

JULY 2003

FINAL REPORT

ENVIRONMENTAL IMPACT STATEMENT
FOR THE COMPLETION OF THE
14-MILE BORDER INFRASTRUCTURE SYSTEM
SAN DIEGO, CALIFORNIA

VOLUME I

U.S. DEPARTMENT OF HOMELAND SECURITY
WASHINGTON, D.C.

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EXECUTIVE SUMMARY

PROPOSED COMPLETION OF A 14-MILE BORDER INFRASTRUCTURE SYSTEM SAN DIEGO COUNTY, CALIFORNIA

Draft

Final

U.S. Immigration and Naturalization Service
Headquarters, Facilities and Engineering Division
425 I Street, NW (Geraldine Pontius)
Washington, DC 20536

Type of Action: Administrative
 Legislative

PROPOSED ACTION

This Environmental Impact Statement (EIS) analyzes the potential for significant adverse or beneficial environmental impacts of the Immigration and Naturalization Service's (INS) proposed action and alternatives. The EIS was prepared in accordance with provisions of the National Environmental Policy Act (NEPA), the President's Council on Environmental Quality (CEQ), Regulations for Implementing NEPA (40 CFR, part 1500), and INS's Regulations for Implementing NEPA (28 CFR, part 61). The proposed action is located along the international border between the United States and Mexico in San Diego County, California.

The INS proposes to complete a Border Infrastructure System that starts at the Pacific Ocean and extends approximately 14 miles inland, to a point east of Tin Can Hill, near the foothills of the San Ysidro Mountains. The project corridor has been subdivided into six areas to facilitate discussions and project management. Approximately nine miles in Areas II, III, and IV of the infrastructure system have been completed or are currently under construction. These activities were completed as pilot projects for the infrastructure system and were addressed in previous NEPA documents. This EIS, therefore, addresses the completion of the infrastructure system in Areas I, V and VI.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The proposed Border Infrastructure System is required for compliance with Title I, Subtitle A, Section 102, of the *Illegal Immigration Reform and Immigrant Responsibility Act* (IIRIRA) of 1996. Subsection B (*Construction of Fencing and Road Improvements in the Border Area Near San Diego, California*) specifically states the Attorney General shall provide "...for the construction along the 14 miles of the international land border of the U.S., starting at the Pacific Ocean and extending eastward, of second and third fences, in addition to the existing reinforced fence, and for roads between the fences."

Furthermore, there is a need to halt the continual influx of illegal aliens and smugglers into the San Diego area by creating a permanent deterrence through a certainty of

detection and apprehension. The objective of the proposed action is to provide for integration of infrastructure and technology into the current strategy for border control. The proposed action would develop a safe and effective enforcement zone near the border that would eliminate illegal foot and vehicle traffic within the 14-mile corridor and thus maximize the proactive, deterrent enforcement capability of the United States Border Patrol (USBP), while gaining the necessary and desired permanent status of deterrence. The current road conditions and operational constraints increase risks to the health and safety of USBP agents. Agents and their vehicles are routinely subjected to rocks and other objects being thrown at them. Windshield replacement costs for the three border stations (Imperial Beach, Brown Field and Chula Vista) have routinely exceeded several thousands of dollars each year, due to rocks and other objects thrown from the Mexican side of the border. Furthermore, steep, unimproved roads have resulted in numerous injuries and even fatalities. During the last two years alone, three San Diego Sector agents and one maintenance worker have lost their lives in vehicle accidents caused by unsafe road conditions, including the Smuggler's Gulch area.

Another need is to reduce the current enforcement footprint that will ensure a more efficient and effective control of the border region. Historically, the USBP San Diego Sector, was required to expand their apprehension and enforcement actions up to five miles north of the border. These actions necessitated incursions into residential areas, commercial and industrial developments, parks and open areas, with potential effects on soils, vegetation, cultural resources, and other sensitive resources. The Border Infrastructure System, once complete, would significantly reduce the enforcement actions north of the system and the concomitant effects to the human and natural environments. The purpose, therefore, of the Border Infrastructure System is to lessen the overall impact of the enforcement footprint, maximize the deterrent enforcement profile, and safeguard local neighborhoods, businesses, and environmental resources.

ALTERNATIVES

Three separate alternatives to complete the infrastructure system in Areas I, V and VI are considered in detail in the Final EIS: the No Action Alternative; the Tactically Optimum Alternative (representing the agency's preferences absent any consideration of environmental impacts); and the Multi-tiered Fence Alternative (which is the Proposed Action). Multiple combinations of environmental design features and alignments have been evaluated as part of the assessment of the Proposed Action. Other alternatives were considered throughout the development of the Draft EIS, but have been eliminated from further consideration as operationally non-effective, environmentally unpalatable, and/or non-responsive relative to the spirit and intent of IIRIRA. Each alternative carried forward for analysis is briefly described in the following paragraphs.

No Action Alternative

The No Action Alternative consists of the completion of all on-going construction projects with no additional project features in Areas I, V, and VI (in total or in combination.). This alternative would provide completion of the Border Infrastructure System in Areas II, III, and IV, which extend from the International Boundary and Water Commission's (IBWC) wastewater treatment plant to Johnny Wolf Creek. For each location in Areas I, V, and VI, where the No Action Alternative is evaluated, the project corridor would have only the primary fence (installed in 1993) and the existing scattered Integrated Surveillance and Intelligence System (ISIS) components (e.g., lights, sensors, cameras) that have been installed in or near high traffic areas.

Tactically Optimum Alternative

The Tactically Optimum Alternative would involve completion of the Border Infrastructure System that optimizes tactical considerations, including line-of-sight, in such a manner that USBP agents consistently occupy a strategically superior position. These considerations dictate a project alignment that is fairly level and is maintained within a virtually straight and parallel corridor. This alternative would require significant cut and fill activities to minimize hills and canyons. This alternative would provide an enforcement zone that is generally 200 to 250 feet wide between the primary and secondary fences, with a larger project footprint determined by subsequent engineering requirements.

Multi-tiered Fence Alternative (Proposed Action)

The third alternative is the Proposed Action, which involves completing the multi-tiered 14-mile Border Infrastructure System project. Within the Proposed Action Alternative, a number of different designs and alternate alignments were evaluated in an attempt to identify the least environmentally damaging alternative that could satisfy the purpose and need and comply with IIRIRA. These designs and alignments are summarized in Table ES-1 below.

**Table ES-1.
Alternate Design Measures Considered for the Proposed Action, by Area**

<u>Design Measure</u>	<u>Area I</u>	<u>Area V</u>	<u>Area VI</u>
Alternate Alignments (number considered)	4	5	5
Road Designs & Construction Methods	Yes	Yes	Yes
Drainage Crossing Designs	No	Yes	Yes
Fence Designs	Yes	No	Yes
Mitigation/Compensation	Yes	Yes	Yes

The Proposed Action would include the existing primary fence, a secondary fence, the patrol and maintenance roads, lights, ISIS components and a third fence along the entire 14-mile corridor. Within each of the remaining areas (i.e., Areas I, V, and VI), various alternate design measures have been formulated and assessed to identify the least environmentally damaging design (i.e., alignment, construction method, road or fence type) that could be implemented without jeopardizing the effectiveness of the infrastructure components or hindering the operations of the USBP. The minimum width of the corridor created between the primary and secondary fences would typically be 130 feet, and the distance between the secondary and tertiary fence would typically be 20 to 24 feet. This distance would vary depending upon large cut-and-fill activities. Cut activities would occur on higher hills, such as Tin Can Hill and the mesas on either side of Smuggler's Gulch. The materials obtained from these cut areas would be used as fill in the lower elevations, principally Smuggler's Gulch, Goat Canyon and to provide an entrance and exit ramp onto Lichty Mesa. These cut-and-fill activities are required to provide a road surface that does not exceed a 10 percent vertical grade and to avoid the need to purchase construction materials, thus minimizing construction costs. In the major cut- and-fill areas, the third fence would probably be installed at the northern edge of the cut/fill slope.

Alternatives Eliminated From Further Consideration

Several alternatives and alternate designs and alignments were evaluated but eliminated from further consideration due to operational constraints that did not satisfy the purpose and need, potentially significant environmental effects, and/or non-compliance with IIRIRA. These alternatives included fortification of a primary fence in one or all three of the remaining project areas, installation of a fence only with no patrol or maintenance road, a secondary fence only that would have consisted of the same designs and alignment as the Proposed Action (except that it would not incorporate the tertiary fence), various road and bridge designs (particularly in the Smuggler's Gulch area), alternate alignments in the Bunker Hill area, and other alignments of the tertiary fence. A brief description of these alternatives and the reasons for their elimination are briefly discussed below:

- Primary Fences. The south face of any primary fence on the border is completely unprotected and provides limitless opportunity for persons on the south side of the fence to defeat the barrier. Once the primary fence is breached, there would be no barrier to impede further northward movement and the USBP agents would be forced to follow illegal entrants in an attempt to apprehend them. Therefore, the enforcement response required for a primary fence only (in any area) would be identical to that currently employed by the USBP. This alternative would not be in compliance with IIRIRA.
- Fence Only Alternative. A fence without an all-weather patrol road cannot be maintained or defended. Any such barrier would become a *de facto* primary fence located inside U.S. territory and the operational methods would be the same as it currently exists. Therefore, construction of the fence platform without a patrol road cannot meet project objectives. IIRIRA requires a combination of fences, roads and other barriers; so this alternative, too, would not be in compliance with IIRIRA.
- Secondary Fence Only. This alternative would consist of the same designs and alignment as the Proposed Action, except that it would not incorporate the tertiary fence. The impacts associated with this alternative would be the same as that for the proposed action. This alternative was eliminated after release of the Draft EIS since it does not strictly comply with IIRIRA.
- Bridge Designs. A bridge would not provide a barrier to northward illegal traffic since undocumented aliens (UDAs) and smugglers could easily drive, walk or ride under the bridge. As such it would not provide the barrier mandated by IIRIRA. In addition, the disturbance footprint for a bridge design across Smuggler's Gulch would be about 83 acres, which is comparable to the disturbance for the proposed embankment alternative. The estimated cost of the bridge-only option for Smuggler's Gulch was estimated to be \$16 to \$27 million.
- Switchbacks. A multiple switchback design is extremely poor from an enforcement/functional standpoint due to the poor sight alignments associated with the switchbacks. In order to maintain a safe slope of 10 percent, the road on either side of Smuggler's Gulch would have to provide numerous switchbacks. Even at a 10 percent grade, these roads would be considered steep, and higher vehicle speeds would be prohibited for safety reasons. The curves (switchback)

would require that vehicles slow to less than 10 miles per hour and the curves would prohibit a straight line of visibility. Furthermore, construction of the multiple switchbacks would require a construction and subsequent footprint of about 83 acres, which is not much less than the preferred alternative. Therefore, due to the increased response time, additional maintenance required for roads and vehicles, risks to driver safety, and a similar disturbance footprint, this alternative was eliminated. A single switchback was also evaluated and eliminated due to similar operational constraints and ground disturbances that exceeded the proposed action.

- Third Fence Alignments. Two other alignments for the third fence were considered at various distances north of the proposed second fence, varying from 20 feet to 2,500 feet north of the secondary fence. Approximately 1,293 acres of land between the existing primary fence and the third fence would have to be purchased and/or long-term leases obtained. While these alignments would satisfy the requirements of IIRIRA and the operational needs of the USBP, they were eliminated due to the large enforcement footprint that would result in unnecessary environmental impacts as well as substantial cost increases.

- Bunker Hill Alignments. The option of placing the fence and road platform around Bunker Hill and combining it with the proposed new Border Field State Park road was considered. Because the USBP felt this area—and only this area—could be effectively controlled by traditional means such as foot and horse patrol (after proposed improvements are completed), the USBP conceded the Border Infrastructure System in this specific location would not substantially jeopardize the integrity of the overall system. These decisions were predicated upon the nearly vertical slope on the Mexican side of Bunker Hill, the lack of dense vegetation (and thus concealment opportunities) on the eastern slope of Bunker Hill, the sedimentation ponds proposed by other agencies in Goat Canyon that would serve as a physical barrier, and the proposed improvement (paving) of the access road to the top of Bunker Hill. Thus, this alignment was eliminated from further consideration.

IMPACTS OF THE PROPOSED ACTION

Environmental

This EIS presents information on the existing conditions of the proposed project areas and analyzes potential impacts to the environment that could occur as a result of the proposed construction activities. Resources that would not be affected by the Proposed Action are not fully analyzed in this EIS. Background information on the existing environmental resources documented in this report was utilized, where appropriate, in developing this EIS and to provide the reader with an understanding of the region's environment.

Implementation of the Proposed Action Alternative and the preferred alignments would result in about 162 acres being altered, of which about 77 acres is classified as disturbed, developed or ruderal. Much of the remaining acreage is considered to be in degraded states or comprised largely of non-native species. Because of the proximity to developed areas on either side of the border, the proposed project corridor supports limited wildlife populations that would be impeded by the construction of the Border

Infrastructure System. No migratory corridors currently exist because the south side of the border is completely developed.

Indirect benefits to vegetation, wildlife, and several threatened or endangered species would result because of the proposed Border Infrastructure System. However, illegal foot and vehicle traffic, as well as the consequent USBP enforcement actions, would be significantly reduced or eliminated upon completion of the Border Infrastructure System.

No significant impacts to surface or groundwater supplies would occur. Approximately 10.2 acres of wetlands or Waters of the U.S. would be permanently impacted by the construction and operation of the Border Infrastructure System. These losses would be mitigated at a ratio of 1:1 to 3:1, as negotiated during the Section 404/401 permitting process.

Endangered Species

The Proposed Action Alternative would affect three endangered species. The least Bell's vireo and coastal California gnatcatcher would be affected by the removal of currently or historically occupied habitat in Areas V and VI. The least Bell's vireo would also be affected by construction noise, depending upon the season and distances between the birds' territories and construction site. Coastal California gnatcatchers are not as susceptible or sensitive to noise. Furthermore, designated critical habitat for the coastal California gnatcatcher and Quino checkerspot butterfly would be altered in Area I. Of the 35 acres of critical habitat affected, about 8 acres are currently disturbed (bare ground) and provide no primary constituent elements for either species. Primary constituent elements are the various resources required by a particular species and should be present within an area designated as critical habitat in order to ensure the preservation and enhancement of the species population. The remainder of the 37 acres is in a degraded state due to human influences and provides little primary constituent elements for either species. Neither the coastal California gnatcatcher nor the Quino checkerspot butterfly have been recorded within the proposed project footprint in Area I.

Mitigation

Several measures have been proposed by the INS to mitigate or compensate for the anticipated losses to jurisdictional wetlands and habitats occupied by or designated as critical habitat for Federally protected species. The INS would transfer approximately 145 acres of lands owned by the INS to a resource agency(s) or conservation organization, or place the land in perpetual conservation in partial fulfillment of mitigation/compensation for the proposed action. The parcel contains a large vernal pool complex that currently supports San Diego fairy shrimp, Riverside fairy shrimp and San Diego button celery. The INS has already committed to transfer or conserve this land upon the completion of the Border Infrastructure System. Other areas that are required to be purchased in order to construct the Border Infrastructure System, but which will ultimately be situated north of the project footprint, will also be transferred or preserved.

Other mitigation measures also proposed include revegetation of cut/fill slopes, abandonment and revegetation of over 100 miles of patrol roads, restoration of coastal sage scrub and maritime succulent scrub habitats on Spooner's Mesa, restoration and enhancement of coastal salt marshes in the Tijuana estuary, and restoration and enhancement of mulefat scrub and southern willow scrub habitats along the Tijuana

River. The latter three measures would be conducted in concert with the City and County of San Diego's restoration plan for the Tijuana Valley Regional Park.

Economic Effects

Minor direct effects to local economies would be experienced, mostly from the purchase of construction materials and supplies from local sources. No houses or commercial/industrial entities would be displaced. Visitors to the Border Field State Park would be affected by the construction activities. If the preferred alignment were implemented in Area VI, access to Friendship Circle, the first international monument, would be limited. The park would remain open during normal hours of operation. The INS/USBP are currently coordinating with the California Department of Parks and Recreation and California Resources Agency to develop designs and alignments at Border Field State Park that are more aesthetically pleasing.

Indirect benefits to socioeconomic resources would also be realized, primarily from the reduction in illegal aliens and smugglers and concomitant decreases in crime, insurance rates, health care costs, and other associated societal costs. Land values would be expected to rise, as has already been experienced in areas where the Border Infrastructure System has been completed. For example, a new shopping mall was constructed in 2002 west of the San Ysidro POE and multiple warehouse complexes have been constructed on Otay Mesa, immediately adjacent to the Border Infrastructure System. No adverse effects, relative to environmental justice or protection of children, are expected. No housing or business would be displaced and thus no disproportionate impacts to low-income or minority families would occur. Dust would be generated during construction, which could affect Hispanic families on the south side of the border. However, these effects would be temporary and dust suppression measures would be implemented to mitigate these potential effects. Furthermore, fugitive dust along the patrol road would be reduced in the long-term during the construction of all-weather surface roads.

Cultural Resources

Some cultural resources sites would need to be tested to determine their eligibility for inclusion to the National Register of Historic Places. Through testing and excavation/data recovery, as needed, no effect to these historic properties would occur. Significant sites on Lichty and Monument Mesas would be capped to avoid adverse impacts to those resources.

Other Physical Resources

Only one alternate alignment (SG-5) would produce air emissions in excess of the *de minimus* thresholds. Since this alignment is not the preferred alignment, a Federal conformity analysis is not required.

No significant impacts to land use, soils, geology or hazardous waste are expected. No prime farmlands would be impacted by the Proposed Action.

Cumulative Impacts

Completion of the Border Infrastructure System would result in the direct alteration of about 332 acres of open rangeland and park/reserve lands to a border enforcement zone. Of these 332 acres, about 65 percent (216 acres) were previously disturbed and provided little or no biological or aesthetic value. The USBP has other ongoing projects within San Diego County, including new USBP stations and support facilities, road

improvement/construction projects, and installation of remote video surveillance (RVS) facilities. These projects would increase the cumulative effects to varying degrees. USBP stations typically require alteration of 20 to 30 acres, while road improvement projects normally remain with the original road right-of-way. RVS towers can impact up to 2,500 square feet each. Currently, 25 RVS towers are proposed in San Diego County, about 19 of which would be installed within the footprint of the Border Infrastructure System.

Numerous other public and private developments have occurred or are planned in the vicinity of the Border Infrastructure System. The National Oceanic and Atmospheric Administration (NOAA) are planning to construct a sedimentation basin within Goat Canyon to trap sediments that are being transported from Mexico into the Tijuana estuary. This system will impact about 42 acres of habitat, some of which is occupied by protected species. This system would work in concert with the Border Infrastructure System. The California Department of Transportation (CalTrans) has plans to extend State Route 125 south to the border and to create a new Port of Entry (POE) on East Otay Mesa. This improvement would likely induce other commercial and private developments throughout the East Otay Mesa area, causing additional cumulative effects to natural and cultural resources, air quality and water supplies. About 25 additional road projects are currently planned in the area.

Other private residential and commercial developments that are ongoing in the project vicinity include West Otay Mesa, Telegraph Canyon Estates, Otay Ranch and East Otay Mesa. All of these developments, and more, will increase the cumulative adverse effects to the region's natural and human environments.

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