one might predict, the vast majority of species sighted are those that are common and seen during daylight hours (Table 5-3) with the exception of the Mexican Burrowing Toad, Texas Horned Lizard, and Yellow-billed Cuckoo. Although “sampling,” “regular intervals” and the like are mentioned, there is no text describing a sampling plan, experimental design or scientific methods used. Since this appears to be the case, it is difficult to see how Table 5-3 provides a general indication of species richness. There is no invertebrate sampling.

**Recommendation:** DHS should conduct a scientifically rigorous, systematic sampling of the project corridor to correct the deficiencies listed above.

### **Environmental Justice.**

Related to the location of the fence and property of individuals, the maps created by DHS show that the fence could run straight through houses and backyards. Many families have lived at these locations for decades, some even centuries, and have strong emotional ties to the family land and homes. The fence could also 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, DHS 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 DEIS. The comments are not exhaustive and do not list every instance in which similar language or text occurs.

**p. 1-4, lines 24-27.** *“The proposed locations of tactical infrastructure and based on a USBP Rio Grande Valley Sector assessment of operational requirements where such infrastructure would assist USBP agents in reducing illegal cross-border activities.”*

There should be a section included here that describes what the assessment included, criteria for fence section placement and other information, analysis, and methods that would give a reader an idea of how placement of the sections was determined.

**Recommendation:** DHS should provide a detailed explanation of how the locations of each section were determined, including any criteria and methods.

**p. 1-7, lines 35-36** *“As part of the EIS process, USBP coordinated with the USEPA...”*

The extent of coordination with USEPA is unclear. According to Appendix D a letter was sent to US EPA on October 18, 2007, after the scoping period ended (October 15, 2007, p. 4 Scoping Report) inviting USEPA to be a cooperating agency. There is no additional information provided.

**p. 1-8, lines 16-20** *“...Step 5 relates to mitigation and is undergoing development.”*

Step 7, issue findings and a public explanation, is not specifically mentioned here. DHS should provide information on what possible mitigation options would be and to what extent they would implement them. Best-case and worst-case scenarios should be part of this analysis.

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

**p. 1-9, lines 2-7** *“...also have decisionmaking authority for components of the Proposed Action and intend for this EIS to fulfill their requirements for compliance with NEPA...”*

It is unclear what specific information is included in the DEIS for these agencies to base a decision. For example, there is no Biological Assessment on which USFWS can base its decision. Only NWI was used to assess potential wetlands impacts on certain sections. No wetland information is provided in other sections. It is difficult to determine whether the estimates of potential impacts to these resources as listed in the DEIS are accurate. They seem to be incredibly inaccurate if the information that will appear in the Final EIS is grossly different from what is contained in the DEIS. For example an estimate of 20 acres of wetlands impacted compared to 7 acres described in the DEIS. In addition, there

is no documentation that coordination with these agencies has occurred (e.g., letters, draft permit applications, etc.)

**Recommendation:** DHS should provide an accurate determination of potential impacts, include documentation and provide agencies and the public adequate opportunity to comment.

### **Section 2.1, Screening Criteria for Alternatives**

On line 12, “screening criteria” were used to develop the proposed action and evaluate alternatives. However, no specific criteria are listed in Section 2.1. For example, what is the length of time illegal border crossers must be delayed for a Border Patrol Agent to arrive? In nearly all of the topics listed in this section USBP is working with a specific agency to identify mitigation measures, but no documentation is provided as to what those mitigation measures might entail and the extent of the mitigation required.

**Recommendation:** DHS should provide best- and worst-case scenarios and explain 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 on which the assessments are based and mitigation developed should also be included as appendices.

**p. 2-2, lines 19-23** *“The No Action Alternative would not meet USBP mission or operational needs...inclusion of the No Action Alternative is prescribed by the CEQ regulations implementing NEPA and will be carried forward for analysis in the EIS...”*

This statement, as well as others, may indicate that the No Action Alternative is not considered a legitimate and viable alternative, but only included because it is mandated. This may violate the spirit of NEPA and implies a decision has already been made.

**Recommendation:** Evaluate the No Action Alternative as a legitimate alternative to fence construction. Current educational initiatives, successful prosecutions or convictions, surveillance, and other enforcement activities should be included.

**p. 2-6, line 5** *“Built 15 to 18 feet high and extend below ground.”*

No information in Section 2 or subsequent sections is provided on the depth to which the fence would be built, nor are methods of construction.

**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. 2-7, line 3** *“Designed to reduce or minimize impacts on small animal movements”*

No information is provided in Sections 3 and 4 that evaluate this statement. No fence design (either single or multiple) has been selected. Impacts on biota (and perhaps other issues) would be different for each design (Appendix E). 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 15-18 feet high, it has the capacity to get very hot. It is unclear whether small animals, specifically amphibians, reptiles, and mammals would use the openings. Figures E-5 and E-6 do not have an identified scale and therefore, one cannot figure out the size of the opening

**Recommendation:** DHS should select specific fence designs for each segment and specifically assess the potential impacts of those designs on biota, both large and small, and not just protected species. 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 of a fence on biota.

**p. 2-7, lines 11-13** *“Route B was developed through coordination with Federal and state agencies and incorporates input received through the public scoping process.”*

It is unclear what public scoping input was used in the development of Route B. In Sections 3 and 4 there are places where avoidance of highly diverse areas is cited. However, there is not explanation as to why Route B is significantly longer than Route A. For example, the eastern portion of Route B in Section O-2 is significantly longer (approximately 5000 ft) than Route A. No explanation is provided as to the reason behind this difference.

**Recommendation:** Provided detailed descriptions for the differences in Routes A and B and the source of the information.

**p. 2-9, lines 1-2** *Rio Grande Valley Sector activities routinely adapt to operational requirements and would continue to do so under this alternative.”*

It is unclear what is meant by this statement and how it would impact the alternatives.

**Recommendation:** Provide a description of what is meant by “routinely adapt to operational requirements” and provide an example of what it might include. If this adaptation has the potential to affect any of the resources described in Sections 3 and 4, then detailed explanations should be provided in the appropriate sections. Since we do not know what the operational requirements are, it is difficult to provide a specific comment on what resources might be affected.

**p. 2-9, lines 6-7** *“For both Route Alternatives, gates would be constructed to allow USBP personnel and landowners access to land, the Rio Grande, and other water resources, and infrastructure.”*

A Table in the appendix outlines how many gates per segment, but there is no description of the locations of these gates or how the locations will be chosen, what the priority access is (e.g., will the gate be located for USBP priority, water access priority, or landowner priority). Additionally, what will happen if the gate is left open for an extended amount of time? Would a passing USBP agent close the gate, even though a farmer may be working the land and moving equipment? According to a recent news item, there are 268 landowners and only 90 gates; therefore, less than half of the landowners may have a gate.

**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 by which the specific locations of the gates will be determined should be described in enough detail 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 stakeholders and landowners who do not have a gate on their property should be described in detail in Section 4.

**p. 2-9, lines 13-15** *“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 EIS should clarify the procedure USBP and USACE would use to determine whether USACE would purchase land.

**p. 2-11, lines 18-19** *Additional USBP agents in lieu of tactical infrastructure... “ was determined not to meet the screening criteria of USBP operational requirements.”*

What are the “screening criteria” that led to this alternative being eliminated?

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

**p. 2-11, lines 21-25** *“...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 lack of supporting evidence for the law enforcement component in the Purpose and Need statement.

**p. 2-11, lines 23-25** *“The use of physical barriers has been demonstrated to slow cross-border violators and provide USBP agents with additional time to make apprehensions.”*

No information is provided as to the deterrence time or USBP response time.

**Recommendation:** Estimate the amount of time each wall 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).

**p. 2-11, lines 37-38** *“Increased patrols would aid in interdiction activities, but not to the extent anticipated by the Proposed Action.”*

No information is provided as to the levels DHS anticipates from the Proposed Action.

**Recommendation:** The EIS should specifically 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. 3-10, line 10ff, Route A and p. 3-11, line 28, Route B**

This section describes the different types of land uses within the Rio Grande Valley, but does not specifically address the amount of each land use that occurs in Route A and Route B.

**Recommendation:** The EIS should provide the amount of each land use type per alternative as a description of the Affected Environment.

**p. 3-11, lines 7-8, 12-14** *“The major land use is agriculture (63 percent).”*  
*“Tourism...centers around Bentsen-Rio Grande Valley State Park...and other recreational facilities. Major urban areas are McAllen, Pharr, and Edinburg.”*

It is unclear why agricultural land uses are proscribed a percentage of county land use, but other uses (e.g., recreational, urban, etc.) are not.

**Recommendation:** The EIS should provide percentages of other land uses per county as a description of the Affected Environment.

**p. 3-19, line 33-36** *“Substantial quantities of surface water are diverted from the Rio Grande to meet municipal, industrial, and agricultural demands in Texas and Mexico, with a significant portion used in the Rio Grande Valley for farming and urban applications.”*

Words like “substantial” and “significant” are relative and do not describe the hydrology of the area.

**Recommendation:** The EIS 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. 3-22, line, 9-11** *“No NWI coverage is currently available for Sections O-1, O-2, O-3, O-5, O-6, O-7, and O-8.”*

What data were used instead of NWI for these areas? It is not acceptable to leave this information out when other data sources are available (e.g. aerial photos, NLCD) are available.

**Recommendation:** The EIS should provide information on wetlands in the Sections mentioned above using a data source other than NWI.

**p. 3-22, line 15** *“Identification and delineation of waters of the United States...within the proposed project corridor is an ongoing process. Wetland delineations will be finalized once rights of entry (ROE) and LRGVNR special use permits have been obtained. The unavoidable impacts on jurisdictional waters and wetlands will be reviewed as part of the USACE Section 404 permit process...”*

Since this is likely to be a controversial project, it would seem prudent to have delayed the publishing of the DEIS until draft permits or similar analysis and descriptions could be included, thereby giving the public and agencies the opportunity to comment. Not including these in the DEIS gives the appearance of “piece meal” NEPA and avoiding the holistic spirit of NEPA—to assess the total project.

**p. 3-23, lines 21-30** *“The use of irrigation and application of fertilizers, pesticides, and herbicides has resulted in contamination of agricultural drainage ditches and resacas in the Rio Grande Valley....”*

In describing the affected environment, one would assume that water quality reports from EPA, the Texas Commission on Environmental Quality (TCEQ) or original investigations should be included to support these statements. There is no information as to the types of compounds and their levels in each waterbody and whether the levels found exceed any state or Federal water quality standard.

**Recommendation:** DHS should use EPA, TCEQ, and original sampling studies to describe the water quality and the contamination of these water bodies in detail. Information should include the compound, the amount sampled, and whether the amount sampled exceeds a state or Federal water quality standard or criterion.

**p. 3-25, lines 12-14** *“More detailed information on the vegetation resources documented during field surveys conducted in 2007, including methodologies and classification schemes, is presented in the Draft Biological Survey Report.”*

The Draft Biological Survey report and its problems are discussed in the general comments section above.

**p. 3-29, lines 26-30** *“The Rio Grande brushland is considered an ecological transition zone between Mexico and the United States. This key community supports many rare, threatened, and endangered species and is a stopover for migrating neotropical birds (TPWD 2007a) ....Most of the 70 miles of the proposed project corridor has been heavily disturbed by agriculture and grazing; however, some high-quality habitat was identified during an October 2007 survey (see Appendix I).”*

Appendix I does describe habitat quality, but only qualitatively in relative terms (e.g., “good,” “medium”). No relative abundances of species are recorded. Rare vs. common or using Natural Heritage Ranks (Global and State) are not provided nor weighted per species. What do the terms “most,” “some,” and “heavily disturbed” mean? The text here and in other places in this subsection is qualitative and vague. If a field survey occurred, why wasn’t it conducted in a more scientifically rigorous and methodical fashion?

**Recommendation:** DHS should conduct a scientific field study to accurately quantify the resources in this section. Relative and vague terms as described above do not sufficiently describe the Affected Wildlife and Aquatic Resources.

**p. 3-35, lines 1-4, 8-10** *“... While the historic ranges of the remaining species included this region of South Texas, available data indicate no known records of these species within or proximal to the proposed project corridor.”*

There is no indication that DHS determined whether potential habitat for these species exists within or proximal to the project corridor. If habitat does exist, then these species (Ashy dogweed, Johnston’s Frankenia, Piping Plover, etc.) cannot be dismissed from further investigation. A species might not have a record of occurrence, but evidence of potential habitat may indicate an area of expansion for the species or an area where additional individuals can be raised or transplanted.

**Recommendation:** DHS should provide information on whether potential habitat exists within or near the proposed corridor for the status species listed on p. 3-34 and 3-35.

**p. 3-35, lines 28-29** *“Jaguarundi prefer dense thornscrub habitats with greater than 95 percent canopy cover.”*

The text says that this type of habitat is what the jaguarundi prefers, but does not say whether this type of habitat was found within the proposed alternatives.

**Recommendation:** DHS should determine whether appropriate habitat for the jaguarundi exists in the project corridor.

**p. 3-59, lines 37-40** *“Tourism related businesses have experienced an expansion in the past 5 years with growth in the arts and entertainment, and recreation industries at 9 percent...”*

The text indicates a growth trend and information on employment, but does indicate how many visitors the area receives because of recreational opportunities, nor does it describe the amount of revenue brought into the local economy from these tourists.

**Recommendation:** DHS should supplement the current text with information about the number of visitors to the area and the type of recreation they engage in. DHS should also include information on the amount of revenue generated from these activities.

**p. 3-75, lines 13-14** *“There are no known waste storage or disposal sites within the proposed project corridor...”*

There is no information included whether there are sites nearby (e. g. 0.5 to 1 mile away). US EPA Region 6 has used a GIS Screening Tool to assist in its review. The maps generated from this indicate that there may be hazardous waste sites within 1 mile of the project corridor. EPA Region 6 has included these maps.

**Recommendation:** Area near (within 1 mile) the proposed corridor could contain hazardous waste sites. This type of information should be considered for each segment.

**p. 4-4, lines 6-8** *“The pedestrian fence and patrol road would require mowing approximately two times per year to maintain vegetation height and allow enhanced visibility and security.”*

How would mowing and other maintenance activities (e.g., herbicide applications) affect biota, vegetation, water issues, and small animal movement and activity?

**p. 4-6, lines 23-25** *“...the impacts would be temporary, and would fall off rapidly with distance from the proposed construction sites.”*

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

**p. 4-9 line 11-12** *“...construction staging areas...”*

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

**Recommendation:** DHS should provide information on the location, activities, magnitude of the construction staging areas.

**p. 4-10, lines 19-22** *“In some locations, land values and land uses (including potential development) are currently adversely affected by illegal border crossings. Under the No Action alternative, land uses and values as described in Section 3.4 may continue to be adversely affected and degradation could increase.”*

This statement (and others like it) is without support in the DEIS. Section 3.4 defines land use and planning and describes the different land use types. It also describes the percentage of each use type (e.g., land use in Hidalgo County is agriculture which is 63% of the land use). There is no analysis or information (numerical or narrative) describing the declines in this area and relating them to the number of illegal border crossings or similar statistics. There is no analysis in Section 4 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, DHS should describe the potential impacts to land use and land value, whether positive or negative.

**p. 4-10, lines 26-28** *“The severity of the impact would vary depending on the need for rezoning to accommodate the fence sections and patrol roads. USBP might be required to obtain a permit or zoning variance based on local restrictions and ordinances.”*

Zoning ordinances and the like are public information and should be included. DHS should have provided more detailed information on likely scenarios in terms of locations where permits or variances would be necessary and what would occur if a variance was not granted.

**Recommendation:** DHS should contact localities regarding zoning ordinances and the process of obtaining permits and variances and that information should be presented in the DEIS. In addition, DHS should provide maps and/or text indicating the locations of relevant segments. DHS should also provide a description of what would occur if a variance or permit were denied.

**p. 4-12, lines 19-21** *“Landowners whose properties would be affected could receive a gate within the fence that would allow them access to other portions of their property to reduce potential inconvenience.”*

The text does not say that every landowner will get a gate and it does not describe specifics about the gates, including placement or prioritizing access. Gate placement could have impacts on farmers, landowners, recreationists, biota, etc. and is not specifically considered.

**Recommendation:** DHS should explain the criteria for gate placement and access and should assess the potential impacts on farmers, biota, etc.

**p. 4-12, lines 24-31** *“Long-term minor adverse impacts on recreation would be expected after construction because access to recreational areas along the proposed tactical infrastructure sections could be limited or restricted to potential users. Long-term indirect beneficial impacts on recreational areas could occur as a result of decreased cross border violators coming into these recreational areas. . In addition, by reducing the amount of illegal traffic within and adjacent to the project area, disturbance to lands on the U.S. side of the proposed fence would be reduced.”*

How does DHS arrive at minor adverse impacts and long-term beneficial impacts? There is no methodology other than a qualitative definition on p. 4-1, line 23. The reason that people come to these areas (hunting, bird watching, hiking, etc.) may not exist or may be substantially different after the fence is constructed. Safety concerns due to funneling of people would not seem to be short term or minor. There is no data provided as to the current levels of illegal cross border activity (i.e., the “no action alternative”); therefore, DHS cannot determine the potential impacts. See above comment. There is no supporting evidence described in the DEIS that supports this statement for either the beneficial impact on species or the number of crossings, incidents, etc. negatively impacting recreational opportunities.

**Recommendation:** DHS should document the current illegal border activity and address what types of potential impacts could occur due to funneling of people. DHS should obtain current recreation visitation statistics to the area in order to assess what declines in visitation may occur (either real or perceived). DHS should conduct scientific biological field studies to determine what changes in biota may occur and relate these data to potential declines or increases in recreation.

**p. 4-12, lines 32-37** *“Land use between the 21 proposed fence sections could be adversely impacted by the deterrent impacts the fence sections would have by funneling of illegal cross border activities into those areas. Since the location of the proposed tactical infrastructure sections are based on USBP operational requirements including the ability to make apprehensions, adverse impacts would be expected to be minor.”*

The DHS cannot have it both ways. In a previous section, land values and land use is currently being negatively impacted without the fence and that the fence would improve conditions. In this section, DHS is now stating the opposite, that the private property near or adjacent will be negatively affected by funneling more crossers there instead of having them spread out across a wider area.

**Recommendation:** See previous comment

**p. 4-13, lines 29-35** “...Grading, contouring, and trenching associated with the installation of the proposed tactical infrastructure...would alter the existing topography.”

How would this affect flooding? If grading, etc. changed the slope then flood water could potentially flow into Mexico or other areas that may or may not currently be subject to flooding.

**Recommendation:** DHS 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. 4-13, lines 8-11** “Short-term minor direct adverse impacts on soils would be expected. Soil disturbance or compaction due to grading ...associated with the installation of the proposed tactical...sections...”

There is no information as to how deep the soil disturbance would go or how much soil would be displaced and where it would be taken.

**Recommendation:** DHS 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. 4-13, lines 16-18** “Soil disturbance on steep slopes has the potential to result in excessive erosion due to instability of the disturbed soils and high runoff energy and velocity.”

What would be the potential impact of soil erosion on flooding, Rio Grande hydrology, etc. from the sediments deposited in the Rio Grande?

**p. 14-16, lines 11-13** “Revegetating the area with native vegetation following construction along with other BMPs to abate runoff and wind erosion could reduce the impacts of erosion and runoff.”

This statement points out that in the majority of cases where best management practices (BMPs) or other “mitigation” is mentioned that there is no indication that DHS “will” do it, but only that the use of a BMP could mitigate impacts (if used).

**Recommendation:** DHS should commit to a range of mitigation. For example, DHS could provide best- and worst-case scenarios and indicate mitigation that would occur in each.

**p. 4-21, lines 4-5** “...*(depending on the location) beneficial impacts would be anticipated due to protection of remaining vegetation north of the proposed project corridor.*”

Is trampling of vegetation in these areas currently a problem? Section 3 does not contain any information indicating the numbers of people that currently traverse the area (whether illegal border crossers or recreational visitors).

**Recommendation:** In order to show that the project corridor would have a beneficial impact on vegetation or other resources, DHS should establish that this is currently a problem and that the construction of the fence would reduce the number of people trampling vegetation or impacting other resources.

**p. 4-24, lines 15-17** “*Potential threats in these areas include habitat conversion, noise, and potential siltation of aquatic habitats.*”

No assessment is made of the potential impacts of a fence to changes to animal movements, access to water resources, or maintenance of genetic diversity.

**Recommendation:** DHS should discuss the potential impacts of the alternatives on animal movement, access to water resources, and maintenance of genetic diversity.

**p. 4-25, lines 3-6** “*The proposed tactical infrastructure sections would be expected to provide some protection for wildlife and wildlife habitats in the areas north of the proposed project corridor from new, continued, or increased foot traffic impacts by cross border violators. Such protection would result in short- and long-term, minor beneficial impacts on wildlife.*”

There is no supporting evidence provided that cross border violator foot traffic is currently a problem or is becoming a problem. Additionally, there is no text providing support that the fence would have a minor (what is minor) beneficial impact. Similar text occurs throughout Section 4 (e.g., p.4-28, lines 20-24).

**Recommendation:** DHS should provide information regarding the current situation (amount of foot traffic, patterns of traffic, etc.) in Section 3 and then discuss the potential impacts, both adverse and beneficial, of each alternative in Section 4.

**p. 4-27, lines 18-24** “*The USFWS has provided critical feedback on the location and design of fence sections to avoid, minimize, or mitigate potential impacts on listed species or designated critical habitat. USBP is developing the Biological Assessment in coordination with the USFWS. Potential impacts of fence construction, maintenance, and operation will be analyzed in both the Biological Assessment and Biological Opinion to accompany the Final EIS.*”

Explain what is meant by “developing the Biological Assessment in coordination with USFWS.” Is USFWS helping to prepare the Biological Assessment or is it some other level of involvement? If USFWS is writing the Biological Assessment and preparing the Biological Opinion, there may be a conflict of interest. Detailed biological information on both status and non-status species would seem to be essential in selecting the appropriate alternative or in generating additional alternatives and for DHS to receive meaningful comments from the public and other agencies. Non-status species (e.g., deer, reptiles, small mammals, etc.) are not specifically mentioned in earlier subsections.

**Recommendation:** Detailed biological information on status (state or federally-listed species) and non-status species should be included in the DEIS and evaluated by DHS. Inclusion of this information should be used to generate additional project alternatives.

**p. 4-30, lines 18-25** *“Habitat loss or conversion for state-listed species in Sections O-1, O-2, O-8, and O-10 (i.e., Mexican tree frog, Mexican burrowing toad, Texas horned lizard, white-lipped lizard) would affect a small area and would be of little consequence to statewide viability of these species. BMPs to avoid and minimize impact...are anticipated to reduce potential impacts to minor or lower intensity. Increased... traffic would be anticipated to have a correlated increased potential for mortality of these species through roadkill.”*

It is unclear what supporting documentation (technical studies, current data, or scientific literature) DHS used to come to this conclusion. The text seems to suggest that some sort of quantitative methods (i.e., viability, correlation) were used, but the text does not indicate methods or specific reasoning for these conclusions. There is a large body of scientific literature regarding animal movements across roads and the effects of roads on many different species.

**Recommendation:** If DHS performed quantitative assessments to come to these conclusions, the text should reflect those investigations. If DHS did not do these types of studies, then the text should be revised to indicate what they did do or they should perform the necessary analysis to support the statements in the text. DHS should review the scientific literature regarding roads and their effects on species and incorporate those findings in the EIS.

**p. 4-31, lines 25-30** *“Short- and long-term adverse impacts on state-listed species due to habitat conversion and roadkill mortality resulting from implementation of Alternative 3 would be major... Short- and long-term beneficial impacts due to protection provided by the fence along Route B would range from minor to moderate, depending upon location.”*

See similar comments above regarding the use of the terms “minor,” “major” and “moderate.” There is no methodology described or analysis that explains how DHS arrived at these conclusions. It is unclear why a statement regarding Route B is in the section regarding Alternative 3.

**Recommendation:** See similar recommendations above.

**p. 4-32, lines 21-22, p. 4-33, lines 1-8** *“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, impacts of Route A on migratory birds is anticipated to be short- and long-term, minor, and adverse due to construction disturbance and associated loss of habitat, and long-term, minor, and beneficial due to reduction of foot traffic through migratory bird habitat north of the proposed project corridor.”*

This portion of the DEIS lists BMPs, but does not indicate that DHS will perform them. In addition, the mention of “time constraints” as a limitation to BMP use needs to be explained. Additionally, a draft of the permit should be included (see comment above regarding USFWS Biological Assessment/Biological Opinion process) or, at a minimum, a description should be included as to the impacts to migratory birds that you anticipate in best-case and worst-case situations.

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

**p. 4-45, Figure 4-11-2.** This figure seems to indicate that there is a residence or farm shed adjacent to the proposed fence. In several subsections, the DEIS mentions that cross border violators would be funneled through non-fenced sections. However, the consequences of this approach to residents and landowners are not discussed. For example, if drug traffickers are trying to cross at the location in this figure, and funneled toward the residence and they see the Border Patrol vehicle. What is to prevent drug traffickers from hiding the drugs on the private property or harassing the residents (either short- or long-term)?

**Recommendation:** DHS should discuss the potential safety risks to home- and landowners that may be adjacent to the proposed fence. Potential mitigation options for safety concerns of landowners should be discussed.

**p. 4-54, lines 6-13** *“Indirect impacts on socioeconomics from recreation and ecotourism would be tied directly to the user’s perception that Route A has altered their access to valued visual or recreational resources. ...Route A would help deter cross border violators, which would make the area safer for...ecotourists and USBP agents in the area.”*

This seems to indicate that impacts are only the perception of potential users and that there are not real impacts that may occur to biota and vegetation. Since no information is

provided in Section 3 as to the current deterrence efforts of USBP (e.g., number of people apprehended, etc), it would be difficult to determine the impact. DHS indicates that the area would be safer; however the opposite could also occur. The area south of the fence could become a “no-man’s land” where drug traffickers or others lie in wait for eco-tourists or others.

**Recommendation:** DHS should provide information regarding current deterrence efforts and compare that to potential impacts, both adverse and beneficial.

**p. 4-54, lines 38-43** *“The proposal provides gates at key locations that are intended to provide landowners with access to their property, but there could be some extra distance in reaching a given field. Installation of a pedestrian fence with gates could have minor adverse impacts on landowner’s access, the movement of machinery and equipment, planting and harvesting, potential problems of access of agricultural service firms, and a resulting increase in costs.”*

It is unclear how DHS determined that the impacts to farmers would be “minor.” There is no information that an economist estimated the additional fuel costs, time, etc. and what the impact would be to a farmer’s financial situation. In addition, 90 gates are planned, but there may be many more landowners. A recent news article suggests that there may be over 250 landowners. There is no information in Section 3 as to the process for determining gate location and priority access.

**Recommendation:** DHS should provide documentation that explains their conclusion of “minor” impacts to farmers. The criteria for gate placement, etc. should be discussed and its potential impact to farmers (e.g., increased fuel costs, etc. and what impact that would have on farmers ability to remain viable).

**p. 4-55, lines 10-22** *“Minor to moderate adverse indirect impacts would be expected from the imminent dislocation of some families due to property acquisition....Many families in the proposed project corridor have lived there for decades, some even centuries, and have strong emotional ties to the family land and homes... These impacts would be mitigated to some extent by fair compensation...and relocation assistance to any displaced family. Renters...are less likely than property owners to have the resources to resettle in a comparable location.”*

This would seem to be a direct impact rather than an indirect impact. It is not clear what relocation assistance would include and whether these renters and landowners would receive assistance in determining fair compensation for property. Given the socioeconomics of the area, this would seem to be an environmental justice issue.

**Recommendation:** DHS should discuss what resources would be available to landowners and renters in assisting them to resettle or obtain fair compensation. The environmental justice consequences of these impacts should be discussed.

**p. 4-55, lines 23-28** *“Some adverse disproportionate impacts on minority or low-income populations would 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, and therefore provide for safer communities.”*

What are the expected impacts to minority or low-income populations? DHS should describe them. See similar comments and recommendations above.

**p. 4-59, lines 16-23** *“Short-term negligible adverse impacts would be expected [from hazardous materials]. Products containing hazardous materials (such as fuels, oils ...pesticides, and herbicides) would be procured and used during construction. It is anticipated that the quantity of products containing hazardous materials used would be minimal and their use would be of short duration. Herbicides would be used along the fence to control herbaceous vegetation.”*

The potential impact on vegetation and animals is dependent upon the toxicity of the material and the exposure pathway of the organism. To simply say that there will be small quantities used for a short time period is not an adequate assessment. There is also no description of the potential long-term impacts of the continual herbicide application (for maintenance purposes, it is assumed).

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

**p. 4-59, lines 24-25** *“Accidental spills could occur during construction. A spill could potentially result in adverse impacts on wildlife, soils, water, and vegetation. However, only small amounts of hazardous materials are expected.”*

See comment above. Additional analysis as to what potential materials would be used (e.g., examples of chemicals, name brands, etc) or the class of material (i.e., hydrocarbon, organochlorine) and the chemical class’s potential impact on these resources should be provided

**Recommendation:** See above comment.

**p. 4-59, line 34** *“ASTs have been within the proposed project corridor.”*

**Recommendation:** It would be helpful to show the location of above ground storage tanks (ASTs) and other hazardous waste locations on a map to indicate proximity to the proposed project.

**p. 5-1, line 26** “...currently 62 miles of landing mat fence at various locations...; 14 miles of ...fence in San Diego...”

**Recommendation:** DHS should provide a map showing the locations of the fence that are already constructed and locations where fencing is going to be constructed for the entire southern border. All past, present, and future fencing locations should be displayed.

**p. 5-2, line 13** “*Private Residential Developments*” p 5-2 line 24 “*Present Actions*”, p. 5-3 line 13 “*Reasonably Foreseeable Future Actions*”

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

**p. 5-3, line 17** *SBI*net

It’s not clear whether SBI<sub>net</sub> 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 SBI<sub>net</sub> could be incorporated into additional alternatives.

**p. 5-3, lines 31-33** “..areas that might be suitable for lighting can be identified for the purpose of the cumulative effects analysis...Approximately 450 lights...”

It is unclear whether DHS assessed the impacts of these 450 potential lights in terms of air, noise, wildlife, etc.

#### **Appendix F. Map 3 of 17.**

It’s unclear why there is such a distinct difference between Routes A and B. Route A extends across the Los Velos West Unit and then stops, but Route B parallels Route A and then continues for an additional mile, approximately.