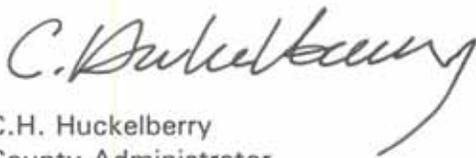


Patience E. Patterson
SBInet Tucson Project
July 3, 2008
Page 3

- Where individual components of the proposed action necessitate activity in washes regulated by Pima County's Floodplain and Erosion Hazard Management Ordinance, a Floodplain Use Permit may be required from the Pima County Regional Flood Control District. Please contact Mr. Eric Shepp, Floodplain Management Division Manager – Regional Flood Control District (eric.shepp@rfcd.pima.gov).

Thank you for this opportunity to provide comments.

Sincerely,



C.H. Huckelberry
County Administrator

CHH/va

- c: John Bernal, Deputy County Administrator - Public Works
Nanette Slusser, Assistant County Administrator for Policy - Public Works
Carmine DeBonis, Development Services Director
Arlan Colton, Planning Official, Development Services Department
Sherry Ruther, Environmental Planning Manager, Development Services Department

RCW 7/28/08



United States Department of the Interior
NATIONAL PARK SERVICE

Coronado National Memorial
4101 East Montezuma Canyon Road
Hereford, AZ 85615



In Reply Refer To:
L7619

July 14, 2008

Ms. Patience E. Patterson
US Dept of Homeland Security
SBInet Program Management Office
US Customs and Border Protection
1300 Pennsylvania Ave NW, Room 3.4-D
Washington, DC 20229

Dear Ms. Patterson,

Please consider the following comments on the Environmental Assessment for the Proposed SBInet Tucson West Project Ajo, Tucson, Casa Grande, Nogales, and Sonoita Stations Areas of Operation, US Border Patrol, Tucson Sector, Arizona.

The document does not reference the known Mexican spotted owl nest and roost sites or the known lesser long-nosed bat roost sites and foraging habitat found within Coronado National Memorial. Please update Table 3-13 on page 112 and the text discussion on pages 124-126 to account for these locations of these threatened and endangered species.

In Table 5-2 on page 185, the table needs to indicate that the roost at Coronado National Memorial is active from July 1 through October 31 and there needs to be associated restrictions on activities during that timeframe.

On page 185, it is not clear in the bulleted item regarding native vegetation who exactly will be removing the exotic species. Please clarify whose responsibility that will be and the timeframe they are responsible for it. In addition, please indicate that on Coronado National Memorial, herbicide use requires pre-approval from the Memorial staff.

Please add a general wildlife mitigation regarding holes and trenches. All holes and trenches need to be covered at night or escape ramps placed in them to allow entrapped wildlife to escape.

We would like to see this project be a 'green' project and reuse existing material as much as possible. A good example would be the steel from the vehicle barriers no longer in use on the border could be used in this project, as appropriate.

In Appendix A, there were no dates on the public scoping letters so it is not clear when these were sent to the public. In addition, no letters were addressed to Coronado National Memorial during the public scoping period. Please ensure that we are contacted early in the process for future projects that will be occurring on the Memorial. Thank you for your time and attention to these items.

Sincerely,

Kym A. Hall

Kym A. Hall
Superintendent

In reply refer to SHPO-2008-0626
General comments

August 4, 2008

RCV 8/11/08

Patience E. Patterson
Director, SBI Environmental Planning
Secure Border Initiative
U.S. Customs and Border Protection
1300 Pennsylvania Avenue,
Washington, DC 20229

RE: Comments on Revised Archeological Testing Plan for Proposed Tower Installations
(Tucson West) CBP; CNF; BANWR; **SHPO-2008-0626** (37241)

Dear Ms. Patterson:

Thank you for continuing to consult with our office pursuant to 36 CFR Part 800 in regard to the above referenced federal undertaking and for responding to the comments in my previous letter. I have the following comments on the revised document titled *Archaeological Testing, Avoidance and Monitoring Plan for Four Proposed Tower Installations in Tucson West* (Revision 1.2, 31 July 2008):

1. The Plan has been revised to satisfactorily address most of my earlier comments.

2. The proposed avoidance and monitoring procedures to be implemented at AZ DD:6:68(ASM) and AZ DD:11:7(ASM)/AR03-05-02-751 are acceptable.

It is not clear whether these measures would be implemented to ensure that other archaeological sites within the area of potential effects are protected from inadvertent damage related to this project.

3. The plan of work proposed for AZ EE:9:245(ASM)/AR03-05-02-751 is acceptable.

4. Page 48, first paragraph, last sentence. Per federal regulation [36 CFR 800.4(c)(1)(2)], the federal agency, not SHPO, makes a determination of eligibility. SHPO agrees (or not).

5. The surface artifact assemblage at AZ FF:12:56(ASM) consists of two vesicular basalt ground stone fragments and approximately 300 pieces of debitage (including cortical and noncortical chert, basalt and andesite flakes) which suggests a limited activity site likely related to production, reduction and use of stone tools.

The eligibility testing plan proposes general rather than specific research questions relevant to the artifacts observed. Examples of specific questions (that could have been addressed in the survey report): consideration of material sources for cherts, andesite, and basalt(s) (i.e., local or not); is there evidence of use wear on the vesicular basalt ground stone fragment; is the fragment likely to be from a mano or a metate; if so, to the extent possible, consider what kind. We expect the testing report to provide such discussions along with good descriptions of artifacts, including measurements and drawings/photographs, in support of an eligibility recommendation.



Janet Napolitano
Governor

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Phoenix

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Larry Landry
Phoenix

Mark Winkleman
State Land
Commissioner

Kenneth E. Travous
Executive Director

Arizona State Parks
1300 W. Washington
Phoenix, AZ 85007

Tel & TTY: 602.542.4174
www.azstateparks.com

800.285.3703 from
(520 & 928) area codes

General Fax:
602.542.4180

Director's Office Fax:
602.542.4188

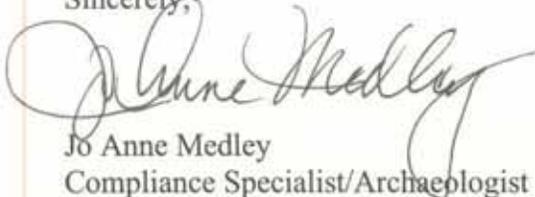
Letter to Ms. Patterson
SHPO-2008-0626 (37241)
August 4, 2008
Page 2

Tucson West Towers

6. Excavation (sampling) of features during eligibility testing is not appropriate. Any features found during testing should be described, measured, photographed/drawn, and evaluated for potential to yield important information. Delete references to excavation/sampling of features from the last paragraph on page 50.

We appreciate your efforts to consider the potential of CBP's plans and actions to affect historic properties.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jo Anne Medley". The signature is written in black ink and is positioned above the typed name and title.

Jo Anne Medley
Compliance Specialist/Archaeologist
State Historic Preservation Office

Public Comments



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, AZ 85004-4427
www.blm.gov/az/

1610 (910)

July 2, 2008

Mr. John Santo
Program Manager, SBInet
U.S. Department of Homeland Security
US Customs and Border Protection
Washington, DC 20229

RE: Comments on the Draft Environmental Assessment (EA) and Proposed Finding of No Significant Impacts (FONSI) for the Proposed SBInet Tucson West Project, Ajo, Nogales.....Tucson Sector, Arizona

Dear Mr. Santo:

This is in response to your letter to the Bureau of Land Management (BLM) received June 5, 2008 regarding the Customs and Border Protection (CBP) Secure Borders Initiative (SBI) Net project. You requested comments by July 5 for the Tucson West Draft EA and Proposed FONSI.

Staff specialists from the BLM Phoenix District Office reviewed the document and provided comments (below). Please note also that the July 13, 2007 letter that I submitted on behalf of the BLM in Arizona, New Mexico, and California to Mr. Kirk Evans and to the then project manager was not referred to or printed in the draft EA. That letter identified all contacts and the process to be followed in obtaining permits and resolving issues with BLM offices. I have attached a copy as a comment to the draft EA.

The BLM Phoenix District Office will continue to process the current application pertaining to this draft EA and the Organ Pipe EA. Mr. Jim Andersen of that office may identify other documents, consultations, or issues that require attention to ensure permit processing.

Comments:

1) BLM's official comment of July 13, 2007 on the SBInet projects and BLM permitting was inadvertently left out of this Draft EA. See below.

BLM 1

2) The draft EA is incorrect and inconsistent in identifying tower locations and ownership. For BLM, please review the land status, current use, and county for tower

BLM 2

#216. EA, page 29, line 16: (TCA-AJO-216); the site is in Pima County and is on land administered by BLM.

3) Comments on the biological portion of the draft EA:

Section 3.7.1, 2nd paragraph. Delete "n" from species of saguaro *C. gigantean*

Section 3.7.1 3rd paragraph. Insert "e" in *Larrea tridentate*

Section 3.8.1, 2nd paragraph. Correct name for desert cottontail is *Sylvilagus audubonii*

Section 3.8.1, 2nd paragraph. Correct name for Gambel's quail is *Callipepla gambelli*

Section 3.8.1, 2nd paragraph, Correct spelling for desert tortoise is *Gopherus agassizii*.

Section 3.8.1, 2nd paragraph, Delete "a" from *Chuckawalla*. Correct name is *Sauromalus ater*

Section 3.8.1, 2nd paragraph, Correct name for western shovel-nosed snake is *Chionactis occipitalis*

Section 3.8.1, 2nd paragraph, Correct spelling for banded gecko is *C. variegates*

Section 3.9.1.1 Federal. Historic range for the Sonoran pronghorn is considered to be south of I-8 and west of Hwy 85. Since tower Ajo 216 is on BLM lands west of Hwy 85, it is within historic range of the Sonoran pronghorn and potential impacts should be identified.

Section 3.13.1 Radio Frequency Environment. Although the document refers to the potential effects of radio frequencies on birds, there is no mention of the effects, if any, of radio waves on bats, particularly the endangered lesser long-nosed bat.

Table 5-2 Seasonal Restrictions. Sonoran pronghorn also have a seasonal restriction from March 15 through July 15 annually, unless modified by the Sonoran Pronghorn Recovery Team. The restriction is to avoid disturbance during the fawning season.

BLM 3a

BLM 3b

Please contact myself or Jim Andersen (623-580-5570, address below) for further information. My contact information: 520-624-0560; telefax 520-388-8305; and, e-mail address is shela_mcfarlin@blm.gov. My mailing address is: Bureau of Land Management, Federal Building, 300 West Congress, 6V3, Tucson, Arizona 85701.

Sincerely,



Shela McFarlin
Special Assistant for International Programs

Enclosure: July 13, 2007 BLM response to Kirk Evans request

cc: Patience E. Paterson, RPA, DHS CBP via Fax and Email

Jim Anderson, BLM Phoenix District Office, 21605 N. 7th Avenue
Phoenix, AZ 85027-2099

BLM_1

SBI*net* appreciates your comments has included your previous July 13, 2008 letter into Appendix A of the Final EA. We have included special use permits for BLM and other resource agencies in the EA within the land use section (Section 3.2). As construction activities come to fruition, SBI*net* will ensure full cooperation with BLM.

BLM_2

The EA was corrected as suggested and reviewed for all towers for consistencies.

BLM_3a

SBI*net* concurs and has incorporated the change as suggested.

BLM_3a

SBI*net* disagrees the correct spelling is *Larrea tridentate*.

BLM_3a

SBI*net* concurs and has incorporated the change as suggested.

BLM_3a

SBI*net* concurs and has incorporated the change as suggested.

BLM_3a

SBI*net* concurs and has incorporated the change as suggested.

BLM_3a

SBI*net* concurs and has incorporated the change as suggested.

BLM_3a

SBI*net* concurs and has incorporated the change as suggested.

BLM_3a

SBI*net* disagrees the correct spelling is *Coleonyx varigatus*.

BLM_3b

Although proposed tower site TCA-AJO-216 is located within the current and historic distribution of Sonoran pronghorn, this site is adjacent to Highway 85 and tower construction and operation would not increase human activity in the area. Therefore, CBP has determined that the proposed project would not affect the pronghorn. This determination was included in Section 3.9 of the Final EA.

BLM_3b

Potential effects of radio frequencies on bats have been included in Section 3.9 of the Final EA.

BLM_3b

Table 5-2 was removed since it is no longer applicable. During formal consultation it was determined that SBI/CBP would not adhere to seasonal restrictions.



U. S. Department of the Interior
 U.S. Fish & Wildlife Service
 Buenos Aires National Wildlife Refuge

Box 109, Sasabe AZ 85633
 Phone: 520/823-4251 FAX: 520/823-4247



July 1, 2008

Patience Patterson, RPA
 U.S. Dept. of Homeland Security
 SBInet Program Management Office
 1300 Pennsylvania Ave. NW, Room 7.5B
 Washington, D.C. 20229

Dear Ms. Patterson:

Thank you for the opportunity to comment on the recent Tucson West Environmental Assessment regarding the proposed SBInet Project. My comments solely pertain to the towers and related infrastructure proposed on the Buenos Aires National Wildlife Refuge (Refuge or BANWR) and by no means imply that this project is approved. The Refuge is required to conduct an evaluation pursuant to the appropriate use/compatibility policy before such a use could be approved on the Refuge. However, DHS must provide a formal project request to the U.S. Fish and Wildlife (Service) prior to our beginning this process. Regardless of the outcome of the appropriate use/compatibility review process, we believe that the following comments should still be addressed in the Environmental Assessment:

BANWR 1

- If these towers are constructed, the Refuge will not have jurisdiction over the land within the chain link fence. If this is the case, then a right-of-way permit must be obtained by DHS which will require approximately 2 months. I presume this process would occur after NEPA compliance is completed.

BANWR 2

- Has anyone taken into consideration the risk of wildfire (or prescribed fire) on the tower equipment within the chain link fence? Because an area must remain cleared beyond the 50 x 50ft fence in order to protect the infrastructure, the total long term area of impact is the 100 x 100 ft area, not the 50 x 50 ft that the EA indicates. Depending on fuel loads and slope, this area may need to be larger at certain tower sites.

BANWR 3

- Illegal immigrants have amazing ways of knowing what Border Patrol activities are taking place on the areas they are traveling through. We believe that once the towers are up and running, immigrants will be more likely to travel in less detectable areas such as the drainages. Diverting traffic into drainages results in indirect effects on the natural resources. These drainages are generally cooler, wetter and less visible and tend to attract more wildlife as well. Directing human traffic into these areas will disturb both the habitat and wildlife patterns.

BANWR 4

- Have these towers been tested and will they do what is expected of them before permanently placing them on the land? Apparently, the technical performance of Project 28 was not fully successful so I am concerned that the permanent towers will be put into position and not be fully functioning. If they are no longer needed in the future, are there plans in place to remove them? If so, DHS must be responsible for restoring these areas to the way they were before tower installation.

BANWR 5

- What is the plan for long term road maintenance? There is no mention of what is going to be done to maintain the roads and the tower site after the towers are in place. How often will the towers be visited by Border Patrol agents and maintenance staff? If traffic is increased to these areas due to the towers being there, then DHS needs to have a plan in place to keep these areas maintained and minimize impacts to the natural resources.

} BANWR 6
- If the towers are constructed, it must be required that the Border Patrol agents minimize their time spent off road. If the towers are fully functioning, then the agents should be able to apprehend immigrants along existing roads rather than randomly traveling across Refuge lands, which degrades habitats further.

} BANWR 7
- There is mention of the use of upgraded vehicles with surveillance/communication equipment and the use of ground sensors in addition to the towers. If there is going to be an increase of vehicles on the Refuge, the potential resource impacts need to be addressed in the EA. There are already hundreds of DHS agents on the ground in Arizona. The Service needs clarification regarding conflicting information received locally that either the number of agents will be reduced once the towers are functioning or that up to 6,000 new agents will be hired for the Tucson Sector.

} BANWR 8
- Pima County has apparently approved tower sites 032 and 300. If so, we would like to see proposed sites 306 and 307 be withdrawn from the EA. Sites 306 and 307 were considered back up sites in case Pima County did not approve 032 and 300.

} BANWR 9
- In the EA, Page 168, line 14 and Page 170, line 6: "Future and ongoing projects" that "will result in cumulative impacts" are mentioned. This is a definite concern for the Refuge. The Refuge is already experiencing cumulative negative impacts as a result of all the border related activities. If DHS proposes more new projects, there is the potential of even more resource damage and adverse impacts to wildlife.

} BANWR 10
- EA, Page 13: There is no mention of the National Wildlife Refuge System Improvement Act in Table 1-2.

} BANWR 11
- FONSI, Page 6, bullet 5: We recommend that CBP will "always" use existing roads within the Buenos Aires NWR to protect the masked bobwhite quail and other sensitive species and areas.

} BANWR 12
- FONSI, Page 8, line 26: We recommend that the number of vehicles "will" be minimized, not "should be" minimized.

} BANWR 13
- EA, Page 34, tower 035: Under "tower access" 159 cubic yards of fill is mentioned. What does this entail? What type of fill is it and where is its source?

} BANWR 14

} BANWR 15
- EA, Page 38, tower 085: "Location" should be Pima Co. and "Land Use" should be BANWR
- EA, Page 76, Table 3-3: Towers 085, 032 and 035 are left out of the table.

} BANWR 16
- EA, Page 77, Table 3-4: Under "land owner" column for tower 287 and 299 it should state BANWR, not "No road work needed."

} BANWR 17
- EA, page 110, Table 3-12: What is the difference between "new road" and "road improvement?" For the towers proposed on the Refuge, the EA indicates several sites for a new road. Is this for

} BANWR 18

the access into the towers only? I am not aware of any other new road development related to the towers.

Please contact me at 520-823-4251, ext. 103, for clarification of any of my comments, or any other questions you may have.

Sincerely,

A handwritten signature in cursive script that reads "Sally Gall".

Sally Gall
Acting Refuge Manager

BANWR_1

SBI*net* concurs and has provided a letter to USFWS (July 10, 2008) to initiate a formal project request.

BANWR_2

SBI*net* concurs that ROW permits will be obtained after NEPA compliance is complete.

BANWR_3

Tower equipment within the perimeter fence may be impacted by wildfire or prescribed burns although if vegetation is required to be cleared outside of the perimeter fence SBI*net* will coordinate with USFWS. The equipment within the fence itself will be grounded which will reduce the potential for accidental sparks. Electric components are within a equipment shed and would be no longer functional with a sustained fire. The propane tank will be on a concrete slab and utilize vents and although could explode in a fire, the chance of this occurring is slight. To minimize the potential for this occur steps, such as a possible larger cleared 100X100 foot area is being proposed. Although towers with significant slopes may not utilize the full 100X100 foot cleared area in order to minimize soil erosion within these tower sites.

An explanation of the fire buffer impact area can be found in Section 2.3 and 3.1.

BANWR_4

SBI*net* appreciates your comment but for all the reasons you mention illegal entrants (IE) are currently using drainages. However, the overall Common Operating Picture (COP) as described in the draft EA would provide greater response time and flexibility in deploying CBP agents to most of the areas in the Tucson Sector western region and would, therefore, decrease overall IE traffic including traffic in drainages.

BANWR_5

SBI*net* has not tested the towers proposed in the Tucson West EA; although Project 28 was not as successful as expected, much has been learned to improve the towers ability to be fully functional. SBI*net* has agreed that 12 months after any tower in the project is not determined not to be functional, SBI*net* will remove the tower or towers and remediate any impacts caused by the towers construction, operation, and removal. This was added to the Final EA and FONSI.

BANWR_6

Currently, there are no plans for long term road maintenance; if maintenance is required in the future, the impacts of this action will be analyzed under an additional NEPA document as appropriate. As stated in the draft EA, the tower sites would be visited twice a month for maintenance. Although, we acknowledge that there could be indirect impacts due to illegal traffic attempting to avoid the proposed tower sites, CBP cannot predict where the shift in illegal traffic may occur. However, the overall Common Operating Picture (COP) would provide greater response time and flexibility in deploying CBP agents to most of the areas in the Tucson Sector western region.

BANWR_7

Although we acknowledge your comment, CBP operational activities are not part of the Proposed Action and will not be analyzed in this document.

BANWR_8

The EA was revised (Section 2.3) to include the following narrative.

“Three vehicle mobile surveillance systems per station and UGS are also proposed under this *SBI*net project, but are not analyzed as a part of the Proposed Action since they would result in no or innocuous impacts. They are an integral part of the overall COP border environment and, as such, are briefly discussed below. The existing USBP vehicles will be retrofitted with technologies to allow USBP agents to acquire/send information via the new fixed surveillance and communication towers. There will not be a significant increase in vehicles per station. The UGS would be placed in disturbed areas where no vegetation would be removed for deployment. The intent of the upgraded vehicles, combined with the towers and UGS is to make USBP enforcement actions more efficient and effective. If this is reached, fewer vehicle trips should be required.

BANWR_9

*SBI*net concurs and TCA-TUS-306 and 307 were removed from the Final EA.

BANWR_10

Currently CBP and *SBI*net do not have reasonably foreseeable projects on BANWR. All other foreseeable projects are listed in Section 4.1 and 4.2 of the EA. The proposed towers will act as a force multiplier thereby minimizing the number of agents on the ground. The Proposed Action itself as designed will reduce the border related illegal activities.

BANWR_11

The National Wildlife Refuge System Improvement Act will be added to Table 1-1 in the Final EA.

BANWR_12

The FONSI was changed to state that CBP will travel on “established” roads to the extent practicable.

BANWR_13

*SBI*net concurs; the FONSI was changed to state that “construction” vehicles “will” be minimized.

BANWR_14

Per standard construction practices, fill is placed to provide a level surface. The fill would be *insitu* material from a nearby site identified and agreed to by BANWR land management personnel.

BANWR_15

*SBI*net concurs; TCA-TUS-085 Proposed Action description will be changed as indicated in the Final EA.

BANWR_16

*SBI*net disagrees; these towers are included in the draft EA in Table 3-3.

BANWR_17

*SBI*net concurs with your comment on TCA-TUS-287 but not for TCA-TUS-299. Approximately 50 feet of new access road would be constructed in association with TCA-TUS-299. The Final EA was revised accordingly.

BANWR_18

The EA has been changed to reflect an updated description of what “new” road, “improved” road, and road repair entails (see Section 2.3). The table will be updated to reflect this change. Additionally, the new road would be for tower access.

REV 7/1/08
AJC



INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

July 1, 2008

OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

Ms. Patience E. Patterson
RPA, U.S. Department of Homeland Security
SBInet Program Management Office
U.S. Customs and Border Protection Headquarters
1300 Pennsylvania Ave, NW
Room 7.5B
Washington D.C. 20299

Dear Ms. Patterson:

The United States Section of the International Boundary and Water Commission (USIBWC) offers the following comments to the Environmental Assessment for the Proposed SBInet Tucson West Project Ajo, Tucson, Casa Grande, Nogales, and Sonoita Stations Areas of Operation, U.S. Border Patrol, Tucson Section, Arizona. The proposed action to construct, operate, and maintain 57 fixed, sensor and communication towers and associated access roads does not appear to impact USIBWC properties, i.e. the international monuments, however, construction of access roads leading to the towers in certain locations may impact runoff and historical drainage patterns at the international boundary. Specifically tower numbers TCA-TUS-291 and TCA-TUS-287 that are closest to the international boundary. Any adverse impacts to runoff and historical drainage patterns will have to be mitigated in the design of the water crossing structure. The water crossing structure should not increase the water surface elevation at the international boundary greater than 6-inches in rural areas and 3-inches in urban areas for a 100-year event. Therefore, please submit a hydraulic model for USIBWC's review and comment prior to commencing construction on above mentioned tower structures and their associated infrastructure. If you have any questions please contact Mr. Gabriel Duran, P.E. at (915) 832-4746.

USIBWC_1

USIBWC_2

Sincerely,

for

Charles B. Kruse, IV, P.E.
Chief, Planning & Integration Division

USIBWC_1

SBI*net* appreciates your comments, and we concur with your findings.

USIBWC_2

Hydrology reports were produced for both tower sites and the proposed tower sites have been designed to avoid increases or impediments to stormwater runoff.

Denise Rousseau Ford

From: TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Monday, June 09, 2008 3:52 PM
To: Howard Nass
Cc: Denise Rousseau Ford
Subject: FW: Draft EA for proposed SBInet, Tucson Sector, AZ

New comment - reply was sent with link.

-----Original Message-----

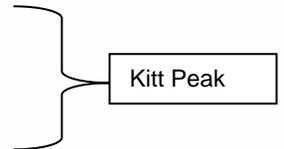
From: Elizabeth Alvarez del Castillo [mailto:ealvarez@noao.edu]
Sent: Monday, June 09, 2008 3:29 PM
To: TUCWESTCOMMENTS
Subject: Draft EA for proposed SBInet, Tucson Sector, AZ

The letter we received instructs us to direct questions to Ms. Patterson via E-mail. Is this her email? It's the only one on the letter.

Is the current draft of the EA available online?

--
--

Elizabeth M. Alvarez del Castillo	Assistant to the Director
Kitt Peak National Observatory / NOAO	ealvarez@noao.edu
950 N. Cherry Avenue	1-520-318-8414 (phone)
Tucson, AZ 85719 U.S.A.	1-520-318-8487 (fax)



Kitt_Peak_1

Ms. Patience Patterson does receive all email from the TUCWESTCOMMENTS email address and the website where the draft EA could be found was sent to Ms. Alvarez del Castillo http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west.

Response was sent via email on June 09, 2008.



Buell T. Jannuzi, Director
Kitt Peak National Observatory
950 N. Cherry Ave., P.O. Box 26732
Tucson, AZ 85726-6732
Ph: 520-318-8353
Fax: 520-318-8487
jannuzi@noao.edu

National Optical Astronomy Observatory

Kitt Peak National Observatory • Cerro Tololo Inter-American Observatory • NOAO Gemini Science Center

June 30, 2008

Ms. Patience E. Patterson, RPA
U.S. Department of Homeland Security
SBI*net* Program Management Office
U.S. Customs and Border Protection, Headquarters
1300 Pennsylvania Avenue, NW, Room 7.5B
Washington, D.C. 20229

Dear Ms. Patterson,

In response to the Tucson West Draft Environmental Assessment (EA) and Proposed FONSI, the following comments are submitted on behalf of numerous astronomical observatories in the area affected by the proposed Tucson West Project. (See Appendix I for a list of institutions.) The premier astronomy observatories in the continental USA are in Arizona, California, New Mexico, and Texas. They represent a substantial investment by our federal and state governments as well as private enterprises and are a key component of our nation's research infrastructure. The Arizona Arts, Sciences, and Technology Academy recently published an economic impact report citing that by the end of 2006, investment in capital facilities and land in Arizona for astronomy, planetary and space sciences (APSS) had reached well over \$1 billion and that in 2006, APSS research returned a total economic impact of well over \$250 million in Arizona alone (Ref. <http://www.simginc.com/AASTA/>).

We are concerned about the potential for harm to our optical and radio astronomy observations and loss of value from that considerable investment because of SBI*net*-produced artificial light at night, degraded air quality, and radio emissions. The SBI*net* radio emissions could cause direct interference with the instruments of both radio and optical telescopes due to the proximity of SBI*net* towers to our facilities. We feel that the EA is incomplete without addressing these previously communicated concerns.

NOAO_1

Our submission identifies issues that we feel still need to be addressed.

We have communicated with representatives from the Department of Homeland Security (DHS), Customs and Border Patrol (CBP), and SBI*net* several times over

950 North Cherry Avenue • P.O. Box 26732, Tucson, Arizona 85726
www.noao.edu • Phone: 520.318.8000

NOAO is operated by the Association of Universities for Research in Astronomy (AURA) Inc., under cooperative agreement with the National Science Foundation

the course of the last year to raise awareness of the potential impact of their proposed facilities on the research enabled by our observatories. We have appreciated the willingness of CBP and DHS staff to meet with us in the past and look forward to further meetings. See Appendix 2 for references to past meetings.

During previous meetings with CBP and DHS personnel, we have discussed useful strategies to minimize the adverse impact of artificial light at night on astronomy. We are pleased to see that the draft EA (under section 2.3, Proposed Action, p. 27, lines 3-5) cites lighting guidelines that indirectly address these issues. We feel the lighting associated with proposed towers during their construction, operation, and maintenance should be assessed for its impact on astronomy activities. An analysis should be based on the proximity and line of sight of individual towers to specific telescopes and arrays used for astronomy.

NOAO_2

The placement of towers and associated activity by CBP could channel illegal border traffic closer to our observatory sites. A resultant impact that is not assessed in the draft EA is the potential for CBP search vehicles and aircraft to illuminate areas and inadvertently damage or destroy sensitive observatory detectors or observations. (See Appendix 3 for a recent example.) This issue was discussed during the October 22, 2007 visit to our observatories by Frank Woelfle and colleagues from DHS but does not appear in the draft EA.

NOAO_3

When towers are located near observatories (within a few miles), radio transmissions can impact optical as well as radio telescopes since they can affect electronic circuits that read signals from sensitive detectors used for astronomy. The EA should identify this issue as it relates to additionally planned towers (e.g. those on the Tohono O'odham Nation) if their proposed locations are near observatories. One tower is within the Mt. Hopkins observatory site. Frequencies, transmitter power, antenna geometry, and beam patterns should be assessed to calculate the effect on observatory equipment.

NOAO_4

NOAO_5

The draft EA does not identify and assess the possibility of inadvertent radio frequency interference (RFI) to radio astronomy equipment at the National Science Foundation/National Radio Astronomy Observatory (NSF/NRAO) Very Long Baseline Array site at Kitt Peak (VLBA-KP), or at the Arizona Radio Observatory sites (ARO) on Mount Graham and Kitt Peak. Due to their concern, the NSF/NRAO initiated extensive discussions with Frank Woelfle of DHS and Phil Smith, the SBInet Chief Engineer in August of 2007 (Ref. Appendix 2). A detailed propagation analysis of the radar, motion-sensing equipment, and data transmission links to be used on-site during normal operations would determine possible interference. (See Appendix 4 for an example.) We feel that the NSF should be included in this process.

NOAO_6

Our observatories have extensive experience working with our neighbors to address lighting and radio frequency interference issues. We offer our assistance

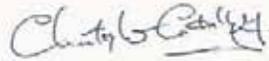
NOAO_7

in assessing the issues, but are extremely concerned that they are not identified and assessed as necessary in the current Tucson West Draft Environmental Assessment (EA) and Proposed FONSI. Buell Jannuzi (contact information at the top of this letter) will serve as the single point of contact for questions or comments based on this submission.

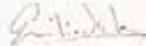
Sincerely,



Buell T. Jannuzi, Director
Kitt Peak National Observatory



Christopher J. Corbally, S.J.
Vice Director, Vatican Observatory



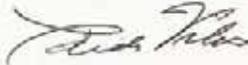
Emilio E. Falco, Project Head
Fred Lawrence Whipple Observatory



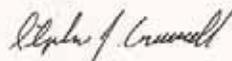
Jeffrey S. Kingsley
Associate Director
Steward Observatory
The University of Arizona



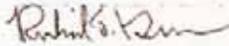
Robert L. Dickman
Assistant Director for New Mexico Operations
National Radio Astronomy Observatory
(VLA/VLBA)



Faith Vilas, Director
MMT Observatory



Stephen J. Criswell, Project Manager
VERITAS



Richard F. Green, Director
Large Binocular Telescope Observatory

950 North Cherry Avenue • P.O. Box 26732, Tucson, Arizona 85726
www.nrao.edu • Phone: 520.318.0000

NRAO is operated by the Association of Universities for Research in Astronomy (AUI), Inc., under cooperative agreement with the National Science Foundation.

Appendix 1

Observatories on Kitt Peak

National Optical Astronomy Observatory / Kitt Peak National Observatory and National Solar Observatory

Both are operated by the Association of Universities for Research in Astronomy, Inc. under cooperative agreement with the National Science Foundation.

NOAO telescopes include: 4-meter Mayall, 2.1-meter, 0.9-meter Coude Feed

NSO telescopes include: 1.6-meter McMath-Pierce Solar telescope, 2x 0.9-meter east and west auxiliaries, and the SOLIS (Synoptic Optical Long-term Investigations of the Sun) facility

Public outreach telescopes include: 2x 0.4-meters, 0.5-meter, 0.1-meter Solar telescope

National Radio Astronomy Observatory (25-m Very Long Baseline Array)

A facility of the National Science Foundation operated under cooperative agreement by Associated Universities, Inc.

Burrell-Schmidt Telescope, CWRU (0.6-meter)

Case Western Reserve University, Cleveland, OH

Calypso Observatory, Edgar O. Smith (1.2-meter)

Private observatory founded in 1992

Michigan/Dartmouth/MIT Observatory (1.3-meter and 2.4-meter)

The consortium includes the University of Michigan, Dartmouth College, the Ohio State University, Columbia University, and Ohio University.

RCT (1.3-meter Robotically Controlled Telescope)

Consortium universities and research institutions are The Planetary Science Institute, Western Kentucky University, South Carolina State University, Villanova University, and Fayetteville State University.

Southeastern Association for Research in Astronomy (0.9-meter)

The consortium includes Florida Institute of Technology, East Tennessee State University, Florida International University, University of Georgia, Valdosta State University, Clemson University, Ball State University, Agnes Scott College, University of Alabama, and Valparaiso University.

ARO (Arizona Radio Observatory) 12-meter Telescope

Spacewatch (1.8-meter and 0.9-meter) Telescopes

Bok (2.3-meter) Telescope

University of Arizona, Arizona State University, Northern Arizona University

(ARO includes the Academia Sinica Institute of Astronomy and Astrophysics.)

WIYN Observatory (3.5-meter)

The consortium includes the University of Wisconsin, Indiana University, Yale University, and the National Optical Astronomy Observatory.

WIYN Observatory (0.9-meter)

The consortium includes the University of Wisconsin (Madison, Oshkosh, Stevens Point, Whitewater), Indiana University, Bowling Green State University, Wesleyan University, University of Florida, San Francisco State University, and the Wisconsin Space Grant Consortium.

Observatories on Mt. Hopkins

Fred Lawrence Whipple Observatory, operated by the Smithsonian Astrophysical Observatory, has the following facilities.

MMT 6.5-meter

A joint facility of the Smithsonian Astrophysical Observatory, the University of Arizona, Arizona State University, and Northern Arizona University.

1.5-meter Tillinghast telescope

1.2-meter telescope

PAIRITEL (Peters Automated IR Imaging Telescope) 1.3-meter

VERITAS (Very Energetic Radiation Imaging Telescope Array System)

Member institutions include the Smithsonian Astrophysical Observatory, Purdue University, Iowa State University, Washington University in St. Louis, University of Chicago, University of Utah, University of California, Los Angeles, McGill University, University College Dublin, University of Leeds, Adler Planetarium, Argonne National Lab, Barnard College, DePauw University, Grinnell College, University of California, Santa Cruz, University of Iowa, University of Massachusetts, Cork Institute of Technology, Galway-Mayo Institute of Technology, National University of Ireland, Galway, and the University of Delaware/Bartol Research Institute.

HAT (Hungarian Automated Telescope) network of telescopes

Operated by the Harvard-Smithsonian Center for Astrophysics

Observatories on Mt. Graham

The Mount Graham International Observatory, operated by the University of Arizona, has the following facilities.

The Vatican Observatory (1.8-meter Alice P. Lennon Telescope)

Large Binocular Telescope Observatory (2x 8.4-meter telescope)

The consortium includes the University of Arizona, Arizona State University, Northern Arizona University, Istituto Nazionale di Astrofisica, Osservatorio Astrofisico di Arcetri (Florence), Osservatorio Astronomico di Bologna, Osservatorio Astronomico di Roma, Osservatorio Astronomico di Padova, Osservatorio Astronomico di Brera (Milan), Max-Planck-Institut für Astronomie (Heidelberg, Landessternwarte), Astrophysikalisches Institut Potsdam, Max-Planck-Institut für Extraterrestrische Physik (Munich), Max-Planck-Institut für Radioastronomie (Bonn), the Ohio State University, and Research Corporation (on behalf of the Ohio State University, University of Notre Dame, University of Minnesota, and University of Virginia).

Arizona Radio Observatory (ARO) – 10-meter Heinrich Hertz Submillimeter Telescope

University of Arizona, Arizona State University, Northern Arizona University
(ARO includes the Academia Sinica Institute of Astronomy and Astrophysics.)

Observatories in the Catalinas

1.6-meter Kuiper Telescope

1.5-meter NASA Telescope

1.5-meter Mount Lemmon Observing Facility Telescope

0.4-meter Schmidt Camera

University of Arizona, Arizona State University, Northern Arizona University

The Korean Astronomy and Space Science Institute 1-meter Telescope

University of Minnesota 1.5-meter Telescope

Public outreach telescopes include: 1.0-meter telescope

Appendix 2

Partial List of related meetings / communications

1. A series of email communications were initiated by Dan Brocious on behalf of numerous southern Arizona observatories to make SBI personnel aware of our concerns about potential adverse effects on astronomy research activities.
 - a. From: Dan Brocious [<mailto:brocious@carpincho.sao.arizona.edu>]
Sent: Wednesday, April 11, 2007 4:07 PM
To: Giddens, Gregory
Subject: SBI effects on research sites
[This email outlined the issues. Mr. Giddens referred us to Mr. Smith.]
 - b. From: "Dan Brocious" <brocious@carpincho.sao.arizona.edu>
To: Charles.P.Smith2@cbp.dhs.gov
Received: 4/24/2007 2:50:58 PM
Subject: SBI effects on research sites
 - c. From: Dan Mertely dmertely@aoe.nrao.edu,
To: dfinley@nrao.edu, CHARLES.P.Smith@dhs.gov
Date: Fri, 11 May 2007 10:23:53 -0600
Subject: RE: Secure Border Initiative effects on research sites,

2. 19 June 2007, at Fred Lawrence Whipple Observatory offices
Meeting with observatory personnel associated with Mt. Hopkins and Tucson Sector Customs and Border Patrol agents (Lisa Reed - Community Relations Officer, John Fitzpatrick - Assistant Chief Patrol Agent, Tucson Sector, and Chris Petrazack - Nogales Station agent)

3. 23 July 2007, at National Optical Astronomy Observatory headquarters
Meeting with observatory personnel associated with Kitt Peak and Tucson Sector Customs and Border Patrol agents (Lisa Reed- Community Relations Officer and six additional specialists in attendance to answer specific questions)

4. 17 July 2007, Holiday Inn Palo Verde, Tucson, AZ
Public Scoping Meeting for the siting, construction, and operation of a technology-based border security system along a portion of the international border in eastern Arizona.
Attended by observatory personnel representing the Fred Lawrence Whipple Observatory (Mt. Hopkins), the National Optical Astronomy Observatory/Kitt Peak National Observatory, the Mount Graham International Observatory, and the University of Arizona observatories.

5. 22 October 2007, Visit to Mt. Hopkins facilities
Frank J. Woelfle (CBP/DHS) and colleagues meeting with observatory personnel representing Fred Lawrence Whipple Observatory (Mt. Hopkins), the Mount Graham International Observatory, and the National Optical Astronomy Observatory/Kitt Peak National Observatory

Appendix 2

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To: Charles.P.Smith2@cbp.dhs.gov
Received: 4/24/2007 2:50:58 PM
Subject: SBI effects on research sites
 - c. From: Dan Mertely dmertely@aoe.nrao.edu,
To: dfinley@nrao.edu, CHARLES.P.Smith@dhs.gov
Date: Fri, 11 May 2007 10:23:53 -0600
Subject: RE: Secure Border Initiative effects on research sites,

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As a result, I would strongly urge the DHS and SBInet planning and engineering project teams to coordinate any and all proposed RF devices planned for each tower with the NSF and NRAO. We are available for detailed RFI analyses once information on site spectrum usage is forwarded, or included in an addendum to the draft EA.

Sincerely;
-Mert

Daniel J. (Mert) Mertely
National Radio Astronomy Observatory
Interference Protection Office Engineer
P.O. Box 0
Socorro, NM 87801
(505) 835-7128
dmertely@nrao.edu
nrao-rfi@nrao.edu

NOAO_1

SBI^{net} appreciates your comments and acknowledges that you and your colleagues concerns discussed with DHS representatives were not fully included in the draft EA. As we were analyzing impacts for the draft EA, we were aware that there were concerns but these concerns were not fully conveyed to SBI^{net} environmental personnel until after the draft EA was out for public comment. We assumed the concerns were generally regarding artificial lighting and radio frequency issues, both of which had been discussed in the EA. We have addressed these concerns in the Final version of the EA.

NOAO_2

One tower (TCA-SON-213) requires lighting to meet FAA regulations and will follow USFWS (2000) *Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers* to reduce night-time atmospheric lighting and the potential adverse effects of night-time lighting to migratory bird and nocturnal flying species.

Although we did not explicitly address lighting with regards to the astronomical observatories, the EA covered lighting in a similar manner for birds and therefore these similar practices to limit night-time atmospheric lighting for birds would also in turn limit artificial lighting impact on the observatories. Additionally, when lighting is required for CBP operational needs, such as the installation of infrared lighting, or for CBP security purposes, then tower perimeter lighting would: utilize low sodium bulbs, not illuminate outside the footprint of the tower site, and when possible, be activated by motion detectors. Through the implementation of these USFWS guidelines and through the use of the lighting measures mentioned above, SBI^{net} determined that this would also mitigate any possible effects on the observatories from artificial lighting (Section 2.3).

The Final EA discusses the potential impacts from artificial lighting from an optical standpoint.

NOAO_3

The Tucson West EA does not include analysis of any search and rescue vehicles but only tower installation and maintenance; however, we understand your concerns with the movement of illegal traffic and the proposed tower sites. Although we acknowledge that there could be indirect impacts on the observatories from illegal traffic attempting to avoid the proposed tower sites, CBP cannot predict where the shift in illegal traffic may occur. However, the overall Common Operating Picture (COP) would provide greater response time and flexibility in deploying CBP agents to most of the areas in the Tucson Sector western region where the observatories are concentrated.

NOAO_4

Radio Frequency emissions will be limited as specified by the National Telecommunications and Information Administration (NTIA) frequency assignments. SBI^{net} will communicate frequency assignments with the National Optical Astronomy Observatory/NSF through the NTIA process.

NOAO_5

The Final Tucson West EA cumulative impact section acknowledges the concern of future proposed towers in such places as the Tohono O'odham Nation; but, at this time the tower sites associated with other projects are still being identified and, thus, it would be very difficult to address these tower locations until they are known. Further analysis would be required for any towers in this region.

NOAO_6

Transmitters and sensors will operate below 30 GHz and all frequencies will be coordinated through the NTIA as required by regulation.

As part of the overall spectrum management process, the NTIA and the Federal Communications Commission (FCC) have developed radio regulations to help ensure that the various radio services operate compatibly in the same environment without unacceptable levels of radio frequency interference and emissions.

NOAO_7

SBI*net* appreciates your willingness to work on potential lighting and radio frequency. We will work to address these concerns for incorporation in the Final version of the EA.

Denise Rousseau Ford

From: TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Wednesday, June 25, 2008 1:10 PM
To: REID, MARIA B (CTR); PATTERSON, PATIENCE E; BIXLER, GLENN A; Howard Nass; Denise Rousseau Ford; MILLER, PAULA M (CTR)
Subject: FW: Information request for The Proposed SBInet Tucson West Project

FYI

-----Original Message-----

From: Dan Brocious [mailto:brocious@carpincho.sao.arizona.edu]
Sent: Monday, June 23, 2008 8:03 PM
To: PATTERSON, PATIENCE E
Subject: Information request for The Proposed SBInet Tucson West Project

----- This is a forwarded message

From: "Dan Brocious" <brocious@carpincho.sao.arizona.edu>
To: patience.patterson@dhs.gov
Received: 6/13/2008 2:25:15 PM
Subject: Information request for The Proposed SBInet Tucson West Project

Ms. Patience E. Patterson, RPA
U.S. Department of Homeland Security
SBInet Program Management Office
U.S. Customs and Border Protection, Headquarters 1300 Pennsylvania Avenue NW, Room 3.4-D
Washington, D.C. 20229

Dear Ms. Patterson:

The Smithsonian Institution operates an astrophysical observatory in the Santa Rita Mountains of the Coronado National Forest in southern Arizona. We would like to know the precise location of proposed tower TCA-NGL-211. From the draft Environmental Assessment, it looks as though it may fall within the area of the land use permit we have with the National Forest. We cannot fully comment on the EA without this information.

} PC_Smithsonian

Thank you.

Dan Brocious
=====

Tower ID: TCA-NGL-211
Type of Tower: CRT
Tower Foundation: SST
Tower Height: Approximately 100 feet
Station: Nogales
Location: Santa Cruz County
Land Use: CNF
Location Description: The proposed tower site for TCA-NGL-211 is approximately 10 miles east of the community of Amado (see Figure 2-7); near an existing tower site.
Tower Access: A small amount of new road construction (132 feet) is needed to facilitate tower installation and maintenance.
Type of Primary Power: Generator-solar hybrid

Dan Brocious

PC_Smithsonian

In order to minimize the time to get the proposed tower coordinate data to you the data were not sent to the library but instead was sent directly to you via email and has been added this to the website, http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west, to aid you in your document review of the draft EA and proposed FONSI.

Denise Rousseau Ford

From: PATTERSON, PATIENCE E [patience.patterson@dhs.gov]
Sent: Friday, June 06, 2008 12:16 PM
To: Howard Nass; Denise Rousseau Ford; Maria Reid
Subject: FW: Proposed SBInet Tucson West Project

From: PATTERSON, PATIENCE E **On Behalf Of** TUCWESTCOMMENTS
Sent: Friday, June 06, 2008 1:14 PM
To: Barbara Cook
Cc: ANDRADE, ALMA L (CTR); BROGLIO, BARBARA (CTR); BIXLER, GLENN A
Subject: RE: Proposed SBInet Tucson West Project

Dear Ms. Cook,
Below is the link to the document itself and you can download the document from there. If this does not work, please let us know and we will send you a CD of the document. I just think this will be much faster for you. Thanks very much.
Patience

Patience E. Patterson, RPA
Branch Manager, Environmental Planning & Compliance
Environment-Land-Facilities Division SBInet SPO
U.S. Customs and Border Protection
Desk: (202) 344-1131
Cell: (202) 870-7422
Fax: (202)344-3550
patience.patterson@dhs.gov

http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west/

From: Barbara Cook [mailto:BCook@azgfd.gov]
Sent: Thursday, June 05, 2008 7:28 PM
To: TUCWESTCOMMENTS
Subject: Proposed SBInet Tucson West Project

Good afternoon,

I am the secretary for the Arizona Game and Fish Department's (AGFD) Habitat Branch, Project Evaluation Program. We received the hard copy of the Draft Environmental Assessment and Proposed Finding of No Significant Impact for the Proposed SBInet Tucson West Project, Ajo, Nogales, Sonita, Casa Grande, and Tucson Stations Areas of Operation, Tucson Sector, Arizona.

Several people within AGFD will be reviewing this document for comments. Is there an electronic version? This would make it faster for everyone to review before the deadline of July 5, 2008.

Thank you for your assistance.

Barbara Cook
Habitat Branch Secretary
bcook@azgfd.gov
623-236-7600

7/2/2008

} AGFD

AGFD

SBI*net* sent your agency only 1 copy of the draft EA and proposed FONSI in an effort to minimize paper consumption. As indicated in the public Notice of Availability, the documents are available on the SBI*net* website:

http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west.

Response was sent via email on June 6, 2008.



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov



Stephen A. Owens
Director

July 7, 2008

Patience E. Patterson, RPA
US Dept. of Homeland Security
SBIInet Program Management Office
US Customs and Border Protection
Headquarters, 1300 Pennsylvania Avenue NW, Room 7.5B
Washington, DC 20229
E-mail: TUCWESTCOMMENTS@cbp.dhs.gov

Re: Draft Environmental Assessment and Proposed Finding of No Significant Impact for the Proposed SBIInet Tucson West Project, Ajo, Nogales, Sonoita, Casa Grande and Tucson Stations Areas of Operation, Tucson Sector, Asrizona

Dear Ms. Patterson:

Thank you for your May 30, 2008 request for comments regarding the Draft Environmental Assessment and Proposed FONSI for the Proposed SBIInet Tucson West Project which will improve and enhance the US Customs and Border Patrol's surveillance capabilities along 81 miles of the US/Mexico border in the Tucson sector. The DEA evaluates the cumulative impacts of constructing 45 new sensor and communication towers, and retrofitting or replacing 12 existing towers. The Draft Environmental Assessment indicates that this project has the potential for disturbing at least 30 acres during construction. With the information that you provided, the Arizona Department of Environmental Quality, Water Quality Division (ADEQ) would like to make you aware of some water quality issues that may need to be addressed.

Stormwater: Stormwater discharges associated with construction activities (clearing, grading, or excavating) which disturb one acre or more must obtain a general permit for coverage of stormwater discharges from industrial activities under the under the Arizona Pollutant Discharge Elimination System (AZPDES) program. A Stormwater Pollution Prevention Plan (SWPPP) must be prepared and implemented during the course of construction. The SWPPP must comply with the SWPPP requirements of the Construction Stormwater General Permit, and must identify such elements as the project scope, anticipated acreage of land disturbance, and the BMPs that would be implemented to reduce soil erosion and contain and/or minimize the pollutants that might be released to waters of the U.S. In addition to preparing the SWPPP, and as noted on page 96 of the Draft Environmental Assessment, the project proponent would need to file for permit coverage prior to construction. The Construction General Permit, SWPPP checklist, and associated forms are available on ADEQ's website at:
<http://www.azdeq.gov/environ/water/permits/stormwater.html#const>.

ADEQ_1

Northern Regional Office
1801 W. Route 66 • Suite 117 • Flagstaff, AZ 86001
(928) 779-0313

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

CWA 401 water quality certification: If project activities will occur inside the Ordinary High Water Mark of any water of the U.S., then an U.S. Army Corps of Engineers-issued Clean Water Act (CWA) section 404 permit (a.k.a. dredge and fill permit) may be required. If a 404 permit (or any other federal permit) is required for the project, a state-issued CWA section 401 certification of the permit will be required. The U.S. Army Corps of Engineers will include the conditions of

ADEQ_2

the CWA 401 certification as requirements of the Section 404 permit to ensure that the permitted activities will not result in a violation of the State's surface water quality standards. For questions relating to CWA 401/404 please contact Bob Scalamera at 602-771-4502 or by e-mail at RS3@azdeq.gov. The CWA 401 application form can be downloaded from the agency website at: <http://www.azdeq.gov/function/forms/appswater.html#dredge>

Impaired Waters: ADEQ is finalizing the 2006/2008 Impaired Waters List, which will be published as part of the Arizona's Integrated 305(b) Assessment and 303(d) List. Before filing for any water quality permits, the project proponent should verify the most current list of impaired waters. For information relating to impaired waters, please contact Anel Avila at 602-771-4647 or by e-mail at AA1@azdeq.gov. The most current version of the Impaired Waters List can be obtained from ADEQ's website at:

<http://www.azdeq.gov/environ/water/assessment/assess.html>

ADEQ_3

We appreciate the opportunity to comment on the DEA and FONSI. If you have any questions please contact Wendy LeStarge at 602-771-4836 or myself at 602-771-4416.

Sincerely,



Linda Taunt, Deputy Director
Water Quality Division

ADEQ_1

A SWPPP will be prepared and implemented during the course of construction as mentioned in Section 5.0 of the draft EA. The EA was revised to include the information regarding the necessity of obtaining the Construction General Permit prior to construction.

ADEQ_2

All potential road construction and maintenance would be authorized under a Nationwide Permit 14.

ADEQ_3

Prior to construction and filing for any water quality permits, the most up-to-date version of the ADEQ's 303(d) list will be obtained.

REV-7/2/08
Aja.

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

25 June 2008

Ms. Patience E. Patterson, RPA
U.S. Department of Homeland Security
SBInet Program Management Office
U.S. Customs and Border Protection, Headquarters
1300 Pennsylvania Avenue, NW, Room 7.5B
Washington, DC 20229

Dear Ms. Patterson:

The National Science Foundation (NSF), an independent federal agency created by Congress "to promote the progress of science; to advance the national health, prosperity and welfare, to secure the national defense and other purposes" submits these comments in response to the Tucson West Draft Environmental Assessment (EA), and the companion proposed Finding of No Significant Impact (FONSI).

} NSF 1

NSF's interest in the draft EA and FONSI stems from the fact that it supports the Kitt Peak National Observatory (KPNO) through a cooperative agreement with Association of Universities for Research in Astronomy (AURA), and it also provides support to other forefront US astronomical facilities in the Tucson area. KPNO, a part of the National Optical Astronomy Observatory (NOAO), supports the most diverse collection of astronomical observatories on Earth for nighttime optical and infrared astronomy and daytime study of the Sun. Founded in 1958; KPNO operates three major nighttime telescopes, shares site responsibilities with the National Solar Observatory and hosts the facilities of consortia which operate 19 optical/infrared telescopes and two radio telescopes. Annex 1 shows a complete list of the Tenant Observatories.

All of the observatories are in close proximity to the SBInet facilities proposed to be deployed in the Tucson area and NSF is concerned that the construction and operation of SBInet, as proposed, may seriously impact the optical quality of the site through light pollution caused by the illumination of the numerous towers planned. Such illumination may brighten significantly the sky background at Kitt Peak, at optical as well as infrared wavelengths. Dust raised during the construction and by other ongoing activities may also degrade the transparency of the atmosphere locally. NSF is also concerned that the transmitters and radars to be installed on the towers will cause harmful radio frequency interference (RFI) to the Very Long Baseline Array antenna operated by the National Radio Astronomy Observatory and the 12-m telescope of the Arizona Radio Observatory (ARO) of the University of Arizona both of which are located on Kitt Peak, and also to

} NSF 2
} NSF 3
} NSF 4

the Submillimeter Telescope, operated by ARO, that is located on Mt. Graham near Safford, Arizona.

NSF's concerns were previously relayed to SBInet representatives and planners at a meeting held at DHS headquarters on July 27, 2007. Subsequent to that meeting, NSF supplied to SBInet representatives a list of the observatories that may be affected by SBInet activities, the detrimental RFI levels that would impact the radio observatories listed, and other information requested by SBInet engineers and planners. Concerns were also voiced on numerous occasions by representatives and staff of the affected observatories at meetings, both public (e.g. at a public scoping meeting held on July 17, 2007 in Tucson, AZ) and private. In spite of the information relayed to the CBP representatives and the numerous meetings held, not a word about the concerns of the US astronomical community made its way into the draft EA, and the FONSI ignores any such concerns as well. In fact, what is most worrisome is that the draft EA lacks sufficient information to evaluate the impact that construction and operation of the SBInet towers may have on the astronomical environment; for example, the height of the proposed towers are not included in the draft EA, nor are the types of radios and radars to be used identified. Possible light pollution mitigation strategies may include the use of low pressure sodium lamps and minimizing illumination directed skywards through the use of full cut-off light fixtures. RFI to radio observatories on Kitt Peak may be minimized, e.g. through appropriate filtering of the emissions, if necessary.

NSF 5

NSF 6

NSF 7

NSF 8

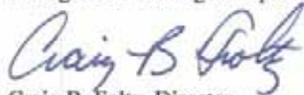
NSF requests that the potential impact to the astronomical environment in the Tucson area be discussed in the EA, and consequently that the issuance of a FONSI be reconsidered. The potential impact of SBInet construction and operation on some of the nation's foremost astronomical research facilities is not negligible. In addition, federal and local government as well as private investment in astronomical facilities in the Tucson area, located there largely because of the excellent observing conditions, resulted in the creation of a significant number of jobs in the Tucson area. NOAO hires preferentially qualified Native Americans living on or near the Tohono O'odham reservation. Disruption of the astronomical facilities in the West Tucson area may result in reduction of technologically advanced employment opportunities for Native Americans, and may have broader socio-economic consequences for the area as well. Such potential direct and cumulative effects of SBInet construction and operation, that may result from loss of astronomical facilities in the area should also be considered and included in the EA.

NSF 9

NSF 10

NSF offers to work with DHS in whatever capacity is necessary to develop mitigation strategies for dealing with possible impacts from the proposed SBInet facilities.

NSF 11



Craig B. Foltz, Director
Division of Astronomical Sciences

Annex I

Kitt Peak National Observatory & Tenants

1. Kitt Peak National Observatory/ National Optical Astronomy Observatory (operated by the Association of Universities for Research in Astronomy under a cooperative agreement with the National Science Foundation)
2. National Solar Observatory (operated by the Association of Universities for Research in Astronomy under a cooperative agreement with the National Science Foundation)
3. National Radio Astronomy Observatory (operated by the Associated Universities, Inc. under a cooperative agreement with the National Science Foundation)
4. University of Michigan
5. The Ohio State University
6. Dartmouth College
7. Columbia University
8. Ohio University
9. Western Kentucky University
10. The Planetary Science Institute
11. South Carolina State University
12. Villanova University
13. Fayetteville State University
14. Florida Institute of Technology
15. East Tennessee State University
16. Florida International University
17. University of Georgia
18. Valdosta State University
19. Clemson University
20. Ball State University
21. Agnes Scott College
22. University of Alabama
23. Valparaiso University
24. University of Arizona
25. Arizona State University
26. Northern Arizona University
27. Case Western Reserve University
28. Bowling Green State University
29. University of Wisconsin, Madison
30. University of Wisconsin, Oshkosh
31. University of Wisconsin, Stevens Point
32. University of Wisconsin, Whitewater
33. Indiana University
34. Yale University
35. Wesleyan University
36. University of Florida
37. San Francisco State University
38. Wisconsin Space Grant Consortium

NSF_1

SBI*net* appreciates your comments.

NSF_2

One tower (TCA-SON-213) requires lighting to meet FAA regulations and will follow USFWS (2000) *Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers* to reduce night-time atmospheric lighting and the potential adverse effects of night-time lighting to migratory bird and nocturnal flying species. Although we did not explicitly address lighting with regards to the astronomical observatories, the EA covered lighting in a similar manner for birds and therefore these similar practices to limit night-time atmospheric lighting for birds would also in turn limit artificial lighting impact on the observatories. Additionally, when lighting is required for CBP operational needs, such as the installation of infrared lighting, or for CBP security purposes, then tower perimeter lighting would: utilize low sodium bulbs, not illuminate outside the footprint of the tower site, and when possible, be activated by motion detectors. Through the implementation of these USFWS guidelines and through the use of the lighting measures mentioned above, SBI*net* determined that this would also mitigate any possible effects on the observatories from artificial lighting (Section 2.3).

NSF_3

Dust generated during construction activities was not addressed in the draft EA specifically for impacts on observatories but was addressed for air quality through the analysis of particulate matter both less than 10 microns as well as less than 2.5 microns. And mitigation measures will be implemented to reduce any dust produced during construction activities. See air quality model calculations in Appendix E of the draft and Final EIS. Additionally, many BMPs will be used during construction to minimize the amount of fugitive dust emitted.

NSF_4

Transmitters and sensors will operate below 30 GHz and all frequencies will be coordinated through the NTIA as required by regulation.

As part of the overall spectrum management process, the NTIA and the Federal Communications Commission (FCC) have developed radio regulations to help ensure that the various radio services operate compatibly in the same environment without unacceptable levels of radio frequency interference and emissions.

NSF_5

SBI*net* appreciates your comments and acknowledges that you and your colleagues concerns discussed with DHS representatives were not fully included in the draft EA. As we were analyzing impacts for the draft EA, we were aware that there were concerns but these concerns were not fully conveyed to SBI*net* environmental personnel until after the draft EA was out for public comment. We assumed the concerns were generally regarding artificial lighting and radio frequency issues, both of which had been discussed in the EA. We have addressed these concerns in the Final version of the EA.

NSF_6

Tower heights can be found in the Proposed Action Section under Section 2.3 and in Appendix C in the Proposed Tower Table.

NSF_7

See response to comment NSF2.

NSF_8

Transmitters and sensors will operate below 30 GHz and all frequencies will be coordinated through the NTIA as required by regulation.

NSF_9

SBI respectfully disagrees with this comment and has determined that a FONSI is appropriate.

NSF_10

SBI appreciates your comments and has met with the astronomical observatories several times in attempt to minimize any potential problems for the observatories and reduce the likelihood of damaging observatory equipment or a loss of observation time. Based on this coordination and the data presented in this Final EA. *SBI* does not anticipate any significant impacts to astronomical observatory operations in the area.

NSF_11

SBI appreciates your willingness to work on potential impacts on astronomical observatories in the Tucson West project area. We will work to address these concerns for incorporation in the final version of the EA.

Denise Rousseau Ford

From: BROGLIO, BARBARA (CTR) [barbara.broglio@associates.dhs.gov] on behalf of PATTERSON, PATIENCE E [patience.patterson@dhs.gov]
Sent: Monday, June 16, 2008 9:03 AM
To: BIXLER, GLENN A; REID, MARIA B (CTR); Denise Rousseau Ford; Howard Nass
Subject: FW: SBInet Tucson West DEA & Spatial Data
Importance: High

From: MClark [mailto:MClark@defenders.org]
Sent: Friday, June 13, 2008 3:36 PM
To: TUCWESTCOMMENTS
Subject: SBInet Tucson West DEA & Spatial Data
Importance: High

Dear Ms. Patterson,

It has come to my attention that DHS has prepared a Draft Environmental Assessment for SBInet remote surveillance towers and supporting infrastructure in the "Tucson West" area. I have obtained a copy of the DEA from a colleague who represents another organization. Why was a copy not sent to me at Defenders of Wildlife? I have personally attended and signed in at all of the open houses DHS has held in the region, and as an organization we have been actively engaged in this issue for many years, so it is concerning that we were not sent a copy upon its release.

} DOW 1

Defenders of Wildlife is generally supportive of the remote surveillance approach as a less-environmentally damaging alternative to walls in securing our international borders. However, the specific locations of proposed towers and access roads will be an important determinant of their relative impact upon sensitive wildlife species. Therefore, I would like to request GIS shapefiles of the proposed infrastructure so that we can conduct our own analysis to inform our comments on the DEA. The maps provided in the DEA show approximate locations, but are not shown in relation to important variables such as threatened and endangered species critical habitats and other special landscape elements. Such spatial data would be for internal use only and would not be distributed further.

} DOW 2

One last item: what is the status of proposed SBInet surveillance towers on the Cabeza Prieta National Wildlife Refuge and Wilderness Area?

} DOW 3

Sincerely,

Matt Clark
Southwest Representative
Defenders of Wildlife
(520) 623-9653 ext. 2



National Headquarters
1130 17th Street, N.W. | Washington, D.C. 20036-4601 | tel 202.582.9400 fax 202.582.4131
www.defenders.org

July 4, 2008

Submitted electronically to: TUCWESTCOMMENTS@cbp.dhs.gov

Ms. Patience E. Patterson
RPA, U.S. Department of Homeland Security
SBInet Program Management Office
U.S. Customs and Border Protection Headquarters
1300 Pennsylvania Avenue, NW, Room 7.5B
Washington, D.C. 20229

RE: Draft Environmental Assessment for Proposed SBInet Tucson West Project, U.S.
Border Patrol, Tucson Sector

To Whom It May Concern:

Please accept the following comments on the Draft Environmental Assessment (DEA) for the Department of Homeland Security's ("DHS") Proposed SBInet Tucson West Project, U.S. Border Patrol, Tucson Sector.

Defenders of Wildlife (Defenders) is a national, not-for-profit conservation organization with over 522,000 members, including more than 16,500 members and activists that reside in Arizona. Defenders is dedicated to the protection of all native wild animals and plants in their natural communities. With offices throughout the United States as well as in Canada and Mexico, we work to protect and restore North America's native wildlife, safeguard habitat, resolve conflicts, work across international borders and educate and mobilize the public. Defenders has a long history of proactive work on public lands and border policy along the U.S.-Mexico border, and thus are uniquely positioned to substantively engage on the challenging issue of safeguarding irreplaceable natural and cultural resources while also securing our southern boundary.

INTRODUCTION

In general, Defenders supports the implementation of relatively low-impact, technological approaches to achieve effective border security. Defenders has long advocated the use of remote surveillance technology as an **alternative** to border walls and high speed patrol roads that fragment and degrade habitat. However, border walls have been and continue to be constructed in the Tucson Sector and across the entire United States/Mexico border, and as such, have unfortunately not yet been implemented as an alternative to wildlife-blocking, ineffective physical barriers. Remote surveillance technology is preferable from an ecological standpoint because it will maintain the landscape permeability that facilitates vital wildlife movements. These movements are crucial because they permit wildlife to access seasonally available food sources, water, new territory, and mates. The exchange of genetic material between wildlife populations over time is also essential to maintaining healthy, viable populations of wildlife. Species range shifts in response to climate change also presents another important reason why landscapes should remain permeable to the greatest extent

DOW_1a

possible. Therefore, in the evaluation of border infrastructure segments and alternatives to walls, we encouraged DHS to carefully consider the ramifications of impermeable barriers and to consider the use of remote surveillance technologies as a viable alternative. While the physical footprint of remote surveillance towers and access roads is significantly less than that of border walls, they do have their own unique set of impacts. Therefore, where they are sighted will in large part determine their level of impact to sensitive resources and species. Given that the proposed tower locations will be permanent in nature, it is imperative that the sites are carefully selected to minimize foreseeable impacts, and that further research is done to assess the nature of these impacts, especially in wildland settings. Formal consultation with the U.S. Fish and Wildlife Service (USFWS) regarding impacts to threatened and endangered species is required by the Endangered Species Act, and should have been conducted prior to the release of a DEA. Valuable information that would have been generated from a Biological Assessment and Biological Opinion is currently not available to inform our collective understanding of potential impacts to over a dozen threatened and endangered species by the proposed action.

DOW_2a

While Defenders is supportive of the “virtual fence” approach, our review of the DEA has led us to conclude that it is unlawfully narrow because it fails to thoroughly consider any action alternatives of various tower array configurations. In addition, the DEA provides a very shallow analysis of cumulative and synergistic effects of the proposed action and other ongoing border security infrastructure projects in the project area. The piecemeal Environmental Assessments completed by DHS/CBP in the last calendar year alone in southern Arizona have been inadequate to assess the collective impacts of these related and other foreseeable federal actions. Importantly, this DEA does not analyze, but rather merely mentions, the predictable redirection of illegal activities into adjacent lands resulting from construction of surveillance tower arrays and discontinuous wall segments; nor does it properly examine the cumulative impacts of such infrastructure upon sensitive species, or the impacts due to the introduction and colonization of invasive vegetation resulting from extensive land disturbance and construction activities. We continue to argue that conducting a regional Environmental Impact Statement for all SBInet “tactical infrastructure” is the only appropriate course of action if DHS desires to comply with the National Environmental Policy Act (NEPA).

A REGIONAL ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED

Because the DEA fails to adequately disclose and analyze the proposed project’s anticipated effects to wildlife and natural resources, nor does it adequately assess reasonable alternatives and cumulative impacts from ongoing and related border security infrastructure projects, we conclude that a regional Environmental Impact Statement (EIS) that includes a lawful analysis of environmental impacts and alternatives is required. This proposed federal project, impacting 57 sites, numerous land management jurisdictions, over a dozen threatened and endangered species (including designated critical habitat) across hundreds of miles of terrain warrants a much more detailed analysis than is provided in the DEA. Despite some thoughtful conservation measures, a “Finding of No Significant Impact” is not appropriate given the scale of the project and the ecologically sensitive areas that will be directly and indirectly impacted. In addition, there are several glaring omissions with regard to threatened and endangered species that must be addressed. These deficiencies indicate a

DOW_3a

need for a significantly more detailed analysis generally not afforded by Environmental Assessments.

As such, the DEA does not inadequately consider nor disclose the potential environmental impacts of the proposed actions within the “TucsonWest” project area. Among other flaws, the DEA fails to consider adequately impacts on sensitive wildlife, of particular concern to Defenders, which is elaborated upon within these comments. Furthermore, the DEA has failed to consider the likely and foreseeable cumulative impacts that the proposed construction will have, especially when taken together with other proposed and constructed walls, fences, barriers, and related infrastructure along the U.S.-Mexico border in the State of Arizona, on sensitive wildlife and other natural resources in the region that are collectively a part of the ongoing and rapid DHS tactical infrastructure build-up, of which this project is a part. The arbitrary segmentation of concurrent border security infrastructure projects is in violation of NEPA.

DOW_4a

A REASONABLE RANGE OF ALTERNATIVES HAS NOT BEEN CONSIDERED

The National Environmental Policy Act (“NEPA”) requires a discussion of the “alternatives to the proposed action.” 42 U.S.C. §§ 4332(C)(iii),(E). This alternatives analysis is “the heart” of the NEPA process, and is intended to provide a “clear basis for choice among options by the decision maker and the public.” 40 C.F.R. 1502.14; *Citizens for a Better Henderson v. Hodel*, 768 F.2d 1051, 1057 (9th Cir. 1985) (EIS must consider “every” reasonable alternative). An agency’s failure to consider a reasonable alternative is thus fatal to its NEPA analysis of a proposed action. *See Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519-20 (9th Cir. 1992) (“The existence of a viable, but unexamined alternative renders an environmental impact statement inadequate.”); *Forty Most Asked Questions Concerning CEQ’s NEPA Regulations*, 48 Fed. Reg. 18,026 (March 16, 1981) (“In determining the scope of alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of carrying out the particular alternative. Reasonable alternatives include those that are practical or feasible from a technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.”).

DOW_5a

Rather than presenting a purpose and need statement that reflects the larger goal of improving border security, and then evaluating different means to achieve that goal, DHS in this case has instead defined “construction of technological infrastructure” itself as the goal. The Proposed Finding of No Significant Impact states: “Two alternatives were considered: No Action Alternative, and Proposed Action Alternative. Other alternatives considered but rejected and not further analyzed in this EA were the use of: Unmanned air vehicles; Remote sensing satellites; Unattended ground sensors; Increased workforce; and Increased aerial reconnaissance/operations.” However, because the DEA does not evaluate alternatives with various surveillance tower site locations and configurations, there is not an action alternative to compare the preferred alternative against. Thus, the DEA has completely failed to develop or analyze alternatives, which is required by NEPA. We encourage DHS to consider alternative locations of towers proposed in and adjacent to threatened and endangered designated critical habitat, roadless areas, wilderness areas, known nesting sites, etc. We appreciate the apparent effort to locate certain towers along existing roads and impacted areas to minimize the need for new road construction.

CUMULATIVE EFFECTS HAVE NOT BEEN SUFFICIENTLY ANALYZED

Despite an effort to catalog various DHS and other foreseeable agency projects in the project area, the DEA falls short of **analyzing the cumulative effects** of these projects. In other words, the laundry list of projects catalogued does not provide the project proponent or the public with enough information to understand how these projects have additive, synergistic and cumulative impacts upon the human environment and the sensitive ecology of the Sonoran Desert and Sky Island mountain ranges where the project is proposed. For instance, how are surveillance towers, in conjunction with hundreds of miles of newly constructed walls and vehicle barriers anticipated to impact illegal activities, habitat suitability and cross-border habitat connectivity, etc.? How are surveillance towers, and the information they gain, anticipated to impact the location, frequency and duration of enforcement activities in the surrounding areas? For instance, if the location of towers pushes traffic deeper into mountain and canyon country, this indirect impact will be almost immediate and have severe consequences for ecologically sensitive areas. On the other hand, if surveillance towers and enforcement activities effectively act as deterrents to illegal entry, it is possible some of these impacts could be beneficial not only for security, but to wildlife habitat. However, without an analysis of what can be reasonably anticipated, project proponents are left without sufficient information to inform their decisions. Lastly, the cumulative effects analysis does not identify numerous proposed mines in the project area on and adjacent to the Coronado National Forest, which have the potential to impact a range of sensitive habitats and species.

DOW_6a

NEPA requires federal agencies proposing to undertake comprehensive actions for development of a region, or proposing to undertake a series of related actions within a region that will have cumulative and synergistic impacts on the environment, to consider and disclose the environmental impacts of such actions in a comprehensive EIS. As noted in the above section, DHS/CBP are engaged in the simultaneous planning and development of numerous projects to construct walls, vehicle barriers, and surveillance towers, along with supporting infrastructure such as roads, at numerous locations along the U.S.-Mexico border. Construction of these projects will have significant individual, cumulative, and synergistic effects on wildlife and other natural and cultural resources within this region. If DHS fails to prepare a comprehensive EIS that analyzes and discloses the individual, cumulative and synergistic impacts of these interrelated projects, it will be in violation of NEPA.

ANALYSIS OF POTENTIAL IMPACTS TO THREATENED AND ENDANGERED SPECIES AND CRITICAL HABITAT IS INADEQUATE

Despite the importance of the large project area to a diversity of plants and other organisms, the DEA's analysis of potential impacts to them by construction of the proposed surveillance towers and supporting infrastructure is insufficient. This is in part because DHS has chosen to conduct a lesser Environmental Assessment instead of beginning with a more thorough Environmental Impact Statement. This is especially apparent with respect to the

DOW_7a

DEA's analysis of impacts on special status species, including species listed as threatened or endangered pursuant to the Endangered Species Act ("ESA").

The construction of the proposed infrastructure will degrade and/or fragment approximately 30 acres of wildlife habitat. However, by its nature, the impact of the proposed project will extend well beyond the confines of the footprint of the surveillance towers and supporting access infrastructure. First, the predictable re-direction of illegal activities away from the towers is discussed, but not analyzed. Second, an increase of enforcement activities within the visible range of the surveillance towers in response to the real-time information they obtain is discussed, but not analyzed. Third, the long-term impacts and disturbance from of noise, lights, maintenance, and interdiction activities upon wildlife and habitat quality briefly discussed, but not analyzed. The fact that all of these impacts have been noted in the DEA, but not analyzed so as to provide the project proponent or the public sufficient quantitative information regarding the nature and severity of such impacts, is further evidence that the DEA is insufficient and should have triggered an Environmental Impact Statement to be conducted. Expediency simply cannot be equated with compliance.

DOW_8a

The maps provided in the DEA of the proposed locations of surveillance towers are at a scale that is not helpful in terms of allowing the public to be able to assess site and species-specific impacts or to confirm/repudiate information provided in the DEA, especially with regard to impacts to threatened and endangered species critical habitats. We submitted a request via e-mail to DHS for the coordinates of the proposed tower locations. This request was denied. The response from Mr. Glenn Bixler, Deputy Director of Environmental Planning on 6/18/08 was: "As per your request for shape files, standard SBInet policy prohibits the release of data files. Specific site locations are Law Enforcement Sensitive information and not available for public review..." Therefore, our ability to analyze the impacts of the proposed towers and related infrastructure has been limited accordingly. If coordinates cannot be released, then more detailed maps should be provided in the DEA or EIS that show the relationship of site locations in relation to designated critical habitat, occupied habitat and other sensitive resources. Despite this limitation, we have gone to great lengths to use the maps provided in the DEA to make our assessment.

DOW_9a

Omitted Threatened, Endangered and Imperiled Species:

Jaguar

According to the Arizona Game and Fish Department, the DEA's project area contains high quality jaguar habitat, even under the most restrictive habitat model. 48 of the 57 surveillance tower locations appear to fall within "the most suitable conservation area for jaguars in southeastern Arizona" (AZGFD 2002). There is extensive evidence of historical jaguar presence in the vicinity of the project area (Brown and Lopez Gonzalez 2001), as well as current documentation of resident jaguars in southern Arizona (McCain and Childs, 2007). McCain and Childs (2007) have documented a male jaguar using habitats from the Sonoran lowland desert at 877 m above sea level to pine-oak woodlands at 1,577 m, and covering 1,359 km² in 2 mountain complexes within the proposed project area – The Baboquivari Mtn. Complex and the Atascosa Mtn. Complex. As stated by the FWS Biological Opinion (2007) on a series of wall construction projects in the vicinity of Nogales and Naco-Douglas, within which this SBInet proposed project is located, states: "it is clear

that the amount of potential jaguar habitat in Arizona represents about as much or more of the area where jaguars are currently distributed in Sonora, Mexico. This area in Arizona could become increasingly important to the survival of the jaguar as threats (i.e., poaching, land conversion, etc.) continue in Sonora and throughout the range of the jaguar.”

The redirection of illegal and law enforcement activities into jaguar habitat, due in part to recently constructed and proposed border walls, roads and surveillance towers, will likely collectively discourage jaguar occupation in the US, result in various disturbances to jaguars and degrade their habitat. As a consequence of these direct and indirect effects, FWS concludes in their recent Biological Opinion that the jaguar “is likely to be adversely affected” (USFWS 2007). Despite this alarming conclusion, border wall construction has proceeded anyway. There are foreseeable interrelationships between various forms of border security infrastructure that are impacting species such as the jaguar, including the proposed Tucson West surveillance tower array that have been consistently overlooked and understated.

The DEA only mentions the endangered jaguar (*Panthera onca*) one time, in the conservation measures section of the FONSI: “CBP activities occurring in suitable jaguar habitat will use existing roads to avoid further fragmentation of habitat, and avoid the use of lights or generators in jaguar habitat, which may disturb and discourage jaguars from occupying or traveling through specific areas.” If CBP intends to follow through with this conservation measure, then 48 of the 57 proposed tower locations should not utilize lights or generators. While this conservation measure is salient and is a recognition of recent border infrastructure projects that have significantly fragmented jaguar habitat, this is sorely insufficient with regard to analyzing the potential impacts of the proposed project. Potential impacts to jaguars were identified in comments Defenders submitted at a SBInet scoping meeting held by DHS at the Tucson Convention Center the on in July, 2007. It is concerning that despite these comments, the DEA has failed entirely to identify and analyze potential impacts of this proposed project to this sensitive species.

DOW_10a

Ocelot

The DEA fails entirely to identify and analyze potential impacts to the endangered Sonoran ocelot (*Leopardus pardalis sonoriensis*). Ocelots are in danger of extinction in the U.S. and Mexico due to habitat destruction and poaching. It is well established that the Sonoran ocelot occurs in western Mexico (Villa-Meza et al. 2002), only about 130 km south of the Arizona border (López-Gonzalez et al. 2003). In addition, through recent and ongoing field research, the non-profit conservation organization Sky Island Alliance has obtained remotely captured photos of ocelot – documenting at least two male individuals in far northern Sonora approximately 38 miles south the DEA project area (Sky Island Alliance 2008).

Historical records in the United States include **five in Arizona**, the latest one from 1964. The late 19th century range of the Sonora ocelot included southeastern Arizona as far north as Fort Verde (USFWS 2007). As such, the ocelot is included on the Arizona Game and Fish Departments list of *Wildlife of Special Concern in Arizona* (AGFD in prep). Ocelots are extremely secretive animals generally associated with thick vegetation cover (e.g. thornscrub), but in Arizona they have been documented in Madrean evergreen woodland and semi-desert grasslands (Brown and Gonzales 2001) and in riparian corridors in northern Sonora (pers.

comm., Sergio Avila, Sky Island Alliance). While they appear to have maintained a stronghold in northern Sonora, they require corridors to connect intact patches of continuous habitat throughout the region, connecting areas of northern Sonora to areas of southeastern Arizona. Fifteen kilometers was the maximum dispersal distance recorded for an ocelot in southern Texas (Laack 1991). Field research has not been conducted between the verified ocelots in northern Sonora and the international border to assess its northernmost range. There is primarily uninterrupted potential habitat between the northernmost documented location and proposed tower/infrastructure locations. Given these facts, it is plausible that this elusive species may currently occupy habitat in the southern project area east of Nogales. Even if ocelot do not currently occupy the area, is certainly possible that the Sonora ocelot may occupy and/or to disperse into the project area and re-occupy potential habitat in southeastern Arizona in the near future.

Border security infrastructure and operations have been recognized in the USFWS Draft Ocelot Recovery Plan. While this draft has not been finalized, the information it contains clearly states the border issues impact ocelots and our government's ability to conserve and recover this endangered species:

Border issues - Recent actions such as the signing of the North America Free Trade Act in 1994, increased border monitoring associated with illegal immigration starting in 1998, and homeland security since 2001 have impacted current and future ocelot recovery efforts. Borderland factors that impact ocelots include urbanization (brush clearing for buildings, sewage dumped into Rio Grande River and tributaries, and road construction and maintenance), water development (brush clearing, channeling, draining), agriculture (brush clearing, pesticide run-off), and border monitoring (lighting, fencing, road construction, human activity) (Jahrsdorfer and Leslie 1988, Lorey 1999). The specific impacts to the ocelot are the losses of habitat and travel corridors necessary for population maintenance (Tewes et al. 1995). *Recovery of the ocelot in the U.S. will be more challenging if the population is genetically and demographically isolated from the much larger Mexican population.*" (emphasis added). (USFWS, 2007)

Road construction, increased traffic and disturbance associated with the proposed project has the potential to impact the ocelot, and thus should be thoroughly analyzed and mitigated for in conjunction with the USFWS.

Cactus ferruginous pygmy owl

The Cactus ferruginous pygmy owl (pygmy owl) (*Glaucidium ridgwayi cactorum* - proposed reclassification) is an imperiled species found in the project area. This species was listed as an endangered species in 1997 and was delisted in 2006. The decision to delist the pygmy owl has been appealed to the Ninth Circuit Court of Appeals and is currently pending. The pygmy owl was not delisted because it had been "recovered", but rather based upon legal technicalities. Since being delisted, this species has continued to decline throughout its range due to prolonged drought (Flesch 2008), development of its habitat, and numerous other threats. Concurrent with pending legal challenges to the delisting, the pygmy owl has been petitioned for relisting based upon new taxonomic information (Proudfoot et al. 2006), classifying the pygmy owl occurring in the project area as *Glaucidium ridgwayi cactorum*, as well as new threats such as border security infrastructure that has been constructed since delisting. The status of the pygmy owl currently being reviewed by the USFWS this year. There is a strong likelihood this species will be re-listed as an endangered species. This

decision may even be made prior to construction beginning on the proposed SBInet project. Therefore, we urge DHS to assess the potential impact of proposed tower and infrastructure development, maintenance and associated interdiction activities upon this imperiled species in conjunction with the USFWS and the AZGFD.

Research conducted on the Organ Pipe Cactus National Monument (OPCNM) illustrates the disruptive effects of border related activities to pygmy-owls at numerous occupied sites at OPCNM (Snyder 2005, Table 1). Snyder (2005) states that the most notable issue at OPCNM “is the increasing drug smuggling, illegal immigrants and law enforcement activity which results in much greater human disturbance to the birds”. The National Park Service (NPS) believes “that cactus ferruginous pygmy-owls within the monument have been subject to repeated disturbance events and some critical habitat degraded as a result of a long-term drought and impacts associated with illegal migration, drug smuggling, and law enforcement interdiction efforts” (Snyder 2005). The Biological Assessment for the vehicle barrier at OPCNM states that, with so many roads sprouting up due to border issues, “... cross-country travel has physically damaged three recently-occupied territories of the endangered cactus ferruginous pygmy owl.

With regard to the proposed tower locations for the Tucson West Project, ten of the proposed towers appear to be within or directly adjacent to the 2002 pygmy owl proposed designated critical habitat units (AJO-216, 305, TUC-32, 35, 85, 187, 287, 290, 291, 288). Tower TUC-287 appears to be within approx. 1,000 meters from a historic pygmy owl nest site in the Altar Valley, while proposed tower sites TUC-35, 36, 85 and NGL-43, 44, 109 appear to be within 3,500 - 5,500 meters away from two other historic nest sites. Due to a lack of monitoring in recent years, it is currently unknown to us if these or nearby nest sites are occupied. However, the potential for the proposed project, including ongoing maintenance, to impact this species and their habitat long-term is a strong likelihood, and as such should not be omitted from the DEA or EIS. Surveys for pygmy owls should be conducted in the vicinity prior to any construction activities commencing. (Please see discussion under Lesser long-nosed bat section for potential radio frequency and electromagnetic radiation impacts to birds.)

DOW_11a

Kearney’s blue star

We anticipate indirect impacts to the endangered Kearney’s blue star (*Amsonia kearneyana*) from the redirection of illegal traffic and enforcement activities into occupied Kearney’s blue star habitat. For instance, increased illegal foot traffic into Brown Canyon (perceived to be out of the viewshed of proposed towers) could easily result in trampling and “take” of the endangered Kearney’s bluestar. Trampling and ground disturbance impacting this rare and fragile species is a serious concern that could be exacerbated by indirect effects of the proposed project, and thus should be assessed.

DOW_12a

Threatened and Endangered Species Identified, but Insufficiently Assessed:

Mexican spotted-owl

The Mexican spotted owl (*Strix occidentalis lucida*) (MSO) was listed as a threatened species in 1993. Because of its specific habitat requirements and sensitivity to human disturbance and

habitat fragmentation, it has been used as an indicator species. Therefore, at the community-ecosystem scale, its presence can be an indicator of forest age and structure, as well as for human intrusion rates and intensities and the level of fragmentation (Noss, 1990). The proposed action has the potential to reduce the quality and suitability of MSO nesting, roosting, and foraging habitat, cause disturbance to breeding MSO, and together contribute to cumulative effects that collectively endanger this species.

Our assessment identifies a total of 13 towers are proposed to be located within Mexican spotted owl designated Critical Habitat (SON-60, 61, 62, 115, NGL-43, 44, 45, 46, 49, 211 and TUC- 192), as opposed to only 10 identified in the DEA. The DEA refers to a “Table 4-2” to clarify which tower locations these are, but such a table does not exist in the DEA. In addition, five tower sites will be located within close proximity to MSO Critical Habitat, including: NGL-47, SON-50, SON-55, SON-58, and SON-59. In addition, 3 MSO PACs would be impacted by tower locations proposed in the DEA, including Joe’s Canyon PAC (Huachuca Mountains), Cottonwood Canyon PAC, and Ski Valley PAC (Santa Catalina Mountains). The fact that the DEA proposes 13 locations in MSO critical habitat affecting 3 Protected Activity Centers highlights the need for **true alternatives**, in this case the evaluation of alternative sites to those proposed.

DOW_13a

Aside from the impact of vegetation removal, the DEA fails entirely to disclose or analyze the nature, severity, duration or frequency of impacts associated with construction, maintenance and enforcement activities. In particular, the DEA completely overlooks the proposed impacts of the project that will lead to increased noise and disturbance, which collectively may degrade habitat quality for MSO.

Noise

The one of the primary direct effects on MSO that is anticipated for the proposed actions is the noise associated with construction, road building, maintenance and associated interdiction activities in the project area. Noise will be created in the process of preparing the construction sites, vegetation clearing for pads and roads, hauling materials, and constructing towers. These noises and their associated impacts will be relatively short lived, but **should not** be conducted during the breeding season between March 1 and August 31.

Additional noise from electricity generators, air conditioners and air blowers will be year round and will exist for the life of the towers. We are not aware of any information or studies that have quantified the effects of construction-related noise on MSO. However, a study conducted by Delaney, et al. (1999) in the Lincoln National Forest in south central New Mexico evaluated the effects of helicopter and chainsaw noise on MSO. The study found that chain saws solicited higher response rates by owls than noise generated from helicopter flights at comparable distances. Spotted owls did not flush when the noise level of helicopters was <92 dBA, and when chainsaw noise levels <46 dBA. (This may indicative of the variance of sound frequencies of different machinery and/or location in relation to nesting owls). As stimulus distance decreased, spotted owl flush frequency increased, regardless of stimulus type or season. The study reported no spotted owl flushes when noise stimuli were >105 m (344.5 ft or 0.06 miles) away, and that owls returned to pre-disturbance

behavior within 10-15 minutes after the stimulus event. Behavioral responses were minimal when noise disturbance sources were greater than 105 m away. Manipulated and non-manipulated nest sites did not differ in reproductive success or the number of young fledged, but it was acknowledged this analysis may have been limited by population size of the study (Delaney, et al. 1999). Another factor that the Delaney et al. (1999) study addressed is the need to determine the level of noise within the hearing range of the owl, which is different than that of humans (indicated by the A-weighted dB scale). The Delaney study developed a conversion from dBA to dBC (noise frequencies detectable by owls), emphasizing the middle frequency range where test spotted owls had the highest hearing sensitivity (Trainer 1946, Konishi 1973 in Delaney et al. 1999).

It is our understanding that the level of noise generated by the machinery that will be used to power the towers will be approximately 55 dbA at 165 ft. (USFWS, pers. comm. 07/02/08). The DEA, however, does not specify this information for the benefit of public review.

Here we provide some guidelines for assessing noise-related impacts to MSO from construction and other noise-generating sources. The first step is to measure the level of noise (dBA) the equipment or combination of machinery will generate at a given distance during various project phases at varying distances for a hypothetical MSO nest site. In order to provide an accurate estimate of how a noise source and distance have upon noise levels, it is necessary to calculate distance attenuation estimations. A general rule is that sound levels will decrease 6 dBA for every doubling of distance. For instance, a piece of equipment (such as an electricity generator) that generates 55 dBA at 165 ft will generate 49 dBA at 330 ft.

The type and level construction-related noise is provided in the DEA Section 3.12.2.2, but combinations of equipment being used simultaneously (a common occurrence at construction sites) is not assessed. A “worse case scenario” of 81 dbA is given, but how this worse case is arrived at is not elaborated upon – the worse case scenario could very well be greater dBA. In addition, what is considered to be “acceptable” and “unacceptable” standards of the U.S. Department of Housing and Urban Development (HUD) is decidedly anthropocentric – leading us to conclude that noise impacts upon sensitive wildlife species has been entirely overlooked in the DEA.

The magnitude of construction noise and power generation noise impacts will depend on the type of concurrent construction activities, the noise level and frequency profile of the noise generated by various pieces of equipment, the duration of the activity, the distance between the activity and noise receivers (i.e. owls or other sensitive wildlife), the hardness of surfaces in the area, and the level of shielding trees and topography provide. Depending upon the orientation of noise sources/receivers within the landscape, topography will have varying shielding effects – such effects are site specific and thus must be measured or modeled. In addition, the relatively dense ponderosa pine and/or mixed conifer forests typical of MSO habitat will likely provide some shielding effect. Cook (1978) discusses trees as an alternative for noise control, and has developed a way to estimate their ability to buffer against noise. By incorporating this into calculations, it is possible to more accurately estimate noise levels at varying distances in the forested landscape of the project area.

Given a more realistic worst-case scenario that three loud pieces of equipment (trucks, pneumatic tool and a bulldozer) were all operating at the same time in the same area *without any noise control*, they would combine to create approximately 123 dBA at 50 ft (approximately 15m). With the added shielding effect of trees, this sound level would drop to 99.3 dBA at 105 m and 91.5 dBA at 200m. In this example, the 91.5 dBA figure is near the 92 dBA threshold identified by Delaney et al. (1999) and thus would be cause for serious concern for a tower located in designated critical habitat and/or near an owl Protected Activity Center. Therefore, the number of machines operating at any one time and efforts at noise control become more important at a distance of 200 m or closer. With noise control, the combined noise level of the three machines noted above could realistically be reduced to 108 dBA at 50 ft. With the shielding effect of trees, this sound level is estimated to drop to 84.3 at 105 m and 89.0 at 200 m. Thus, with noise control, the 92 dBA threshold would not be exceeded at 200m. In this example, the 92 dBA threshold would be met at 60 m from the source. While the 92 dBA threshold is a potential threshold indicator, it is not necessarily the threshold that will determine impact vs. non-impact to MSO and the quality of their habitat. Towers that utilize noise-generating towers will decrease the likelihood MSO will occupy the surrounding area, as annoyance from constant noise will likely be avoided by MSO, especially in the selection of nest sites.

In conclusion, the effects of noise on MSO and other sensitive birds such as the Cactus ferruginous pygmy owl can be reduced by carefully considering site locations location (proximity to MSO PACs and active nesting sites from noise origins), timing of construction to avoid breeding season, carefully selecting machinery used, quantifying levels of noise from various activities, and the potential shielding effects of topography and trees. Where construction and tower locations are near PACs, we highly recommend conducting MSO surveys in within at least a 1 mile radius prior to construction activities. In addition, we suggest that noise control measures be implemented both during construction and for generators to reduce the level of impact to MSO, pygmy owls and the suitability of the surrounding habitat. (Please see discussion under Lesser long-nosed bat section for potential radio frequency and electromagnetic radiation impacts to birds.)

DOW_14a

Human Disturbance

The impacts of human disturbance on MSO are largely unknown. It is thought that frequent disturbance by humans (e.g. vehicles, recreationists, etc.) may impact the selection of nesting sites and reproductive success. An example of this is illustrated by the Orion PAC, which is located in northern Arizona. The Fort Valley 10K Biological Assessment states, "Over the years, concern was raised over the increasing human use within the Orion PAC (040207), and the impacts the use was having on the owl pair...the impacts of increased human use appear to be the frequent movement of the pair to new nesting and roosting sites, which in turn, may be affecting nesting success. The pair has not reproduced since 1993. In 1998 it was discovered that the pair had moved approximately 0.75 miles from the historical habitat (1987-1997). The new location of the pair is within habitat which is not suitable for nesting and is an area lacking in suitable nesting platforms due to the young age of Douglas-fir trees. The concern is that the birds have moved due to human disturbance into habitat which will not meet reproductive needs" (USFWS, 1999). Scientific research conducted by Swarthout and Steidl (2001) was the first attempt to quantify the effects of recreation on MSO. This study, conducted in the canyonlands of southeastern Utah,

assessed factors that influence flush responses in MSO in relation to recreational activity in canyon habitats. Based upon the findings of the study, the authors recommend placing a 55-m (0.03 miles) buffer zone around roosting sites to eliminate virtually all behavioral responses of owls to human disturbance, while a less conservative 12-m buffer zone would eliminate 80% of adult owl flush responses, and restrict hiker access to 25% of canyons occupied by owls. These response thresholds may be applicable, but not necessarily directly analogous, to increased levels of human presence and disturbance that are anticipated to occur from ongoing tower maintenance and interdiction activities initiated from information gathered by the towers. Activities that generate more noise than passive recreation (i.e. vehicular traffic) will likely require a greater buffer zone to avoid flushes and disturbance to MSO.

DOW_15a

Lesser long-nosed bat

The potential impact of towers for strikes and of radar and electromagnetic frequencies emitted by surveillance and communications towers upon bats and avifauna is only superficially discussed, but not analyzed in the DEA, despite this concern being raised in our scoping comments.

The potential impact of bird strikes on communication towers and other vertical obstructions is well established in the scientific literature, yet there is no mention of any of these studies in the DEA, more or less any analysis of the anticipated level of impact, species anticipated to be impacted, etc. In fact, the only mention of this potentially significant impact is: “The proposed sensor and communication towers 26 would also comply with USFWS guidelines for reducing fatal bird strikes on 27 communication towers (USFWS 2000) to the greatest extent practicable.” This is certainly a commendable mitigation measure, but does not constitute a “hard look” at this obvious impact as required under NEPA.

Animals, such as migratory birds, bats, and certain fish and insects, that are strongly dependent on magnetic fields for orientation or migration are likely to be disproportionately impacted by EMF radiation. Nichols and Racey (2007) demonstrated that bat activity is reduced in habitats exposed to electromagnetic radiation when compared with matched sites where no such radiation can be detected: “Bat activity was significantly reduced in habitats exposed to an EMF strength of greater than 2 v/m when compared to matched sites registering EMF levels of zero. The reduction in bat activity was not significantly different at lower levels of EMF strength within 400 m of the radar.” Certain electromagnetic frequencies have been documented to irritate bat’s nervous systems, interfere with communicating and flying – such applications are being considered for applications to deter bats away from areas where conflicts with aviation and wind turbines exist (Nichols and Racey 2007) and have also been used in “pest control” applications. It is clear that the best available science was not thoroughly investigated with regard to this impact in the DEA:

“Though greater research is required to have a better understanding of the effects of RF energy on the avian brain, the potential effects on passing birds is expected to be negligible as well. Any disorientating effect, if experienced, would be short-term and would occur only at close distances from the antennas....the RF environment created by the installation, operation and maintenance of the communication and radar systems on the proposed towers

would not result in significant adverse impacts on human safety or the natural and biological environment.”

This statement makes two unsubstantiated assumptions: 1) birds and/or bats will always be “passing” and will not perch or otherwise encounter surveillance towers and 2) that the impact would be short-term. Thus, the claim of insignificance is equally unsubstantiated. Several studies in the past four decades shed some light on potential impacts related to EMF, but the impacts of the proposed action must analyze the potential impacts given the context of the proposed equipment, site locations, species, etc. The following are a few examples:

- Bigu (1973): “Interaction of electromagnetic fields and living systems with special reference to birds.” In this study, the mortality rate of the radiated colony was almost double that of the control colony.
- Tanner (1969) “Effects of microwave radiation on Parakeets in Flight”. The results obtained in this experiment indicates that microwave radiation has an aversive effect on birds in flight comparable to that previously observed in caged birds.
- Kleinhaus et al. (1995) “Thermal Effects of Short Radio Waves on Migrating Birds”. This study concluded that large birds landing on antenna structures might become vulnerable to overheating, but it is likely that these birds would depart rather than remain where they are uncomfortably hot.
- One of the few scientific review articles published on the environmental impacts of electromagnetic frequencies is not even mentioned in the DEA: “Health and safety implications of exposure to electromagnetic fields in the frequency range 300 Hz to 10 MHz. (Litvak, Foster and Repacholi 2002).

Furthermore, much information in the gray literature, specifically in other Environmental Assessments and Environmental Impact Statements for communication towers and other vertical obstructions such as wind turbines, are not referenced in the DEA at all. This leads us to conclude that the DEA is sorely insufficient with regard to assessing the impacts of 57 communication and surveillance towers 80-200 ft. tall, emitting various EMF frequencies, most of which are proposed to be located in sensitive wildland environments.

Most importantly, the DEA fails to include any information regarding the EMF or RF energy **strength** of the proposed tower’s equipment, which is a key determinant in assessing the level and proximity within which the environment will be impacted for sensitive species. There is one reference to a “safe operating distance for these systems (*i.e.*, 17 feet)”, but the basis for this is distance is not quantified, nor substantiated. While humans and terrestrial animals will likely stay out of this proximity due to fences and the height of equipment, both birds and bats will almost certainly come within 17 feet of tower equipment on a regular basis. Given that such little research has been done to quantify impacts of such invisible emissions upon birds and bats, and the one and only attempt to substantiate the above claim of insignificance is based upon a workshop presentation given nearly a decade ago “Beason (1999)” (not a peer-reviewed journal article), the statement that the proposed towers would not result in significant adverse impacts to the biological environment is baseless. This

DOW_16a

“invisible” potential impact merits further scientific study, which should be funded by DHS and cooperating agencies via mitigation money, and highlights the importance of locating towers well away from known avian nests, flyways, bat roosts and foraging areas.

Pima pineapple cactus

The fact the DEA reports a total of 18 new tower sites would be constructed within potential Pima pineapple cactus habitat and that specimens were observed at two of these new tower sites (TCA-NGL-048 and TCA-TUS-038) and construction activity would likely result in take of any individuals present, highlights the need for **true alternatives**, in this case the evaluation of alternative sites to sites where specimens have been confirmed.

DOW_17a

Conclusion

While the nature of the impacts of remote surveillance towers are likely to be less for terrestrial species than tactical infrastructure such as border walls, there are numerous potential impacts of the proposed Tucson West tower array that have been ignored, or only briefly mentioned, and may disproportionately impact species of flight. The potential environmental impacts, both direct and indirect, of the proposed action are significant enough both in scale and in terms of their ecologically-sensitive locations, to merit a regional Environmental Impact Statement with an alternatives that include various tower array locations and configurations. It is our understanding that an additional 7 surveillance towers on Organ Pipe Cactus National Monument will be proposed in a separate DEA to be released on July 31st, 2008. The minimalist approach DHS has taken, to conduct piecemeal EAs with FONSI on projects to build extensive mileages of border walls vehicle barriers, patrol and access roads, and surveillance towers is unacceptable and is not only in violation of NEPA, it has undermined DHS’/CBP’s own ability to comprehend the full magnitude and nature of its numerous actions upon the human environment.

DOW_18a

We urge a formal Section 7 Consultation be initiated to assess, minimize and offset impacts to all of the threatened and endangered species that will potentially be impacted, including those omitted in the DEA (i.e. jaguar, ocelot and candidate species Cactus ferruginous pygmy owl). Many of the conservation/mitigation measures identified in the DEA appear to be salient. However, formal consultation with the USFWS will likely identify other important measures that have not yet been considered in the DEA.

DOW_19a

Defenders continues to support the implementation of remote surveillance towers as an alternative to walls. At the same time, we recognize this type of infrastructure comes with its own set of potential impacts, both direct and indirect, which must be properly assessed and mitigated for. We continue to see the potential for remote surveillance towers to capture information identifying wildlife of conservation concern. This potential benefit to science and wildlife conservation was not addressed in the DEA. We hope that if detected, such information will be shared with wildlife management agencies, researchers and concerned non-governmental organizations. Such information is valuable in building our collective understanding of the occurrence, distribution and movements of wildlife in the remote borderlands region.

DOW_20a

Sincerely,

Matt Clark
Southwest Representative
Defenders of Wildlife

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DOW_1

Thank you for your interest and support of SBInet projects. SBInet regrets you did not receive a copy of this document. You may download a copy at our website http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west.

Response was sent via email on June 18, 2008.

DOW_1a

Alternative tower site locations were identified and analyzed during the development of the project and are provided in Table 2-1 of the draft EA. CBP respectively disagrees and maintains the cumulative effects analysis in the draft EA is sufficient. Reasonably foreseeable and recently completed CBP infrastructure projects are included in the cumulative effects analysis. Further, the EA is tiered from a Immigration and Naturalization Service and Joint Task Force Six (JTF-6) NEPA document entitled, *Supplemental Programmatic Environmental Impact Statement (SPEIS), INS and JTF-6 Activities on the Southwest U.S.-Mexico Border* (July 2001).

DOW_2

The Tucson West draft EA has location and tower access descriptions for each site including maps of the area [beginning on page 30]. In addition, an Addendum to Appendix C has been added to the website (listed above) which denotes tower coordinates.

Response was sent via email on June 18, 2008.

DOW_2a

Tactical infrastructure projects (e.g., fences and barriers) are beyond the scope of this project and are not addressed as part of its proposed action. This project addresses technology and includes tactical infrastructure and other technology-based projects in the cumulative impacts analyses (Section 4.0).

CBP has coordinated with the USFWS since the conception of the project and formal Section 7 consultation is on-going. Findings from the biological assessment prepared for this project were included in the draft EA. The preliminary draft biological assessment was submitted to USFWS on May 15, 2008. Currently USFWS is working towards a draft Biological Opinion, when received the Biological Opinion will be included in the Final EA.

DOW_3

The towers proposed on the Cabeza Prieta National Wildlife Refuge have independent utility from the towers identified for the Tucson West project, and thus, will be addressed in a separate NEPA document. These tower locations are still in the early planning stages.

DOW_3a

See response to DOW comment 1a.

DOW_4a

See response to DOW comment 1a. Additionally, although the Tucson West project is related in a broad sense to other DHS/CBP border infrastructure projects, it has independent utility in terms of deterring and controlling illegal crossers on this discrete section of border, therefore it is appropriate for DHS/CBP to use a single document to analyze potential impacts of this project.

DOW_5a

Alternative tower site locations were identified and analyzed during the development of the project and are provided in Table 2-1 of the draft EA. Further, the EA is tiered from a Immigration and Naturalization Service and Joint Task Force Six (JTF-6) NEPA document entitled, *Supplemental Programmatic Environmental Impact Statement (SPEIS), INS and JTF-6 Activities on the Southwest U.S.-Mexico Border* (July 2001). Section 2.5 of the draft EA identifies numerous alternatives considered, but eliminated, due to their inability to fulfill the purpose and need of this project. Additionally, in the Secure Fence Act of 2006, Congress called on DHS to install not less than 700 miles of fencing on the southwest border and to provide for the installation of additional physical barriers, roads, lighting, cameras, and sensors to gain operational control of the southwest border. The *SBI*net Tucson West project will directly help to meet the Secure Fence Act mandates by constructing cameras and sensors. *SBI*net has coordinated with Coronado National Forest and Buenos Aires National Wildlife Refuge to select tower locations to minimize impacts to species and habitats.

DOW_6a

The movement of illegal traffic cannot be predicted as potential travel routes are at the discretion of the illegal aliens. CBP respectfully disagrees with the commenter. An analysis of potential cumulative impacts is provided after the list of DHS and other agencies' projects in the Tucson Sector. All agencies' projects identified in the Cumulative Impact section (Section 4.0) of the draft EA were considered in the analysis of Cumulative Impacts for the proposed project. After coordinating with Mr. Keith Graves in response to this concern with Coronado National Forest, it was determined that there are currently two mine proposals (Margarita and Rosemount) for the Coronado National Forest. The proposal for the Margarita mine in California Gulch, which is in the project area, is being withdrawn and the proposed Rosemount Mine is outside the project area.

DOW_7a

See response to DOW comment 2a. The EA is tiered from a SPEIS that analyzed potential effects from infrastructure and technologies along the southwest border. The proposed tower project may have a beneficial impact on sensitive species and sensitive areas through the deterrence of illegal traffic.

CBP and USFWS are in an on-going programmatic consultation for all CBP border activities. This consultation has identified and developed numerous best management practices and conservation measures which have been assembled into an internet-based database system to assist in the preparation of the Biological Assessments.

DOW_8a

CBP respectfully disagrees that the proposed project would fragment wildlife habitat. Although, species may avoid the proposed tower sites when operational, there is sufficient open habitat adjacent to the proposed tower sites for species to travel. Formal Section 7 consultation for affected Federally listed species is on-going and *SBI*net expects to receive a Biological Opinion from USFWS the week of July 14th. Indirect adverse effects resulting from shifts in illegal traffic could also occur; however, the location of these effects could occur anywhere along the international border and can not be predicted with reasonable certainty. The purpose of all infrastructure and technologies projects is to prevent potential shifts in illegal traffic. Potential impacts to affected species as coordinated with USFWS are presented in Section 3.9.2 of the draft EA. *SBI*net Enforcement activities should decrease as USBP would be able to concentrate efforts during search and apprehension activities.

DOW_9a

SBI*net* appreciates your comment and an Errata sheet to Appendix C was added, on June 24, 2008, to the SBI*net* website (<http://www.cbp.gov/xp/cgov/border-security/sbi/nepa/tucson-west>) which denotes tower coordinates. SBI*net* apologizes if you did not receive notification of the upload.

DOW_10a

The jaguar and ocelot were included in the Biological Assessment and formal consultation for this project. Analyses for these species from the Biological Assessment were added in the Final EA (Section 3.9). The construction of new roads and improvements made to impassible roads would increase access to habitat occupied or potentially occupied by sensitive species. However, it should be noted that the total length of new road would be approximately 1 mile for all 55 towers. The longest segment of new road is approximately 1,267 feet which indicates that the majority of these sites are currently in proximity to accessible roads and, therefore, any increase in traffic from these new roads would be expected to be negligible. Additionally, tower maintenance would be performed bi-monthly and traffic associated with enforcement activities should decrease as USBP would be able to concentrate efforts during search and apprehension activities. Further, indirect adverse effects resulting from shifts in illegal traffic could also occur; however, the location of these effects could occur anywhere along the southwest border and can not be predicted with reasonable certainty.

DOW_11a

The cactus ferruginous pygmy owl is not currently listed as threatened or endangered and is not afforded protection under the Endangered Species Act. Per the Endangered Species Act, the USFWS did not recommend that SBI*net* request a conference opinion for the cactus ferruginous pygmy owl. It is not anticipated that the proposed project would fragment habitat used by the pygmy owl. Although the proposed tower sites would remove potential dispersal habitat, they would not provide a physical barrier to pygmy owl movement. Additionally, no potential nesting habitat within riparian corridors along washes would be cleared as part of the Proposed Action. Noise levels from construction activities would be attenuated to 55 dBA (*i.e.*, background levels) within 1,000 feet of proposed tower sites and access roads and noise levels associated with tower operations would be attenuated to 55 dBA within 165 feet of the proposed tower sites. If the cactus ferruginous pygmy owl is listed in the future, CBP would reinstate formal Section 7 consultation, as appropriate. Further, biological monitors will be present during construction activities.

DOW_12a

SBI*net* determined that the Proposed Action will not affect known populations of Kearney's blue star. Formal Section 7 consultation is currently on-going and SBI*net* anticipates a Biological Opinion the week of August 4th. This finding is based on the lack of potential habitat near the proposed tower sites and the lack of current illegal entrant (IE) related impacts. Indirect effects associated with the Proposed Action would include a reduction of IE activity and associated USBP enforcement activity. These indirect effects would occur where the USBP's ability to detect and respond to IE activity is elevated as a result of implementing the Proposed Action. Indirect adverse effects resulting from shifts in illegal traffic could also occur; however, the location of these effects could occur anywhere along the southwest border and can not be predicted with reasonable certainty.

DOW_13a

The reference "Table 4-2" is a typographical error and has been corrected to read "Table 3-13" in the Final EA. Mitigation measures, included in Section 5.0 of the draft EA, were developed to reduce potential impacts to Mexican spotted owls including critical habitat and Primary Activity Centers (PACs). Further, conservation and mitigation measures developed during Section 7 consultation will be included in the Final EA and Finding of No Significant Impact. Currently, CBP is finalizing conservation and mitigation measures with USFWS to minimize impacts to Mexican spotted owls.

DOW_14a

Seasonal restrictions for the Mexican spotted owl were provided as a mitigation measure in the draft EA. CBP is developing BMPs with USFWS to minimize impacts to Mexican spotted owls during the breeding season. The discussion on Mexican spotted owl in Section 3.9.2.1 has been revised to include potential effects from noise levels on the owl. Additionally, mitigation measures are provided in Section 5.0 of the Final EA to mitigate potentially negative impacts of increased noise levels on Mexican spotted owl. Impacts specific to noise were discussed in Section 3.9.2.1 in the draft EA.

DOW_15a

Maintenance activities associated with the proposed towers could occur bi-monthly. This activity would require USBP maintenance staff to drive to the tower on existing roads to check the tower and generator facilities. With the exception of starting the generator for a brief period, noise levels would not be expected to exceed passive recreation levels. Biological monitors will be utilized to reduce potential impacts to Mexican spotted owl and were provided as mitigation measures in Section 5.0 of the draft EA. Further, the following conservation measures to minimize disturbances related to human presence have been added to the Final EA:

1. The number of vehicles traveling to and from the project site and the number of trips per day will be minimized to reduce the likelihood of disturbing animals in the area or injuring an animal on the road.
2. Construction speed limits will not exceed 35 miles per hour (mph) on major unpaved roads (*i.e.*, graded with ditches on both sides) and 25 mph on all other unpaved roads. Night time travel speeds will not exceed 25 mph, and may be less based on visibility and other safety considerations.
3. Where approach and access roads may allow use of habitats occupied or potentially occupied by Federally listed species, gating, physical barriers, signs, or other means to restrict access would be implemented in coordination with landowners and management agencies.

A total of three sites and associated access roads would be located within 1 mile of a Mexican spotted owl PAC. Two of these sites (TCA-TUS 192 and TCA-SON-115) are existing tower sites with adequate access roads and would not require any ground disturbance or removal of vegetation. The construction of a new tower site and 132 feet of new road would be required in the Santa Rita Mountains (TCA-NGL-211) and would result in habitat loss and potential isolation of resources for the Mexican spotted owl. Three additional tower sites (TCA-SON-061, TCAS-SON-062, and TCA-SON-115) are within 1 mile of occupied habitat.

DOW_16a

Potential effects from EMF frequencies on lesser long-nosed bat have been added to Section 3.9.2.1 of the Final EA.

DOW_17a

Pima pineapple cactus was observed at two tower sites and impacts are likely to be unavoidable. CBP has determined that the proposed project may affect and is likely to adversely affect the Pima pineapple cactus. Pima pineapple cactus was included as part of the formal Section 7 consultation, which is on-going. Conservation measures to minimize soil disturbance, establishment of non-native invasive plant species, development of fire management plans in cooperation with land owners and resource agencies', and post-construction monitoring for and control of soil erosion and non-native invasive plant species were developed as part of the consultation process. The Biological Opinion will be included in the Final EA.

DOW_18a

Although the various forms of tactical infrastructure used by DHS/CBP are related in a broad sense, they do not constitute a single proposal for the purpose of NEPA. Moreover, we believe we have adequately accounted for and assessed potential cumulative impacts as part of the current EA.

DOW_19a

Formal Section 7 consultation has been initiated by CBP for this project and is currently on-going. *SBI_{net}* anticipates receiving a Biological Opinion from USFWS the week of August 4th. Analyses for jaguar and ocelot has been added to the Final EA as a result of the formal Section 7 consultation. The conservation/mitigation measures presented in the draft EA were compiled from USFWS conservation and mitigation guidelines prepared specifically for the USBP and the USFWS Information, Planning, and Consultation System. Any additional conservation/mitigation measures identified in the Biological Opinion for this project have been included in the Final EA and Finding of No Significant Impact.

DOW_20a

CBP would coordinate with resource agencies to share information to the extent practicable.

Denise Rousseau Ford

From: PATTERSON, PATIENCE E [patience.patterson@dhs.gov] on behalf of TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Friday, June 06, 2008 12:15 PM
To: Howard Nass; Denise Rousseau Ford; Maria Reid
Subject: FW: EA

[For incorporation in public comments.](#)
Paddie

From: ADAMS, ROWDY D
Sent: Thursday, June 05, 2008 10:13 AM
To: TUCWESTCOMMENTS
Subject: EA

I think this is a very good idea and our US govt employees and contractors are doing a good job of taking into account the environmental impacts.

} PC_Adams

6/6/2008

PC_Adams

SBI*net* appreciates your comment.

Denise Rousseau Ford

From: Howard Nass
Sent: Monday, June 23, 2008 1:04 PM
To: Denise Rousseau Ford
Subject: FW: Meaningful comment on SBInet EA impossible
Attachments: Blank Bkgrd.gif

From: PATTERSON, PATIENCE E [mailto:patience.patterson@dhs.gov]
Sent: Sunday, June 22, 2008 6:24 AM
To: Howard Nass
Subject: Fw: Meaningful comment on SBInet EA impossible

Ditto on pub comm in EA
Paddie

Patience E. Patterson, RPA
Branch Manager, Environmental Planning & Compliance
Environment-Land-Facilities Division SBInet SPO
Customs and Border Protection
Desk: (202) 344-1131
Cell: (202) 870-7422
Fax: (202)344-3550
patience.patterson@dhs.gov

----- Original Message -----

From: Mary Scott <maryscott@wildblue.net>
To: Christopher Geoffroy <christopher.m.geoffroy@dhs.gov>; Patience Patterson <patience.patterson@dhs.gov>; Tom King <thomas.king@dhs.gov>; patience.e.patterson@dhs.gov <patience.e.patterson@dhs.gov>
Cc: REED, LISA A <lisa.reed@dhs.gov>; BROWN, BRIAN C <brian.brown@dhs.gov>
Sent: Sat Jun 21 14:25:36 2008
Subject: Meaningful comment on SBInet EA impossible

Dear Tom, Patience, and Christopher,

The community of Arivaca received the "Draft Environmental Assessment" for the SBInet Tucson West project early this month. It was clear after much study that the maps and descriptions of the proposed locations of the new towers were at such a distance (the maps) or so vague (the descriptions) as to make actually locating the proposed tower sites impossible. We requested more accurate information that would make the possibility of meaningful comment on the EA possible in advance of our Border Patrol Community Meeting which was held Thursday evening, June 19th. Unfortunately, Sector Representative Gary Robison came unprepared to provide actual tower locations, and even with careful study after the meeting with Sector Representative Brian Brown, no one was able to determine just where the proposed new towers were to be sited.

Mr. Robison suggested that we just make comments on the document. Obviously the problem is that we can make no meaningful comments if we do not know where the proposed tower sites are located.

We are trying as a community to believe that you are sincerely interested in our input in this project. If that is the case, please make the actual site locations available to us, either by GPS coordinates, Longitudes/Latitudes, or using Section maps, down to the 1/16th Section.

PC_Scott

Thank you,

Mary Scott

6/24/2008

PC_Scott

SBI*net* appreciates your comment and an Errata sheet to Appendix C has been added to the website http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west which denotes tower coordinates to aid you in your document review of the draft EA and proposed FONSI. An email response letting you know of the Errata sheet containing the proposed tower coordinates was sent.

Denise Rousseau Ford

From: Howard Nass
Sent: Monday, June 23, 2008 1:04 PM
To: Denise Rousseau Ford
Subject: FW: draft environmental assesment of towers

FYI

From: PATTERSON, PATIENCE E [mailto:patience.patterson@dhs.gov]
Sent: Sunday, June 22, 2008 6:23 AM
To: Howard Nass
Subject: Fw: draft environmental assesment of towers

For pub comm in doc
Paddie

Patience E. Patterson, RPA
Branch Manager, Environmental Planning & Compliance
Environment-Land-Facilities Division SBInet SPO
Customs and Border Protection
Desk: (202) 344-1131
Cell: (202) 870-7422
Fax: (202)344-3550
patience.patterson@dhs.gov

----- Original Message -----

From: Kyle Young <camelboo@mac.com>
To: PATTERSON, PATIENCE E <patience.patterson@dhs.gov>
Sent: Sat Jun 21 18:15:21 2008
Subject: draft environmental assesment of towers

Patience,
As a resident of Arivaca since 1984 I would like to request that we be given more detailed information about the locations of the 26 new proposed SBInet towers. I have looked at the E. A. and the location information is to vague to be able to make any kind of informed comment. Thank you for your time and effort in this matter.
Kyle Young

} PC_Young

PC_Young

SBI*net* appreciates your comment and an Errata sheet to Appendix C has been added to the website http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west which denotes tower coordinates to aid you in your document review of the draft EA and proposed FONSI. An email response letting you know of the Errata sheet containing the proposed tower coordinates was sent.

Denise Rousseau Ford

From: Howard Nass
Sent: Monday, June 23, 2008 1:03 PM
To: Denise Rousseau Ford
Subject: FW: Proposed Virtual Fence SBInet Towers

FYI

From: PATTERSON, PATIENCE E [mailto:patience.patterson@dhs.gov]
Sent: Sunday, June 22, 2008 6:22 AM
To: WINNICK, SETH; BIXLER, GLENN A; dguzewich@lmi.org; Maria Reid; Howard Nass
Subject: Fw: Proposed Virtual Fence SBInet Towers

Action? Howard, for inclusion in public comment portion of doc.
Paddie

Patience E. Patterson, RPA
Branch Manager, Environmental Planning & Compliance
Environment-Land-Facilities Division SBInet SPO
Customs and Border Protection
Desk: (202) 344-1131
Cell: (202) 870-7422
Fax: (202)344-3550
patience.patterson@dhs.gov

----- Original Message -----

From: arienne ellis <arienneellis@gmail.com>
To: PATTERSON, PATIENCE E <patience.patterson@dhs.gov>
Sent: Sat Jun 21 21:05:34 2008
Subject: Proposed Virtual Fence SBInet Towers

Dear Patience,

We understand you are in charge of the "Draft Environmental Assessment" documents that have been made accessible to our community at our local Arivaca, AZ library. As you may by now know, we cannot decipher where these towers are planned to be located with any accuracy such as would be marked on a map with of reasonable scale, or with the use of GPS co-ordinates, latitude/longitude readings, or Section locations to 1/16 of a Section.

PC_Ellis 1

Our environment is here is fundamentally key to our daily lives, and not only are we concerned about the locations of the towers, the large number of them will also negatively impact us. Since many here know the land intimately, we could also be of help in determining the most appropriate specific sites. I request that supplemental information about the location of the new proposed tower sites be forwarded to the Arivaca Library promptly so that we can offer timely input on this project.

PC_Ellis 2

I further request that the planners and DHS consider the profound implications and impacts of their actions here in our territory on the southern U.S. border, and realize that this is our home, and that surveillance towers and apprehensions are mere band-aids on what is an international issue that can only be solved at its source.

PC_Ellis 3

Thank you for your attention.
Arienne Ellis

PC_Ellis_1

SBI*net* appreciates your comment and an Errata sheet to Appendix C has been added to the website http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west which denotes tower coordinates to aid you in your document review of the draft EA and proposed FONSI. An email response letting you know of the Errata sheet containing the proposed tower coordinates was sent.

PC_Ellis_2

In order to minimize the time to get the proposed tower coordinate data to you the data were not sent to the library but instead was sent directly to you via email and has been added this to the website, http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west, to aid you in your document review of the draft EA and proposed FONSI.

PC_Ellis_3

SBI*net* appreciates your comment.

June 23, 2008

RCV 7/2/08
BB

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7
8
9 Ms Patience E. Patterson
10 US Department of Homeland Security
11 SBINET Program Management Office
12 US Customs and Border Protective Headquarters
13 1300 Pennsylvania Avenue NW
14 Room 3.4 D
15 Washington, DC 20229

16
17 Dear Ms Patterson:

18
19 Kindly send me a copy of the **Draft Environmental Assessment to:**

20
21
22 Jean M and Teresa Branger
23 The Branger Ranch
24 Empire Mountains
25 35000 Hilton Ranch Road
26 Vail, AZ 85641
27

PC_Branger 1

28 Jean and I would like to study this assessment and maybe come up with some
29 ideas on how best to tackle this problem. We still have undocumented people
30 coming through our property and know what a problem it is.

PC_Branger 2

31
32 Thank you for your prompt attention.

33
34 Sincerely,

35
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38 J M & T Branger
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PC_Branger_1

SBI*net* unfortunately did not receive your written comment until July 2, 2008. In order to allow you to review the document we are sending you an expedited copy of the draft EA and FONSI in order for you to provide comments via fax (202-344-3550) or email (TUCWESTCOMMENTS@ cbp.dhs.gov) by Monday morning, July 7, 2008.

PC_Branger_2

SBI*net* awaits your comments.

Denise Rousseau Ford

From: Howard Nass
Sent: Tuesday, June 24, 2008 7:27 AM
To: Denise Rousseau Ford
Subject: FW: border towers

From: PATTERSON, PATIENCE E [mailto:patience.patterson@dhs.gov]
Sent: Monday, June 23, 2008 9:56 AM
To: BIXLER, GLENN A; Howard Nass; WINNICK, SETH; REID, MARIA B (CTR); dguzewich@lmi.org
Subject: Fw: border towers

Fyi and action

Patience E. Patterson, RPA
Branch Manager, Environmental Planning & Compliance
Environment-Land-Facilities Division SBInet SPO
Customs and Border Protection
Desk: (202) 344-1131
Cell: (202) 870-7422
Fax: (202)344-3550
patience.patterson@dhs.gov

----- Original Message -----
From: Mary Perdue <Mary.Perdue@SAMHC-CRISIS.ORG>
To: 'patience.patterson@dhs.gov' <patience.patterson@dhs.gov>
Sent: Mon Jun 23 09:32:58 2008
Subject: border towers

Dear Ms. Patterson,

As I understand it, numerous new "virtual fence" tower sites between Nogales and AZ Hwy 286 have been proposed. I also understand that we are currently in a public comment period regarding the placement of these towers. I live in Arivaca, AZ and have already been impacted by the existing tower. I would like to be able to address the proposed locations, but the material that has been left at the Arivaca Library makes it impossible to tell the exact location of these towers. I imagine that to conduct an environmental assessment, you must have a specific location in mind for each of the proposed towers—I'm sure you have GPS coordinates identified. Please make this information available so that I can have some meaningful way of commenting. Perhaps if you put yourself in the position of the residents of Arivaca you will understand the desire to have some say in what we see out our windows, and where the towers are likely to funnel the traffic that surely will continue regardless of the towers' placement.

} PC_Perdue

Thank you,
Mary Perdue
14000 W. Cota Rd.
Arivaca, AZ

6/24/2008

PC_Perdue

In order to minimize the time to get the proposed tower coordinate data to you the data were not sent to the library but instead was sent directly to you via email and has been added this to the website, http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west, to aid you in your document review of the draft EA and proposed FONSI.

Denise Rousseau Ford

From: TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Wednesday, June 25, 2008 1:10 PM
To: PATTERSON, PATIENCE E; BIXLER, GLENN A; MILLER, PAULA M (CTR); REID, MARIA B (CTR); Howard Nass; Denise Rousseau Ford
Subject: FW: SBInet Towers

From: Bruce Pheneger [mailto:bparchitect@att.net]
Sent: Monday, June 23, 2008 8:35 PM
To: PATTERSON, PATIENCE E; Gabrielle.Giffords@mail.house.gov
Cc: Tony Davis; Glen Miller; Bill and Ellie Kurtz ; Nick Blessor
Subject: SBInet Towers

Dear Ms. Patterson, I am absolutely opposed to any towers located North of the International Boundry between the United States and Mexico or for that matter anywhere South of the International Border between the United States and Canada.

There are several reasons this project should be abandoned.

- It has failed to work: as SBInet, Americas Shield or ISIS
- It is difficult to respond to an EIS study when the location of the towers is unknown
- Not only will this technology harm birds (try and prove ME wrong). It will also harm other legal animals trying to maintain

} PC_Pheneger

their habitat as protected border crossers

- It will also harm homo-sapiens, who remember when we had legal rights to continue our pursuit of happiness.
- The cost benefit can not be proven by the government.

For these reasons this project will do irreparable to a wide group of animals with zero proveable benefit.

Sincerely
Bruce Pheneger Architect
PO Box 2631
Tubac, Arizona
520 990-1212

PS Please stop this insane waste of reasorces and destruction of America.....bp

PC_Pheneger_1

SBI*net* appreciates your comment and an Errata sheet to Appendix C has been added to the website http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west which denotes tower coordinates to aid you in your document review of the draft EA and proposed FONSI. An email response letting you know of the Errata sheet containing the proposed tower coordinates was sent.

The Proposed Action would likely have an adverse affect on migratory birds. However, the Proposed Action is not expected to result in a substantial loss of individuals that would affect the abundance or diversity of any one species. Therefore, the Proposed Action would not have a significant adverse impact on migratory birds.

The construction and operations of the proposed towers have been coordinated with USFWS and AGFD. Mitigation measures to minimize impacts to migratory birds will be implemented as part of the project.

PC_Pheneger_2

SBI*net* appreciates your comment.

Denise Rousseau Ford

From: TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Wednesday, June 25, 2008 1:11 PM
To: PATTERSON, PATIENCE E; BIXLER, GLENN A; MILLER, PAULA M (CTR); REID, MARIA B (CTR); Howard Nass; Denise Rousseau Ford
Subject: FW: SBInet Tucson West Project: draft EIS

From: B & E Soporibell [mailto:soporibell@msn.com]
Sent: Tuesday, June 24, 2008 11:33 AM
To: PATTERSON, PATIENCE E
Subject: SBInet Tucson West Project: draft EIS

Dear Ms. Patterson:

I request that you provide me with the exact location rather than the vague sitings of the proposed **SBInet** towers using the usual establishing points of latitude, longitude, township and range. What has been presented in the draft EIS is so broad that there can be no reasonable comment on the proposed location.

Having served as an intervenor in other proposals I know the importance of this. I would appreciate this information as soon as possible.

Thank you.

Ellen Kurtz
HC 65 Box 7990
Amado, AZ 85645
soporibell@msn.com

} PC_Kurtz

PC_Kurtz_1

In order to minimize the time to get the proposed tower coordinate data to you the data were not sent to the library but instead was sent directly to you via email and has been added this to the website, http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west, to aid you in your document review of the draft EA and proposed FONSI.

PC_Kurtz_2

SBI*net* appreciates your comment. Biological and Cultural Resource surveys were conducted for all proposed new tower sites and access roads to be constructed or requiring maintenance.

CBP acknowledges the fact that numerous protected and sensitive species are present or have the potential to occur in the project area. Formal Section 7 consultation as required by the Endangered Species Act is on-going with the U.S. Fish and Wildlife Service.

SBI*net* anticipates receiving a Biological Opinion from USFWS the week of August 4th.

Denise Rousseau Ford

From: PATTERSON, PATIENCE E [patience.patterson@dhs.gov]
Sent: Wednesday, June 25, 2008 3:17 PM
To: REID, MARIA B (CTR); Denise Rousseau Ford; Howard Nass; EXI-Bixler, Glenn A
Subject: FW: towers

Attachments: TCA_W_TowerLaydown for website errata.xls



TCA_W_TowerLaydown for website...

Forgot to cc you all on this one.

Paddie

-----Original Message-----

From: PATTERSON, PATIENCE E
Sent: Wednesday, June 25, 2008 4:16 PM
To: 'Roderick Menzies'
Subject: RE: towers

Mr. Menzies:

Attached please find the list of tower sites and their attendant lat/longs. Also, please note that this list is being placed on the CBP-SBI website as an errata sheet for Tucson West EA. Thank you.

Patience E. Patterson, RPA
Director, Environmental Planning
Secure Border Initiative
Customs and Border Protection
Desk: (202) 344-1131
Cell: (202) 870-7422
Fax: (202) 344-3550
patience.patterson@dhs.gov

-----Original Message-----

From: Roderick Menzies [mailto:rodmenzies@mac.com]
Sent: Wednesday, June 25, 2008 4:06 PM
To: PATTERSON, PATIENCE E
Subject: towers

Please supply more detailed info as to location of the proposed towers. Defining location within a 10 mile radius is not helpful.

}

PC_Menzies

Thank you!

PC_Menzies

In order to minimize the time to get the proposed tower coordinate data to you the data were not sent to the library but instead was sent directly to you via email and has been added this to the website, http://www.cbp.gov/xp/cgov/border_security/sbi/nepa/tucson_west, to aid you in your document review of the draft EA and proposed FONSI.

Denise Rousseau Ford

From: PATTERSON, PATIENCE E [patience.patterson@dhs.gov] on behalf of TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Friday, June 13, 2008 1:17 PM
To: Howard Nass; Denise Rousseau Ford; REID, MARIA B (CTR); BIXLER, GLENN A
Cc: PATTERSON, PATIENCE E
Subject: FW: Tucson West Draft EA and Proposed FONSI

Here is our first genuine comment on the TCA West EA.
Paddie

-----Original Message-----

From: Paul Smith [mailto:psmith@as.arizona.edu]
Sent: Friday, June 13, 2008 1:53 PM
To: TUCWESTCOMMENTS
Cc: Paul Smith
Subject: Tucson West Draft EA and Proposed FONSI

Ms. Patience E. Patterson, RPA
U.S. Department of Homeland Security
SBInet Program Management Office
U.S. Customs and Border Protection Headquarters 1300 Pennsylvania Avenue, NW Room 7.5B
Washington, DC 20229

Dear Ms. Patterson,

With regard to the Tucson West Draft EA and Proposed FONSI, the document

does not address in any way the possible impacts on an important economic/scientific interest in the proposed project region. There are 5 major astronomical observatories that are supported by dozens of U.S. universities, as well as directly by the Federal government, that could be adversely affected by the construction and operation of the proposed sensor and communication towers in southern Arizona. Given the large investment of taxpayer dollars in these facilities over the last several

decades, I believe that the EA should also include an investigation into

three aspects that are central to the operation of this nation's astrophysical research/teaching assets:

(1) Will the transmitters and sensors for the proposed towers produce interference with radio-frequency observations of the sky that are made from Kitt Peak and Mt. Graham, AZ? Even a small leakage into frequency band passes used for radio astronomy will greatly compromise these facilities. Given that the frequencies set aside for astronomical research are publicly known and set aside by international treaty, it should be relatively easy to assess the impact that the border project will have.

PC_Smith_1

(2) Possibly more difficult to assess is whether the substantial emissions from the towers will interfere with the sensitive detector electronics used at all telescopes. Blasts of microwave emissions from radar and communications from a variety of sources have occasionally corrupted the data collected from nearly all of the observatory sites. Astronomers try very hard to shield their equipment from outside noise sources, but there may be no defense against a strong emission source aimed directly at an observatory.

PC_Smith_2

(3) Will the towers be visibly illuminated at night (in addition to the required aircraft warning beacons), and if so, will the added illumination be shielded so that little direct light escapes upward from

PC_Smith_3

the horizontal to minimize light pollution from these sites? This is a serious issue for the many optical telescopes that will be close to the proposed towers. Light inadvertently illuminating the observatories threatens the effectiveness of facilities

that comprise a large fraction

of the astrophysical research "infrastructure" of the United States of America.

I sympathize with the need for border security, but we should try to ensure that this process does not destroy the very activities and investments that we are trying to defend.

Thank you very much for your consideration,

Paul S. Smith
2790 E. King St.
Tucson, AZ 85716

PC_Smith_1

SBI*net* appreciates your comments. Transmitters and sensors will operate below 30 GHz and all frequencies will be coordinated through the NTIA as required by regulation.

PC_Smith_2

Radio frequency emissions will be limited as specified by the NTIA frequency assignments. SBI*net* will communicate frequency assignments with National Optical Astronomy Observatory/NSF through the NTIA process.

PC_Smith_3

There are no external lights on the proposed tower sites, except for a low wattage light on the equipment shed. The light is only activated if personnel are performing maintenance or testing on the diesel generator. There are no routine operations at the tower sites at night. Please see the typical tower compound description in the Proposed Action section of the EA (Section 2.3).

RCW 7/8/08

Mr. Bill Eimers
President/Duquesne Homeowners
Association
C/O 514 W. Willetta Street
Phoenix, AZ 85003

Ms. Patience E. Patterson, RPA
U.S. Department of Homeland Security
SBInet Program Management Office
U.S Customs and Border Protection, Headquarters
1300 Pennsylvania Avenue NW, Room 3.4-D
Washington, D.C. 20229

Electronic copy also forwarded to: TUCWestComments@cbp.dhs.gov

July 1, 2008

Dear Ms. Patterson:

This is a response on behalf of the Duquesne Homeowners Association of Duquesne, Arizona (*Homeowners*) to the draft document 'Environmental Assessment for the SBInet Tucson West Project' (*EA Draft*), dated May 2008. Specifically, this response addresses proposed tower sites TCA-SON-055 and TCA-SON-208 in or near the Duquesne Subdivision (*Subdivision*) in Santa Cruz County, Arizona.

TCA-SON-055

Earlier this year, Homeowners initiated informational discussions with the Border Patrol of Sonoita, Arizona Station (*Sonoita Border Patrol*) regarding the SBInet Tucson West Project. Of first concern to Homeowners was the proposed site for tower TCA-SON-055, on private property within the Subdivision.

In one of those discussions, Agent Gaylon Mills advised Homeowners that an alternate site, apparently more advantageous than the original site, was being proposed by the Sonoita Border Patrol Station.

PC_Eimers_1

Homeowners are therefore of the understanding that the original site has been rejected. The EA Draft, however, clearly identifies the proposed site within the Subdivision as an accepted location.

Homeowners have concerns about aesthetics, increased traffic (for this remote region), noise pollution, light pollution and degradation of property values resulting from the construction of a tower prominently within the Subdivision. There are, in fact, Covenants, Conditions and Restrictions prohibiting such towers within the Subdivision.

PC_Eimers_2

Homeowners have other issues with the EA Draft as relates to the site proposed for TCA-SON-055. For example, the document states that access is via Forest Service roads and crosses Forest Service lands. In fact, one must also cross private property within the Subdivision to access the site. It is the understanding of Homeowners that the Forest Service has a public easement through the Subdivision to reach Forest Service lands, but that easement does not extend into the Subdivision where the proposed site is located.

PC_Eimers_3

Considering the large tracts of public Forest Service property in the area and the existing network of roads through those lands, Homeowners believe there are viable, less problematic and much less injurious alternatives.

PC_Eimers_4

Assuming that the EA Draft was simply not updated in time for publication and an alternate site is being proposed for TCA-SON-055, these and other issues with the EA Draft as relates to TCA-SON-055 are moot.

PC_Eimers_5

TCA-SON-208

Of equal importance to Homeowners is the proposed location of tower TCA-SON-208 just outside the Subdivision. According to the EA Draft, TCA-SON-208 is rejected due to operational, environmental, constructability and technical reasons. However, TCA-SON-208 is referenced on at least 3 maps within the document.

PC_Eimers_6

TCA-SON-208 raises all the same concerns for Homeowners as does TCA-SON-055. These concerns include aesthetics, increased traffic (for this remote region), noise pollution, light pollution and degradation of property values. TCA-SON-208 (as with TCA-SON-055) would be visible to nearly all Subdivision property owners and audible to many homeowners day and night, 365 days a year.

Given that the 850+ acre Subdivision is surrounded by more than 100,000 acres of public land, it seems reasonable and appropriate to seek

site locations where towers are not visible, audible or otherwise injurious to the Homeowners.

In conclusion, Homeowners are asking for the following confirmations:

1. That the proposed site for TCA-SON-055, as identified in the EA Draft of May 2008, is rejected.
2. That that the proposed site for TCA-SON-208, as identified in the EA Draft of May 2008, is rejected.

PC_Eimers_7

Thank you on behalf of the Duquesne Homeowners Association.

Sincerely,

Bill Eimers/jb

Bill Eimers
President/Duquesne Homeowners Association

Electronic copy to:
Agent Gaylon Mills/Sonoita Border Patrol Station
Gaylon.mills@dhs.gov

PC_Eimers_1

SBI*net* appreciates your concerns, but at this point a replacement for TCA-SON-055 has not been chosen. TCA-SON-055 is still proposed as part of the Tucson West project.

PC_Eimers_2

Issues of aesthetics, increased traffic, and noise pollution have been addressed in the EA in Sections 3.16, 3.15, and 3.12 respectively.

PC_Eimers_3

SBI*net* appreciates your comment. Further, SBI*net* would obtain all required rights of entry, leases, and/or easements prior to construction of any proposed towers.

PC_Eimers_4

SBI*net* appreciates your comment.

PC_Eimers_5

SBI*net* appreciates your comment.

PC_Eimers_6

Tower site TCA-SON-208 is a rejected site and is not a part of the Proposed Action. After further review of the maps in the draft EA, this specific tower could not be located as suggested by the commenter.

PC_Eimers_7

SBI*net* appreciates your concerns, but at this point a replacement for TCA-SON-055 has not been chosen. TCA-SON-055 is still proposed as part of the Tucson West project. TCA-SON-208 has been rejected and is no longer a part of the Tucson West project.

RCU 7/8/08

Box 701
Arivaca AZ 85601
6-24-8

Ms. Patience E. Patterson, RPA
U.S. Dept. Homeland Security
SBlnet Program Mgt. Office
U.S. Customs + Border Protection, Headquarters
1300 Pennsylvania Avenue NW, Room 3.4-D
Washington, D.C. 20229
Re: Response to SBlnet Tucson West Project Assessment

Minimal adverse impact? My survival (dangerous Lupus and its serious cardiac and hemoraging^{↑pain} when the Arivaca Tower was running and severe progression from it after the shut down) is not minimal to me, my children and grandchildren!

My M.D. says I have to move because of towers and I have no funds (SSI Disability \$637./mo total income).
Homeland needs to relocate me out of towers views^{to medically appropriate chosen location}
immediately!

Surveillance towers are illegal to your own U.S. families. From electro magnetic radiation of microwaves, etc., -
Your children with fatal cancers!, your spouse with fatal cardiac event and fatal autoimmune + neurological diseases (Brain tumors, Leukemia, sudden cardiac arrest, Alzheimers, autism, Lupus, m.s., etc, etc.)

Protecting us by killing us is not protection, - It's Murder!!!
Class Action Suits?

What would Jesus Say? No Surveillance Towers!!!!!!!
Georgiana DiSpigno 520-398-2692,

PC_DiSpigno

PC_DiSpigno

SBI*net* appreciates your comment. Studies provided in the draft EA in Section 3.13 indicate that the type of RF emissions associated with the proposed towers would not have an adverse effect on health and human safety.

Denise Rousseau Ford

From: TUCWESTCOMMENTS [Tucwestcomments@dhs.gov]
Sent: Thursday, July 03, 2008 9:57 AM
To: Howard Nass; Denise Rousseau Ford; Maria Reid; PATTERSON, PATIENCE E; BIXLER, GLENN A; BROGLIO, BARBARA (CTR)
Subject: FW: Comments on Tucson West Tower EA

-----Original Message-----
From: peter ragan [mailto:sodwinder@yahoo.com]
Sent: Thursday, July 03, 2008 10:42 AM
To: TUCWESTCOMMENTS
Cc: peter ragan
Subject: Comments on Tucson West Tower EA

My name is Peter Ragan and I am a resident of Arivaca.

The comment period on the EA for the Tucson West phase of the SBInet should be extended due to lack of the most basic pertinent information needed for proper evaluation- specific locations for the towers. The location descriptions for each tower contained in the EA are vague and the maps are not of high enough resolution to locate them with any accuracy. When this was pointed out to DHS, they responded with latitude/longitude coordinates. Why useable GPS coordinates or accurate physical location descriptions could not be provided is unclear.

PC_Ragan 1

The EA makes only cursory mention of the impacts that will certainly occur on the region as people crossing the border are forced into ever more remote areas. It seems to assume that as surveillance and enforcement increase, traffic will simply disappear. It compares a "no action" scenario of rampant degradation due to heavy traffic to a "proposed action" fantasy of seemingly no traffic. People have consistently gone over, under, through and around all tactical and technological efforts to stop them. These towers will cause many to choose even more remote routes, endangering themselves and causing an even greater negative impact on the last bastions of habitat for many plant and animal species.

PC_Ragan 2

The EA concludes that there will be no significant aesthetic and visual impact from the towers. Apparently, the fact that a significant number of Arivaca residents have been complaining for more than a year about a very visible P28 tower located two miles south of town on Tres Bellotas Road has been conveniently overlooked. Now, despite assurances from Tucson Sector Border Patrol officials that this tower would not be replaced, it seems new tower TUC-038 is in essentially the same location. Many Arivaca residents deeply resent the negative visual, aesthetic and privacy impacts of this tower, looming over a town twelve miles north of the border.

PC_Ragan 3

Concerns over the tower radar's operational effects on bats were brought up during the P28 phase of the towers but no new consideration of the issue appears in the EA, just some discussion of the effects of the initial construction. Along with the Lesser Long Nosed bat, a large nursery colony of Mexican Free Tailed bats inhabits Ruby, in the middle of the CNF southeast of Arivaca, throughout the summer.

PC_Ragan 4

Water resources all along the border are scarce and those in and near Arivaca in Pima County, despite being in an AMA, are small, isolated and limited. The use of locally sourced water, especially for road construction and ongoing maintenance, could have a significant negative impact.

PC_Ragan 5

A large network of roads in the CNF southeast of Arivaca has been graded and improved to create access for these towers, SBInet and the BP. The Fresnel Wash road all the way through BANWR, a new extension of this road south of Fraguita Peak to Ruby Road, Warsaw Canyon, California Gulch, Corral Nuevo, these formerly four wheel drive roads are now passable by passenger car in many instances. Inadequate consideration is given to the impact of increased traffic on these roads, traffic going both ways. Sectors of the CNF southeast of Arivaca had more deer hunting allowed on them than any other sectors in the

PC_Ragan 6

state last year. Many more people will use these roads and more easily access and negatively impact previously less accessible areas.

The EA assumes that a significant decrease in numbers of people crossing the border due to the towers will offset the many, and much underestimated, negative impacts of their presence. There is no basis to assume that traffic will simply disappear. It hasn't gone away in response to past enforcement efforts, including the failed P28. The DHS/BP policy of forcing border crossers in to more remote areas has not deterred people from crossing but rather has endangered many unsuspecting human lives, increased human suffering, trampled more remote natural areas and put more pressure on species trying to hang on in the region, like the jaguar. The SBInet surveillance tower system is still essentially untested in the field and the full extent of its possible negative impacts in operation has not been adequately studied. Most of the EA concerns itself only with the impacts of tower construction.

These towers are a continuation of a failed policy and an attempt to create the illusion that a technological solution exists to systemic economic and social problems. To roll out such a large expansion of an unstudied system after the abject failure of what is now called its "initial test phase" is unjustifiable.

PC_Ragan 7

PC_Ragan_1

SBI*net* respectfully disagrees; it is CBP policy to provide the public with a 30 day public comment review period. SBI*net* has determined that adequate project information has been provided.

PC_Ragan_2

Although SBI*net* acknowledges that there may be indirect impacts due to illegal traffic attempting to avoid the proposed tower sites, CBP cannot predict where the shift in illegal traffic may occur. However, the overall Common Operating Picture (COP) would provide greater response time and flexibility in deploying CBP agents to most of the areas in the Tucson Sector western region.

PC_Ragan_3

SBI*net* appreciates your comment. Some P28 towers will be replaced by the towers proposed by this project.

PC_Ragan_4

SBI*net* has entered into formal consultation with USFWS and a conservation and mitigation measures have been identified, which could be implemented to reduce impacts to bats. Impacts to lesser long-nosed bat are included in Section 3.9.2.1 in the EA.

PC_Ragan_5

SBI*net* respectfully disagrees; although water is limited, as mentioned in the EA, the use of a total of 554,000 gallons for the construction of new roads and the use of 326,000 gallons for road maintenance repairs (previously called road improvements) would still be minimal as compared to other uses in Pima County. Impacts to water resources are discussed in Section 3.4 of the EA.

PC_Ragan_6

This EA only analyzes for the impacts of the proposed towers, new roads, road repairs and maintenance, and road improvements (the latter two formerly called road improvements); this EA does not analyze for CBP operational activities beyond the scope of this project. Within the 81 mile Tucson West area, the Proposed Action would only create 1.3 miles of new road and repair or maintain 12 miles of existing access road.

PC_Ragan_7

SBI*net* appreciates your comment. The Tucson Sector is currently using the P28 towers. While not stating that the proposed Tucson West project will completely stop illegal traffic, SBI*net* has determined that the towers proposed will act as a force multiplier and will increase CBP response time and flexibility based on the proposed project. One of the indirect beneficial effects of the project would be a reduced enforcement footprint. The proposed towers would identify illegal entrants sooner and allow USBP agents to concentrate their enforcement efforts.

APPENDIX B
Public Scoping Meeting Minutes

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PUBLIC SCOPING MEETING
FOR THE
SITING, CONSTRUCTION, AND OPERATION
OF A TECHNOLOGY-BASED BORDER SECURITY SYSTEM
ALONG A PORTION OF THE INTERNATIONAL BORDER IN
EASTERN ARIZONA

JULY 17, 2007

7:00 P.M.

HOLIDAY INN PALO VERDE
4550 S. PALO VERDE ROAD
TUCSON, ARIZONA 85714

COPY

PUBLIC COMMENTS REPORTED BY:
FLORENCE PASTEUR, CR# 50300
OLIVIA ARMENTA, CR# 50411
CINDY SHEARMAN, CR# 50718

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JAMES McGAHA

Southern Arizona is one of the premier places in the world for astronomy, and lighting up the border will have a very detrimental effect on astronomy, so the lighting should be considered very carefully. It should be as low a light wattage as possible and certainly shielded and pointed towards the ground as much as possible, and away from the United States. And you can put my name, James McGaha, M-c-G-a-h-a, and I'm the director of the Grasslands Observatory.

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GRETA ANDERSON

I'm Greta Anderson, representing the Center for Biological Diversity in Tucson, and we're pleased that they're following the NEPA process and we'd like to provide as much input on the environmental impacts of the project as possible.

We would remind the border patrol that their job is to recover endangered species, not merely maintain the status quo, meaning that they should assess the project in terms of the long-term consequences and how it might inhibit species coming back into areas.

Also, there's quite a bit of road construction that they're talking about, and roads relate strongly to the spread of invasive species which relate strongly to the spread of wildfire in our deserts, which is a huge issue. We encourage them to look at the cumulative effects of additional roads.

Changes to hydrology will be really important throughout the area and hydrologic change, where they're talking about adding roadways in riparian areas and washes, that could really change the whole watershed system. And my postal mailing address is P.O. Box 710, Tucson, 85702.

1 ANONYMOUS COMMENTATOR

2 No matter what we, as citizens, have
3 responded to so far, you always say that there's no
4 impact, so it's a game you're playing with us and I
5 don't like it. I don't like the fact that I don't
6 count. I don't like the fact that no matter what
7 animal we list on there, you just say there's no
8 impacts.

9 I think putting a wall up is absolutely
10 hostile. I think putting up a tower is hostile. I
11 don't think we need it. We're being hostile enough
12 with the rest of the world. I think we should stop
13 now, take our resources, and try and make up for
14 all the wrong we've done in the past five years and
15 figure out how to get along with the rest of the
16 world instead of just preemptively striking at
17 everything.

18 Okay. If we're going to develop our
19 infrastructure, let's do it right. Let's put it
20 into bridges, let's put it into connections with
21 the rest of the world, as opposed to barriers to
22 the rest of the world.

23 I don't think it's right that our
24 government is auctioning off the different parts of
25 the electromagnetic spectrum and are going to use

1 it now to impact biological life forms in ways that
2 they haven't even bothered to study about yet.
3 They're just going to impact them with this
4 electromagnetic game they're going to play out
5 there next and call it an intelligent call, when
6 it's not.

7 I mean, from what we understand, they've
8 already, down in Arivaca, they basically just cut
9 off everybody's computer service by whatever
10 electromagnetics they decided -- whatever part of
11 the spectrum they decided to consume down there.

12 So they're just going to start making these
13 arbitrary decisions on where they're going to fill
14 up the electromagnetic spectrum with their needs
15 and they're hostile and they're potentially
16 dangerous to us. I don't appreciate it when they
17 haven't even done the science to realize the impact
18 on what they're projecting outward.

19 Okay. And I know it may sound kooky, but
20 it's not. They've already said their equipment
21 isn't working down there. Well, they're also
22 canceling out their computer access, people's Wifi
23 down there. What else haven't they thought about
24 as they continue on the way?

25 Another big point I want to make is that if

1 we're going to have a secure nation, I don't think
 2 we should have a contract with another country to
 3 do our secure border technology design, you know,
 4 to pick another country's designs and use them;
 5 that doesn't make me feel secure. It may make that
 6 other country feel secure. I understand they're
 7 selling the same secure systems to the Canadians,
 8 to the Australians, et cetera. Who is in charge of
 9 that software of the command post? Who's making
 10 the designs for it and who's putting back gates
 11 into it, okay? If that technology is not designed
 12 in the US, then I question where the security is of
 13 it, where is the security of anything?

14 If it's a design made in another country,
 15 as they're saying in the paper, Boeing is
 16 collaborating with Elbit, E-l-b-i-t, a subsidiary
 17 of Elbit, they're an Israeli company, I'm not
 18 secure with them and the way they've conducted
 19 themselves in the world turning around and telling
 20 us how we're supposed to be secure, okay? I think
 21 it's wrong. Thank you.

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