October 2004

REVISED DRAFT

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR OFFICE OF BORDER PATROL OPERATIONAL ACTIVITIES WITHIN THE BORDER AREAS OF THE TUCSON AND YUMA SECTORS IN ARIZONA

DEPARTMENT OF HOMELAND SECURITY
U.S. CUSTOMS AND BORDER PROTECTION
WASHINGTON, D.C.

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FOR
OFFICE OF BORDER PATROL OPERATIONAL ACTIVITIES WITHIN THE BORDER AREAS OF THE TUCSON AND YUMA SECTORS IN ARIZONA

October 2004

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EXECUTIVE SUMMARY

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WITHIN THE BORDER AREAS OF THE
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(X) Draft ( ) Final

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Type of Action: (X) Administrative
( ) Legislative

BACKGROUND:

This revised draft Programmatic Environmental Impact Statement analyzes the potential for significant beneficial or adverse environmental impacts of the Customs and Border Protection (CBP), Office of Border Patrol (BP daily operations within the border regions of the Tucson and Yuma Sectors, Arizona. The original draft Programmatic Environmental Statement was released for public review in November 2002. The original draft Programmatic Environmental Impact Statement included both operations and the types of infrastructure that could be installed along the Arizona border over the next 10 years. The original draft Programmatic Environmental Impact Statement also provided quantification of these infrastructure systems. These infrastructure systems were merely a list of items that would be desired, exclusive of any planning analysis or environmental impacts. The purpose of evaluating both operation and infrastructure in the original draft Programmatic Environmental Impact Statement was to provide a cumulative analysis of the conceptual infrastructure plans. However, an evaluation of the public comments on the original draft Programmatic Environmental Impact Statement indicated that a more focused analysis of the effects of the expansion of BP operations to achieve the desired objectives was necessary. Therefore, the CBP has decided to issue a revised draft Programmatic Environmental Impact Statement focusing on the potential adverse and beneficial effects of expanding daily BP operations, expansion of technology-based systems, and the completion and maintenance of approved infrastructure. This revised draft Programmatic Environmental Impact Statement also analyzes the potential effects of deploying the Arizona Border Control Initiative (ABCI) that was announced in March 2004.

The revised draft Programmatic Environmental Impact Statement was prepared in accordance with the provisions of the National Environmental Policy Act (NEPA), the President's Council on

Environmental Quality (CEQ) regulations for implementing NEPA, and the legacy Immigration and Naturalization Service)'s NEPA regulations (28 C.F.R. Part 61, Appendix C) which the BP currently uses for NEPA compliance. The Proposed Action is located along the international border between the United States and Mexico in Cochise, Santa Cruz, Pima, and Yuma counties in Arizona.

The scope of this revised draft Programmatic Environmental Impact Statement covers the daily operations (*i.e.*, additional BP personnel, support vehicles, air support, patrols, off-road operations, sensors, portable lighting, tactical and permanent checkpoints, temporary camp details, and remote video surveillance) within the Arizona border areas of the Tucson and Yuma Sectors. The revised draft Programmatic Environmental Impact Statement describes the purpose and need, alternatives considered, existing conditions of the human and natural environment, the anticipated impacts that would result from implementation of the various alternatives, any design measures needed to reduce potential impacts, and cumulative impacts for the study area.

PURPOSE AND NEED FOR THE PROPOSED ACTION:

The border area in the BP's Tucson and Yuma Sectors extends approximately 377 miles along the US-Mexico border. BP agents in the Tucson and Yuma Sectors apprehended approximately 402,000 illegal entrants (IEs) and seized approximately 382,802 pounds of drugs during Fiscal Year (FY) 2003 . These large numbers of IEs and volumes of drugs compromise the security of the US and can only be addressed with a significant increase in BP operational activity and various types of infrastructure needed to support these operations. Just increasing the number of BP agents would not create a permanent deterrent through a certainty of detection and apprehension. Infrastructure and technology-based systems serve as a "force multiplier" when used in conjunction with manpower.

The purpose and need for the expansion of operations (including the ABCI), technology-based systems, and completion of approved infrastructure proposed by the BP is to:

(1) Satisfy the CBP and BP mission to prevent the entry of terrorists and their weapons and to enforce the laws that protect America's homeland by the detection, interdiction, and apprehension of those who attempt to illegally enter or smuggle any person or contraband across the US sovereign borders;
(2) Provide a safe, effective, and efficient environment for BP agents in which to accomplish the BP mission;
(3) Enhance the effectiveness of the apprehension activities through the combined use of manpower, technology, and infrastructure and to increase deterrence;
(4) Create a permanent deterrence through a certainty of detection and apprehension;
(5) Create a limited zone of certain apprehension in proximity to the US-Mexico border;
(6) Prevent the loss of life of IEs traversing the desert; and
Protect sensitive resources, public and private lands, and US residents from IEs, other illegal activities, and terrorists.

ALTERNATIVES:

Four separate alternatives were considered in the revised draft Programmatic Environmental Impact Statement . Three of the four alternatives could satisfy all or portions of the purpose and need.

Alternative 1. Expand Operations, Technology-based Systems, and Complete Approved Infrastructure

Alternative 1 (the preferred alternative) would allow the CBP and BP to expand its existing operations/activities (including technology-based systems) and complete approved infrastructure projects (*i.e.*, border road improvements, border barriers, border fences, stadium style lighting). The term "approved" as used in this document refers to projects that have been analyzed in previous NEPA documents and decision documents (*i.e.*, Findings of No Significant Impact [FONSI] or Records of Decision [ROD]) that have been signed. Enhancements under the Arizona Border Control Initiative (ABCI) are included as part of the preferred alternative. Alternative 1 includes the expansion of the following BP operational activities and technology-based systems, including but not limited to:

- Integrated Surveillance Intelligence Systems (ISIS);
- Support vehicles;
- Air support;
- Portable lighting;
- Checkpoints;
- Patrols;
- Off-road operations;
- Drag road preparation for tracking and sign cutting;
- Rescue beacons;
- Temporary camp details; and
- Additional BP personnel

Alternative 2. Expand Technology-Based Systems and Complete Approved Infrastructure

Alternative 2 promotes the expansion of technology-based systems and the completion and maintenance of currently approved infrastructure while keeping manpower and activities at current levels. Technology-based systems would expand the use of RVS sites, operational repeaters, and ground sensors positioned at strategic locations along the border. Alternative 2 would require the completion of approved infrastructure projects. Implementation of this alternative would be designed to keep daily operations conducted by BP agents at current levels, since much of the border would be monitored remotely. Alternative 2 includes the expansion of technology-based systems, including but not limited to:

- ISIS components
- Air support

Alternative 3. Expand Existing Operations and Technology-based Systems

Alternative 3 strictly relies on the employment and expansion of existing operations/activities (including technology-based systems). It does not include the completion of approved infrastructure projects that have been evaluated through the NEPA process. The NEPA process is defined by the CEQ as fulfilling all measures necessary for compliance with the requirements of Section 2 and Title I of NEPA (40 C.F.R. §1508.21. Expanding all operations/activities including technology-based systems would rely almost solely on detection

of IEs as a means to effectively enhance deterrence and apprehension. An invisible technological barrier would be the primary deterrence to illegal entry. Alternative 3 includes the expansion of the following CBP and BP operational activities and technology-based systems, including but not limited to:

- ISIS components;
- Support vehicles;
- Air support;
- Portable lighting;
- Checkpoints;
- Patrols;
- Off-road operations;
- Drag road preparation;
- Rescue beacons;
- Temporary camp details; and
- Additional BP personnel

Alternative 4. No Action Alternative

The No Action Alternative consists of continuing the operations at the current level. It would not include the expansion of technology-based systems or the completion of on-going and approved infrastructure projects. Although this alternative would reduce unavoidable impacts and irretrievable committments of resources, it greatly hinders the CBP and BP mission to gain and maintain control of the border. The No Action Alternative may also have a greater indirect impact since the flow of IEs would likely increase, leading to subsequent environmental damage that may be significantly greater than the other alternatives. Past experience has demonstrated that illegal traffic may shift to areas where there is limited BP operations and infrastructure.

ENVIRONMENTAL CONSEQUENCES:

Direct effects are caused by the proposed action and occur at the same time and place. Indirect effects are caused by the action and occur later in time or removed in distance but are still reasonably foreseeable. A cumulative impact is an impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.

Alternative 1 Expand Operations, Technology-based Systems, and Complete Approved Infrastructure (preferred alternative):

This alternative would increase operational activities (*i.e.*, increases in manpower for patrols, additional tactical checkpoints, and continued support from existing programs such as Operation Skywatch[1], Operation Desert Grip[2], and the ABCI [3]). In combination with expanding operations and completing approved infrastructure projects, expanded employment of technology–based systems such as the approved RVS would further enhance detection and apprehension of IEs in

[1]Operation Skywatch is a special operation that involves the combined effort of Tucson and Yuma Sectors to increase aerial reconnaissance in the west desert of Arizona during the summer months (INS 2002b).

[2]Operation Desert Grip is a special operation that includes the establishment of temporary camp details in the west desert of Arizona, thus enabling the BP to have a 24-hour, 7-day presence in this region. (DHS 2003b)

[3] ABC Initiative is a special operation that involves the commitment of increased manpower and resources to the Arizona BP Sectors to achieve a safer and more secure southwest border.

proximity to the US-Mexico border. The anticipated individual and cumulative direct and indirect effects for Alternative 1 (preferred action) are:

- Land use would be directly affected by the completion of approved infrastructure and expansion of technology-based systems under Alternative 1;
- Approximately 587[4] acres of soils and vegetation would be directly impacted by construction activities;
- Approximately 430 acres of vegetation would be impacted as a result of increased illumination from completion of approved infrastructure projects;
- Approximately 1,017 acres (587 acres plus 430 acres of illumination effects) of wildlife habitat would be potentially impacted;
- Potential adverse impacts to groundwater supply in deficit/overdraft watersheds, such as the Upper San Pedro Basin, if water withdrawals associated with BP actions increase the water deficit in those watersheds;
- Potential beneficial and adverse effects on those areas valued for their aesthetic qualities; aesthetics are based on individual perceptions and are difficult to quantify at a programmatic level;
- Noise levels would temporarily increase adjacent to construction areas; however, permanent lights would reduce or eliminate the use of portable lights, thus reducing noise levels form diesel or gas-powered generators; however, noise levels could increase;
- Adverse impacts to air quality as a result of expanding operations; and
- Potential impacts to threatened and endangered species, if activities are expanded within threatened and endangered species habitat as a result of increased air operations and vehicles.

Impacts to vegetation, soils, wildlife, and air quality would increase substantially with increased operations such as off-road enforcement activities, increased road patrols, and increased air patrols. These impacts are unquantifiable at this time because it is unknown when the actions could occur and the extent of the action. It can be assumed that impacts could increase by approximately 10 percent. BP agents patrol on established roads to the extent practicable. Off-road activities occur only when a BP agent detects signs that IEs are traveling cross-country. The BP agent tracks signs for the purpose of law enforcement and/or saving human life. When BP agents make the determination to track signs off-road, they follow the tracks of the IEs; therefore, BP agents are generally traveling within a previously disturbed area and are not creating new trails.

Potential impacts to threatened or endangered species, cultural resources sites, wetlands and other sensitive resources would be avoided to the extent practicable, as they are now. Where impacts are unavoidable, mitigation measures to reduce or compensate for losses would be implemented and coordinated through the appropriate Federal and state resource agencies. Implementation of best management practices (BMPs) and stormwater pollution prevention plans (SWPPP) would be required, as appropriate, for construction activities to reduce any potential effects to soils, soil erosion, and water quality.

Implementation of this alternative would also have a beneficial effect on previously disturbed and degraded land that contains vegetation, wildlife, and numerous threatened and endangered

[4] Impacts were derived from Table 4-1 and Table 4-2 of the revised draft PEIS.

species north of the border, through the long-term reduction of illegal foot and vehicle traffic and consequent BP enforcement activities.

Alternative 2 Expand Technology-Based Systems and Approved Infrastructure:
While an increase in the technology-based systems would enhance the detection abilities of the BP, it would do little to provide the level of deterrence provided by daily and existing operational activities. That is, cameras and sensors would aid agents in the active pursuit of IEs, but they would not ensure apprehensions. Traditional patrols and aerial support would still be required to pursue and apprehend IEs that breach the border. This alternative would still require BP agents to deploy to remote areas to apprehend IEs. This alternative would have less direct effects to the region's natural environment than Alternative 1 because manpower and activities would not be increased; however, indirect effects may be greater because increased IE foot and vehicle traffic might require responsive patrol activity. Any beneficial effects to the environment that had resulted from on-going BP operations may be diminished under this alternative. The anticipated individual and cumulative direct and indirect effects for Alternative 2 are:

- Land use would be directly affected by the completion of approved infrastructure and expansion of technology-based systems;
- Approximately 587 acres of soils and vegetation would be directly impacted by construction activities;
- Approximately 334 acres of vegetation would be impacted as a result of increased illumination from completion of approved infrastructure projects;
- Approximately 921 acres (587 acres plus 334 acres of illumination effects) of wildlife habitat would be potentially impacted;
- Potential adverse impacts to groundwater supply in deficit/overdrawn watersheds, such as the Upper San Pedro Basin, if water withdrawals associated with BP actions increase the water deficit in those watersheds;
- Potential beneficial and adverse effects on those areas valued for their aesthetic qualities; aesthetics are based on individual perceptions and may be difficult to quantify at a programmatic level;
- Noise levels would temporarily increase adjacent to construction areas, however, permanent lights would potentially reduce the use of portable lights, thus reducing noise levels from diesel or gas fired generators;
- Temporary impacts to air quality; and
- Potential indirect effects on threatened and endangered species if activities are expanded within threatened and endangered species habitat.

Unavoidable impacts to endangered species, cultural resources sites, wetlands, and sensitive resources would be mitigated to compensate for these losses. BMPs and SWPPPs would be implemented for all construction projects to reduce potential impacts to soils, soil erosion, and water quality.

Alternative 3 Expand Existing Operations and Technology-based Systems:
This alternative would increase operational activities (*i.e.*, increases in manpower for patrols, additional tactical checkpoints, and continued support from existing programs such as Operation Skywatch, Operation Desert Grip, and the ABCI). In combination with expanding operations, expanded employment of technology–based systems such as the approved RVS and portable lighting would further enhance detection. In areas or instances where there is adequate BP manpower to respond immediately when IEs are detected, this alternative would enhance deterrence. However, at the present level of physical infrastructure on the border and without

construction of any of the currently approved infrastructure projects, the response time of BP agents would be inadequate to gain and maintain control of the border region beyond current levels.
Even with an increase in manpower and ability to detect breaches in the border, agent response times would be further diminished without adequate access to remote areas. Reduced times would not be adequate to effectively apprehend IEs or rescue distressed individuals within proximity to the border. The BP agents would consistently be required to either pursue IEs across sensitive habitat or be forced to wait until they reveal their location or come in contact with checkpoints. This alternative would not effectively limit the trampling of vegetation by IEs, thus causing natural resource damage once they breach the US-Mexico border. Alternative 3 would have fewer direct impacts to the region's natural environment than Alternative 1 because currently approved infrastructure would not be completed; however, indirect impacts may be greater because increased IE foot and vehicle traffic might require responsive patrol activity. The anticipated individual and cumulative direct and indirect effects for Alternative 3 are:

- Land use would not be affected by implementation of Alternative 3;
- Approximately 2 acres of soils, vegetation, and wildlife habitat would be directly impacted;
- Approximately 98 acres (2 acres plus 96 acres from portable illumination effects) of wildlife habitat would be potentially impacted;
- Potential adverse impacts to groundwater supply in deficit/overdrawn watersheds, such as the Upper San Pedro Basin, if expanded operations increase the water deficit in those watersheds;
- Noise levels would temporarily increase adjacent to construction areas;
- Potential beneficial and adverse effects on those areas valued for their aesthetic qualities; aesthetics are based on individual perceptions and may be difficult to quantify;
- Potential indirect effects on threatened and endangered species because apprehensions would occur away from the border in potential threatened and endangered species habitat;
- Air quality would be impacted as a result of increased patrols on unimproved roads; and
- Potential indirect impacts to soils, vegetation, and wildlife from illegal traffic would likely increase because apprehension takes place over a wider area and is not limited to a corridor near the border.

Mitigation would be provided for unavoidable impacts to resources as previously described. Some potential mitigation measures and environmental design features are presented in the following section.

A summary matrix that illustrates whether each of the alternatives satisfies the stated purpose and need is presented in Table 1. A summary of the environmental impacts anticipated as a result of the viable alternatives, as compared to the No Action Alternative is presented in Table 2.

MITIGATION:

Several measures have been proposed by the CBP and BP to mitigate or compensate for potential impacts to vegetation, wildlife, air quality, and water quality as a result of the preferred alternative.

Table 1. Summary Matrix for Alternatives Considered in the Programmatic Environmental Impact Statement

Project Purpose and Need	Alternatives			
	Alt 1	Alt 2	Alt 3	No Action
Enhance the BP mission to prevent the entry of terrorists and their weapons and to enforce the laws that protect the US homeland by the detection, interdiction, and apprehension of those who attempt to illegally enter or smuggle any person or contraband across the sovereign borders of the US	Yes	Yes	No	No
Provides a safe, effective, and efficient environment for BP Agents in which to accomplish the BP mission	Yes	Yes	No	No
Enhances the effectiveness of the apprehension activities through the combined use of manpower, technology, and infrastructure and to increase deterrence	Yes	Partially	Partially	No
Increases deterrence through enhanced detection and apprehension	Yes	Partially	Partially	No
Creates a limited zone of certain apprehension in proximity to the US-Mexico border	Partially	Partially	Partially	No
Prevents the loss of life of IEs traversing the desert	Yes	No	Partially	No
Protects sensitive resources, public and private lands, and US residents from IEs, illegal activities, and terrorists	Yes	Partially	Partially	No

Alternative 1. Expand operations, technology-based systems, and and approved infrastructure (Preferred Alternative)
Alternative 2. Expand technology-based systems and approved infrastructure
Alternative 3. Expand operations and technology-based systems
No Action Maintain all operations, technology-based systems and infrastructure at current levels

Table 2. Summary Matrix of Potential Impacts by Alternative[1]

Natural and Cultural Resources									
Alternatives	**Land Use**	**Soils**	**Prime Farmland**	**Water Supply and Quality**	**Air Quality**	**Noise**	**Aesthetics**	**Socio-economics**	**Environmental Justice**
No Action	No additional direct effect to land use.	No additional direct effects; indirect effects (*e.g.* soil disturbance and erosion) from increased illegal off-road traffic.	No additional direct impacts would occur. However, indirect impacts from illegal traffic would continue and likely increase.	No additional direct impacts.	No direct impacts.	Minor indirect effects from BP vehicles in pursuit of IEs.	No additional direct effects; indirect effects from increased environmental damage from illegal traffic.	No additional direct impacts; indirect adverse effects to residential areas, recreation areas, and commercial developments associated with increased illegal activity. Likely increase in IE loss of life.	No impacts.
Alternative 1. Expand Operations, Technology Based Systems, and Approved Infrastructure	Additional permanent conversion of 587 acres from potential commercial developments and open lands to border infrastructure, technology-based systems, and operations. Expanded operations would increase potential impacts by approximately 10% over existing levels.	Additional 587 acres of soil disturbed as a result of the expansion of infrastructure, operations, and technology-based systems and an additional 10% over existing levels of potential disturbance due to expanded operations.	The expansion of operations would increase the potential for additional impacts. Adverse impacts would be short-term; however, long-term beneficial impacts would be expected as IE activities are deterred by expanded BP actions.	Some temporary impacts to water quality in ephemeral streams during construction; would be minimized through BMPs; all unavoidable impacts to wetlands/ other waters and groundwater supplies would be quantified, permitted, & mitigated in site-specific NEPA documents.	Insignificant emissions; below *de minimus* thresholds, if projects are conducted in phases with implementation of environmental design measures.	Additional noise from expanded operations including increased patrol vehicles (ATVs, trucks, and aircraft) as well as short-term construction noise and noise from vehicles and portable light generators could impact visitors to recreation areas; adjacent residential areas.	Potential beneficial and adverse effects on those areas valued for their aesthetic qualities (*e.g.*, Wilderness Areas, National Parks, Wildlife Refuges, etc.)	No relocation of houses or commercial facilities; some minor benefits due to purchase of materials from local suppliers; indirect beneficial effects to land values would occur by stabilization of border. Some effects to tax base if landownership is transferred to DHS. Potential decrease in IE loss of life by increased deterrence, better detection, and confined crossing sites.	No impacts.
Alternative 2. Expand Technology-Based Systems and Approved Infrastructure	Additional permanent conversion of 587 acres from potential commercial developments and open lands to border infrastructure and technology-based systems.	Additional permanent disturbance to soils estimated at 587 acres; no prime farmlands impacted.	No additional direct impacts are expected. However, indirect adverse effects from increased illegal traffic would likely occur.	Some temporary impacts to water quality in ephemeral streams during construction; would be minimized through BMPs; all unavoidable impacts to wetlands/ other waters would be quantified, permitted, & mitigated in site-specific NEPA documents.	Insignificant emissions; below *de minimus* thresholds.	Temporary construction noise would return to ambient conditions upon completion of projects	Potential beneficial and adverse effects on those areas valued for their aesthetic qualities (*e.g.*, Wilderness Areas, National Parks, Wildlife Refuges, etc.)	No displacements of houses or commercial facilities; some minor benefits due to purchase of materials from local suppliers; indirect beneficial effects to land values would occur. No impact to current level of IE loss of life.	No impacts.
Alternative 3. Expand Operations and Technology-Based Systems	Additional permanent conversion of 2 acres as a result of the expansion of operations and technology-based systems. Impacts would be expected to increase by approximately 10% as a result of increased operations.	Additional disturbance to soil estimated at 2 acres and an additional 10% over existing levels of potential disturbance for expanded operations; no impact to prime farmlands.	Effects would be similar to those described for Alternative 1.	Very minimal chance of impact to water quality in ephemeral streams during expanded operations use.	Insignificant emissions; below *de minimus* thresholds.	Additional noise from expanded operationsincluding increased patrol vehicles (ATVs, trucks, and aircraft).	Potential beneficial and adverse effects on those areas valued for their aesthetic qualities (*e.g.*, Wilderness Areas, National Parks, Wildlife Refuges, etc.)	No displacements of houses or commercial facilities; some minor benefits due to purchase of materials from local suppliers. No impact to current level of IE loss of life.	No impacts.

Table 2, continued

Natural and Cultural Resources							
Alternatives	**Vegetation Communities**	**Wildlife**	**Fisheries**	**Unique and Sensitive Areas**	**Threatened and Endangered Species**	**Hazardous Waste**	**Cultural Resources**
No Action	No additional direct impacts; potential significant indirect effects from increased illegal traffic.	No additional direct effects; indirect effects to wildlife in all areas due to continued and increased IE traffic.	No impacts.	No additional direct impacts to sensitive areas.	No impacts.	No impacts.	No additional direct effects would occur to historic properties or cultural sites; indirect impacts would continue on potentially eligible sites from illegal and BP traffic as well as intentional looting.
Alternative 1. Expand Operations, Technology-Based Systems, and Approved Infrastructure	Additional 587 acres of vegetation cleared as a result of the expansion of proposed BP border infrastructure and technology-based systems construction areas, and an additional 10% over existing levels of potential disturbance for expanded operations. An additional 430 acres would be impacted by illumination. Extant disturbed habitat (Sonoran desert scrublands) would be most impacted.	Additional 587 acres removed as potential habitat due to the expansion of approved infrastructure and technology-based systems, and an additional 10% over existing levels of potential disturbance for expanded operations. Additional 430 acres of indirect impacts (increased lighting). Impacts to neotropical migrants and other wildlife from noise avoided by minimizing construction during nesting seasons.	No impacts.	Approximately 4.8 acres within seven different Unique & Sensitive Areas would be permanently removed and an additional 10% over existing levels of potential disturbance to account for expanded operations. Some effects to T&E critical habitat and occupied habitats.	Some species may be adversely impacted by the expansion of BP operations. Mitigation measures would be implemented to not jeopardize the continued existence of any protected species.	No impacts.	Potential for direct impact to historic properties or cultural sites. Requires site-specific surveys and Section 106 coordination. Testing and/or data recovery may be required.
Alternative 2. Expand Technology-Based Systems and Approved Infrastructure	The construction of on-going and technology-based systems and infrastructure would directly affect 587 acres of vegetation. An additional 334 acres would be directly affected by illumination.	Additional 587acres of potential habitat affected due to the expansion of infrastructure and technology-based systems.	No impacts.	Approximately 4.8 acres within seven different Unique & Sensitive Areas would be permanently removed. Potential effects to T&E critical habitat and occupied habitat.	Existing and ongoing T&E species concerns surrounding BP infrastructure and operations would continue. Reduced potential for additional direct impacts associated with expanded operations only (no construction of BP additional infrastructure). Minimal additional indirect impacts. Potential impacts reduced compared to Alternative 1.	No impacts.	Potential for direct impact to historic properties or cultural sites. Requires site-specific surveys and Section 106 coordination. Testing and/or data recovery may be required.
Alternative 3. Expand Operations and Technology-Based Systems	Impact to approximately 2 acres of vegetation as a result of the expansion of technology-based infrastructure and an additional 10% over existing levels of potential disturbance for expanded operations.	Additional impacts to 2 acres. Minimal direct effects to wildlife due to extant disturbances and developed areas.	No impacts.	Approximately 0.6 acre of Unique and Sensitive Areas would be impacted as well as an additional 10% over existing levels of potential disturbance for expanded operations.	No direct impacts associated with expanded construction of BPinfrastructure. Minimal indirect impacts. Impacts similar to Alternative 2.	No impacts	No impacts to historic properties; potential impacts to unknown cultural sites require site-specific surveys. Testing and/or data recovery may be required.

[1] Please refer to Tables 4-1 and 4-2 for a detailed summary of impacts. Acreage impacts were derived from approved and ongoing CBP operations/activities and infrastructure provided by the Tucson and Yuma Sectors. Values were derived from previous environmental analysis and geographic information systems data of existing BP infrastructure as of October 1, 2003.

[2] The impacts presented for Alternatives 1 and 3 include only those impacts that are quantifiable at this time (*e.g.* approved infrastructure and technology-based systems). Additional impacts are expected from the expansion of operations; however, the expansion of off-road enforcement activities, increased road patrols, and air patrols are unquantifiable at this time.

Threatened and Endangered Species

Professional biologists have performed field surveys of potentially impacted areas for approved infrastructure projects. All areas which are known to support threatened or endangered species will be considered off limits to avoid impacts to these resources, to the extent practicable.

The BP air operations shall avoid known concentrations of Sonoran pronghorn on normal, routine flights. Known fawning areas (*i.e.*, Mohawk Dunes, Pinta Sands) will be avoided to the maximum extent possible during the peak fawning period (April through June). Deviation to routine flight patterns is conducted in response to "sign" or evidence of illegal entry. Helicopters from the Yuma Sector that leave the patrol route to fly to the Ajo Station at Why, Arizona for refueling will fly at a higher altitude, generally between 100 and 200 feet, and will not engage in hovering activities except in emergency situations.

As part of the informal consultation under Section 7 of the ESA for the establishment and operation of rescue beacons, the CBP and the BP agreed to the following mitigation measures to reduce or minimize potential effects to the Sonoran pronghorn: (1) blue colored beacon lights are used for beacons in the Ajo Station's AO located west of Highway 85 in current Sonoran pronghorn habitat; (2) BP helicopters shall avoid any helicopter over flights of the semi-captive breeding facility for the Sonoran pronghorn in Child's Valley on the CPNWR and the BP shall avoid existing and future forage enhancement plots with helicopter over flights; (3) the BP shall report annually to the US Fish and Wildlife Service (USFWS) all rescue missions conducted in Sonoran pronghorn habitat, as part of the reporting for formal consultation on Tucson Sector activities; (4) the BP shall minimize over flights of Sonoran pronghorn fawning areas from March 15 to July 15 of each year, unless conducting rescue missions in these areas; and (5) the BP shall minimize hovering and landings by helicopters over current Sonoran pronghorn habitat to the maximum extent practicable (DHS 2003a). As part of the mitigation requirements for Operation Desert Grip, the BP provided $50,000.00 to the USFWS for Sonoran pronghorn habitat improvements and to study impacts caused by IEs.

According to BLM's Conservation Agreement with the USFWS for the flat-tailed horned lizard, environmental design measures include minimizing surface disturbance projects to a level of one percent of the management area over five years beginning in 1997; collecting compensation fees; prohibiting off-highway competitive events; supporting continuing lizard monitoring and research; and attempting to acquire all private in-holdings. Like most plans, the flat-tailed horned lizard Conservation Agreement is a working document subject to revision. Therefore, during the planning phase of potential projects in the Yuma Desert Management Unit, the CBP and BP will, to the extent practicable observe conservation measures included as part of the Conservation Agreement for the flat-tailed horned lizard. Field surveys for the flat-tailed horned lizard have been performed for approved infrastructure projects in flat-tailed horned lizard habitat and will be performed again prior to the initiation of construction.

Coordination efforts will continue with the USFWS to obtain the most current information available about species status, habitat requirements, potential project impacts, and environmental design measures to avoid, minimize, and/or compensate for impacts. If construction occurs in areas known to support threatened and endangered species, biologicalmonitors could be used.

Vegetation

Additionally, BP will minimize losses to vegetation by: (1) trimming vegetation along roadsides rather than removing entire plants, (2) requiring heavy equipment to utilize road pullouts or other such disturbed areas, and (3) ensuring revegetation efforts following completion of ground

disturbing activities (*e.g.*, temporary construction footprint for new fence installation). Disturbed sites or sites with low quality habitat will be utilized to the maximum extent practicable for construction and operational support activities. Patrol vehicles and ATVs will be restricted to existing roads to the extent practicable without jeopardizing the BP's mission.

To comply with Executive Order 13112 on Invasive Species (64 FR 6183, February 8, 1999), operation and construction activities will minimize ground disturbance when possible. However, when disturbance is unavoidable, the BP will coordinate with the USFWS and other land managers to determine revegetation measures. Disturbed areas resulting from approved infrastructure projects will be revetated with native seeds or plants. Revegetation of disturbed areas with native seeds and plants will be addressed under site-specific NEPA documents. Weed seed free horse feed will be utilized by BP horse units operating in sensitive areas to further decrease the potential of promoting the establishment and spread of invasive species by BP activities. Weed seed free horse feed is certified to be free of noxious weed seeds for specific states.

Wildlife

The Migratory Bird Treaty Act (MBTA)(16 U.S.C. §703, *et.seq.*) requires contractors to obtain a construction permit if the construction activity is scheduled during nesting seasons (March through August). Surveys shall be performed to identify active nests, so that these nests could be avoided during construction. Another mitigation measure that will be considered is scheduling all construction activities outside the nesting season (*i.e.*, September through February).

Environmental design features that will be considered, especially in areas that support protected species, include the development of vegetation corridors to avoid and/or minimize habitat fragmentation and the proper placement and size of culverts to adequately transport storm water and allow wildlife to safely cross roads. Habitat fragmentation will be minimized to the extent practicable by providing for migration corridor systems (wildlife pathways) that allow free movement of animals across the international border. Corridors act as a connection between two or more otherwise isolated habitats and provide for animal movement and reproduction. It must be noted that no one wildlife corridor design will completely mitigate habitat fragmentation alone. Project specific mitigation measures will be required for projects with the potential to cause substantial impacts on wildlife habitat, protected species, or other environmentally sensitive resources; these plans will be closely coordinated with, and approved by, the US Fish and Wildlife Service (USFWS) and appropriate state resource agency(s) prior to initiation of construction. It is policy, however, to mitigate adverse impacts through the sequence of avoidance, minimization, and finally, compensation. The CBP and BP coordinates with the USFWS to obtain the most current information available about species status, habitat requirements, potential project impacts, and environmental design measures to avoid, minimize, and/or compensate for impacts. Compensation varies and includes activities such as restoration of habitat in other areas and acquisition of lands and is coordinated with the USFWS and appropriate state resource agencies.

Unique and Sensitive Areas

Unique and sensitive habitats and areas such as caves, riparian communities, parks, refuges, Wilderness Areas, conservation areas, national forests, scenic streams, unique vegetation communities, or other sensitive resources will be avoided to the maximum extent practicable. Any unavoidable effects to such communities shall be closely coordinated with the appropriate Federal and/or state agency(s) to ensure that impacts are kept to an absolute minimum and that restoration actions are considered and implemented, where plausible. Road-kill impacts may

potentially increase due to the completion of on going and currently approved infrastructure (*i.e.*, road maintenance, vehicle barriers, fences). However, BP is committed to avoid impacts to the greatest extent practicable through agent education and minimization of disturbance areas. Permanently stationed agents will receive biannual training regarding sensitive habitats and protected species. Agents on temporary assignment will receive training regarding sensitive habitats and areas and protected species for the respective station to which he or she is assigned.

Cultural Resources

Potential adverse impacts to cultural resources will be mitigated through a policy of site avoidance. The continuation of archeological surveys and monitoring of potentially ground disturbing BP activities to ensure that cultural resources deemed to be potentially eligible for listing on the National Register of Historic Places (NRHP shall be avoided when possible. The CBP/BP will be responsible for compliance with Section 106 of the National Historic Preservation Act. The CBP/BP will coordinate with the State Historic Preservation Office (SHPO) along with the appropriate Tribal Historic Preservation Office (THPO) or federally recognized tribes for maintenance activities involving earth-moving operations in areas where historic properties have been previously identified. This coordination is necessary to ensure mitigation measures are implemented. Mitigation measures that could be used, when approved by the SHPO and/or THPO, to preclude impacts include, but are not limited to, data recovery, preservation through site burial, and use of professional archeologists as monitors during construction.

All construction activities shall be at least three feet away from the international boundary to avoid impacts to historical boundary monuments and other demarcations. Near each permanent boundary monument, strict construction precautions shall be implemented to avoid potential damage to them. Additionally, no construction materials shall be placed adjacent to these monuments.

Patrol vehicles and ATVs will be restricted to existing roads to the extent practicable without jeopardizing the BP's mission. The BP is committed to avoid impacts to the greatest extent practicable through agent education and minimization of disturbance areas. Permanently stationed agents will receive biannual training regarding cultural resources. Agents on temporary assignment will receive training regarding sensitive habitats and areas and protected species for the respective station to which he or she is assigned.

Air Quality

Proper and routine maintenance of all vehicles, generators, aircraft and other equipment shall be implemented to ensure that air emissions are within the design standards of the equipment. Construction activities within non-attainment areas will be coordinated with the appropriate environmental agency(s) to ensure that the emissions will conform with regulations specified in the Clean Air Act. Construction sites within urban areas, along major transportation routes, or in biologically sensitive areas (*e.g.*, wildlife refuges, parks, Wilderness Areas) shall be kept wet, to the extent practicable, to reduce fugitive dust emissions. Where practicable, drop lines from local electrical systems shall be used as a substitute for generators. When electrical service is not available, generators will utilize low-sulfur fuels, such as diesel fuel or natural gas, to minimize emissions to the extent practicable.

Water Resources

Each proposed construction project that affects greater than 1 acre will require a Stormwater Pollution Prevention Plan (SWPPP) as part of the National Pollution Discharge Elimination

System (NPDES) permit process under the Clean Water Act (CWA). The SWPPP is utilized by the entity(s) performing construction (*e.g.*, CBP personnel, Joint Task Force North [JTF NORTH – formerly Joint Task Force Six], Arizona National Guard or independent contractors) to avoid and minimize impacts to water resources. All proposed projects would be coordinated with the US Section International Boundary and Water Commission (USIBWC) for review and approval. Similarly, if wetlands or waters of the US are to be affected, early coordination by the CBP with the United States Army Corps of Engineers (USACE), Los Angeles District, Regulatory Branch Phoenix Field Office and Arizona Department of Water Resources agencies will be conducted. Applicable Section 404 permit and Section 401 Water Quality Certification procedures shall be completed prior to initiation of the construction activities, as required. Mitigation and compensation shall be implemented to ensure no functional net loss of waters of the US, including wetlands.

No action shall be initiated that may affect wetlands or floodplains without performing the requisite analysis and findings specified by Executive Orders 11990 and 11988 respectively, prior to taking any action. The CBP/BP generally does not directly perform construction activities. JTF NORTH, National Guard units (typically the Arizona National Guard), and independent contractors perform construction for the CBP/BP within the Tucson and Yuma Sectors. Project-specific SWPPPs are provided to the construction entity that identify conservation measures to avoid and minimize water resource impacts. Some of those measures are presented here for reference. The construction storage or staging sites will be located at least 0.5 mile from wildlife and livestock tanks or other permanent surface water bodies to reduce potential effects of accidental spills. Conservation measures will be implemented to preclude unnecessary waste of water supplies. Discharges of gray water and other wastes to drainages or other water courses/bodies are prohibited. However, gray water may be used for irrigation and dust suppression (*i.e.*, road watering) if coordinated and approved by the land management agency. Portable latrines and on-site septic systems, provided and maintained by licensed contractors, shall be used to the extent practicable during construction and operational support activities.

Water conservation measures shall be considered for operations or construction projects within the Sierra Vista sub-watershed. Water conservation measures for Sierra Vista air operations will be included as part of the required Section 7 consultation for the Tucson Sector BA. Potential water conservation measures may include but not limited to low water-use fixtures, low water-use landscaping, installation and use of waterless urinals, restrictive landscape watering policy and enforcement, and the use of gray water for irrigation.

Hazardous Materials

A Spill Prevention, Containment, and Countermeasures Plan (SPCCP) will be in place prior to the start of construction projects, and all personnel will be briefed on the implementation and responsibilities of this plan. The SPCCP is utilized by the entity(s) performing construction (*e.g.*, CBP personnel, JTF NORTH, Arizona National Guard, or independent contractors) to avoid and minimize impacts associated with hazardous materials during construction. A designated environmental advisor will be on-site during construction activities in case of any accidents.

All used oil and solvents will be recycled if possible. All non-recyclable hazardous and regulated wastes will be collected, characterized, labeled, stored, transported, and disposed of in accordance with all Federal, state, and local regulations, including proper waste manifesting procedures.

Noise

Mitigation of noise levels may occur at the noise source, along the path of the noise, or at receiver locations. Mitigation of noise levels occur in nature to varying degrees as sound propagates from the source over terrain surfaces (scattering and ground attenuation), as the distance between the source and receiver increases (dispersion), and when intervening natural terrain features intersect the path of the noise source to the receiver (diffraction). Within practical limits, these principles shall be applied to the mitigation of noise levels from proposed construction and operations.

RELATIONSHIP BETWEEN LOCAL AND SHORT-TERM USE OF SOCIETY'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM ENVIRONMENTAL PRODUCTIVITY

Benefits derived from the control of IEs and narcotics trafficking into the U.S. and the adverse impacts associated with the expansion of BP operations and technology-based systems and completion of approved infrastructure necessary to accomplish this control represent trade-offs between the local, short-term use and the long-term stability and productivity of society's environment. Short-term, local adverse direct effects resulting from habitat disturbances would be off-set by long-term regional benefits, including protection from illegal vehicle and foot traffic, accidental fires caused by IEs, lower costs to the country for health and emergency services, potentially increase the quality of life along the border, reduction in crime near the border, and reduction in poaching. Reductions in crime along the border would likely have a favorable effect on insurance rates for homeowners and businesses near the border.

The preferred alternative would require the conversion of approximately 587 acres. Most of this acreage has been previously disturbed and does not provide suitable habitat for most wildlife populations. The long-term productivity of these lands would be lost over the life of the proposed project. The CBP and BP would make every attempt practicable to avoid disturbances to valuable wildlife habitat (*e.g.*, by locating project sites and staging areas in previously disturbed sites). Compensation for these losses, if statutorily required, would be coordinated through the appropriate state and Federal resource agencies, as described in Chapter 5. Some impacts to threatened or endangered species would occur and must be mitigated to offset these losses, as required by Sections 7 and 9 of the ESA.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES INVOLVED IN IMPLEMENTATION OF THE PREFERRED ACTION

The preferred action would result in the permanent conversion or loss of approximately 509 total acres of various habitats, mostly disturbed areas and non-native grasslands to roads and infrastructure. The proposed action would also require the irretrievable commitment of fuel, labor, vehicles, building materials, and monetary resources.

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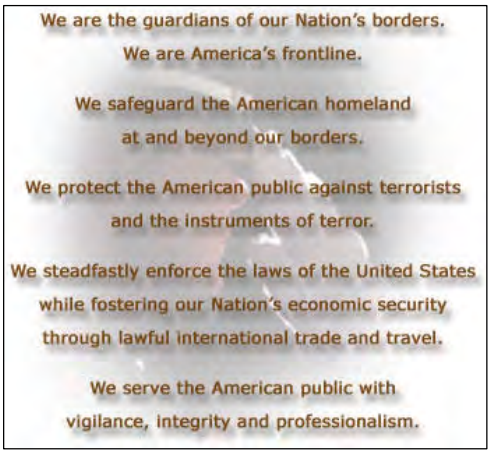
1.0 INTRODUCTION

The US Customs and Border Protection (CBP), in the Bureau of Border and Transportation Security of the Department of Homeland Security (DHS) is the guardian of the United States' (US) borders and has the responsibility to regulate and control illegal immigration into the US. In 1924, Congress created the Border Patrol (BP) to be the law enforcement arm of the legacy Immigration and Naturalization Service (INS). Recently the BP has been integrated as an office of the CBP. While the BP has changed dramatically since its inception over 75 years ago, its primary task remains unchanged: to detect and prevent the unlawful entry of drug smugglers, terrorists, and illegal entrants (IE) throughout the US. The term IE is used to describe anyone who crosses the border between Ports of Entry (POE) .

CBP Mission Statement



Source: DHS 2003a

This revised draft Programmatic Environmental Impact (PEIS) provides a broad assessment of the actual and potential effects, beneficial or adverse, of the BP's daily operations (existing and proposed) along the Arizona border within the Tucson and Yuma Sectors. The original draft Programmatic Environmental Impact Statement was released to the public for review in November 2002. It included both operations and the types of infrastructure that could be installed (barring any environmental, funding, and other resource constraints) along the Arizona border over the next 10 years. These infrastructure systems were merely a list of items that would be desired to provide absolute control of the border, exclusive of any planning analysis or environmental impacts. The purpose of evaluating both operation and infrastructure in the original draft PEIS was to provide a cumulative analysis of the daily operations and conceptual infrastructure plans. However, an evaluation of the public comments on the original draft PEIS indicated that a more focused analysis of the effects of the BP daily operations to achieve the desired objectives is necessary. Therefore, the CBP has decided to issue a revised draft PEIS focusing on the potential adverse and beneficial effects of expanding daily BP operations, expansion of existing and technology-based systems, and the completion and maintenance of approved infrastructure. Hereinafter the term PEIS is used to refer to this revised draft PEIS. The term "approved" as used in this document refers to projects that have been analyzed in

previous National Environmental Policy Act (NEPA) environmental documents and signed decision documents (*i.e.*, Findings of No Significant Impact [FONSI] or Records of Decision [ROD]). Proposed infrastructure that may need to be implemented along the US-Mexico border will be analyzed in a cumulative manner in this document, and in-depth in subsequent NEPA documents once future individual construction projects are identified.

During the time the revised draft PEIS was being prepared, the DHS Under Secretary Asa Hutchinson announced on March 16, 2004 the Arizona Border Control Initiative (ABCI). The ABCI supports the priority mission of DHS agencies to detect and deter terrorist activities and cross-border trafficking of people and contraband. Additionally, the ABCI involves hundreds of local, state, tribal, and Federal enforcement officers in Arizona utilizing a cooperative approach enhanced with additional personnel, technology and aviation assets. Hutchison summarized the ABCI in a speech on March 16, 2004 (DHS 2004a):

> *"...The ABC Initiative exemplifies Homeland Security's goal to present one face at the border as we implement joint border operations with Border Patrol agents and employees of the US Customs and Border Protection, Immigration and Customs Enforcement, Transportation Security Administration, as well as the resources of the Department of the Interior, the Tohono O'odham Nation, the United States' Attorney Office, Arizona Department of Public Safety and dozens of local law enforcement agencies. By leveraging these resources, we are better able to multiply the positive effects of the initiative and can use the cutting-edge of technology to ensure that Arizonans and the nation's citizens are safer."*

The ABCI includes the increase of BP agents in the Tucson Sector, the deployment of unmanned aerial vehicles (UAVs), and the deployment of additional helicopters and fixed-wing aircraft. A full description of the ABCI is provided in Subsection 1.6.3. The increase in BP agents and resources associated with the ABCI would expand the daily operations of the Tucson and Yuma Sectors; therefore, the potential environmental effects of implementing the ABCI are considered in this revised draft PEIS as part of the Proposed Action.

The expansion of BP operations is being proposed to enhance the BP's capability to gain, maintain, and extend control of the US-Mexico border. The cumulative effect of these actions, in conjunction with other existing and proposed projects, will be addressed in this document. All physical estimates of direct impacts are given in English units (*e.g.*, acres, miles, feet). This revised draft PEIS was prepared in accordance with the NEPA (42 U.S.C. §4321, *et.seq.*), the President's Council on Environmental Quality (CEQ) Regulations for the Implementation of

NEPA (40 C.F.R. Part 1500), as well as the INS' Procedures for Implementing NEPA (28 C.F.R. Part 61, Appendix C), which BP is currently using for NEPA compliance.

The Tucson and Yuma Sectors of the BP are responsible for controlling approximately 400 miles of the US-Mexico border, most of which are remote and rugged lands. Figure 1-1 depicts the border counties under the Tucson and Yuma Sectors' areas of operation (AO). Figure 1-2 identifies the approximate boundaries of the BP Tucson and Yuma Sectors' AO. Land ownership in the Tucson and Yuma Sectors is identified in Figure 1-3. IEs use both urban and rural areas of the border to gain illegal access to the US.

Numerous tactics are employed to detect IEs including remote sensing techniques and visual observations. Remote sensing techniques include ground sensors to detect motion, day and night video cameras, and counter-intelligence data collection. Visual observations can be obtained from aerial reconnaissance using fixed-wing aircraft, un-manned aircraft, and helicopters, or on the ground by BP agents on foot or using vehicles, bicycles, motorbikes, all-terrain vehicles (ATVs), boats, hovercraft, or horses.

The study area of the revised draft PEIS is defined by the limits of existing operations/activities within southern Arizona. While the Tucson and Yuma Sectors extend well north of the border area, the vast majority of the BP's daily operations/activities are located along the US-Mexico border in an attempt to control illegal entries at the border. Therefore, in order to discuss impacts in more detail, the study area is limited to the immediate border counties.

1.1 STRATEGIC INTENT AND PRIORITIES OF THE CBP

The priority mission of the CBP is to prevent terrorist and terrorist weapons from entering the US. That important priority mission involves maintaining a diverse, multi-layered approach, which includes improving security at the US border and POEs, and extending CBP's physical zone of security beyond the physical borders of the US so that the US borders are the last line of defense, not the first. As part of this mission, the CBP will work to implement its Comprehensive Strategy to Address the Threat of Nuclear and Radiological Terrorism, identify

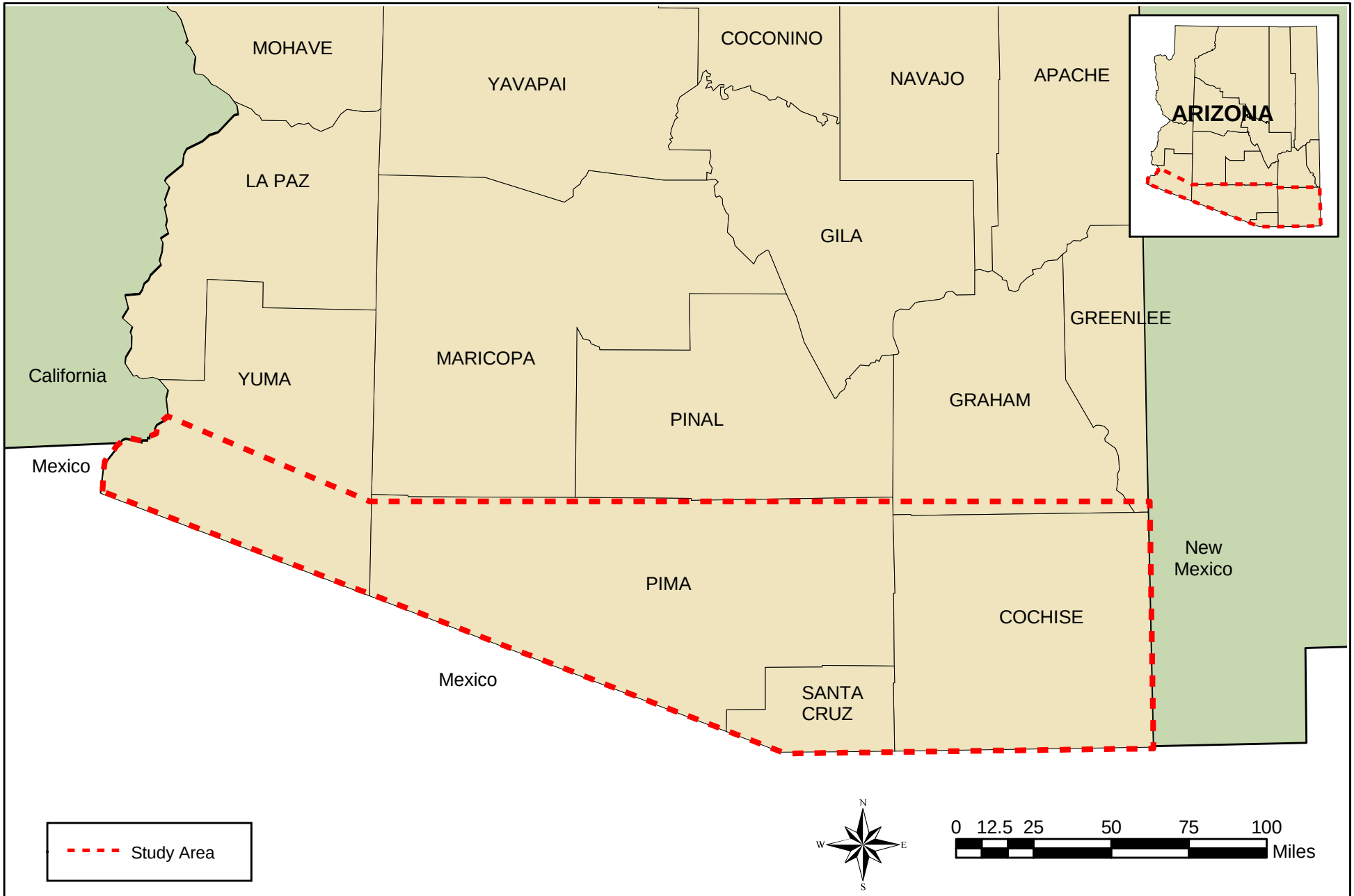


Figure 1-1: Counties within the Study Area

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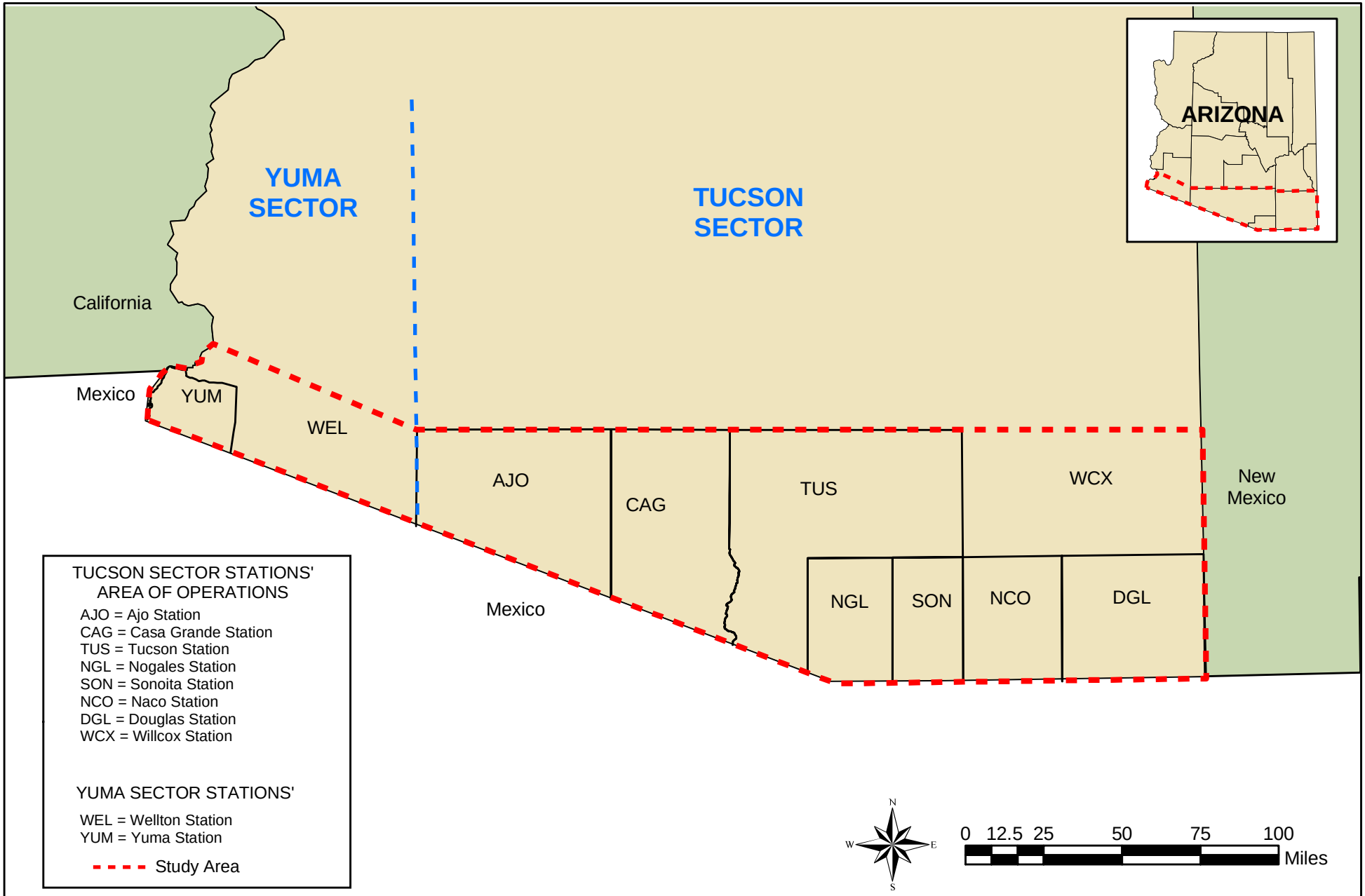

Figure 1-2: Border Patrol Stations' Area of Operations within the Tucson and Yuma Sectors

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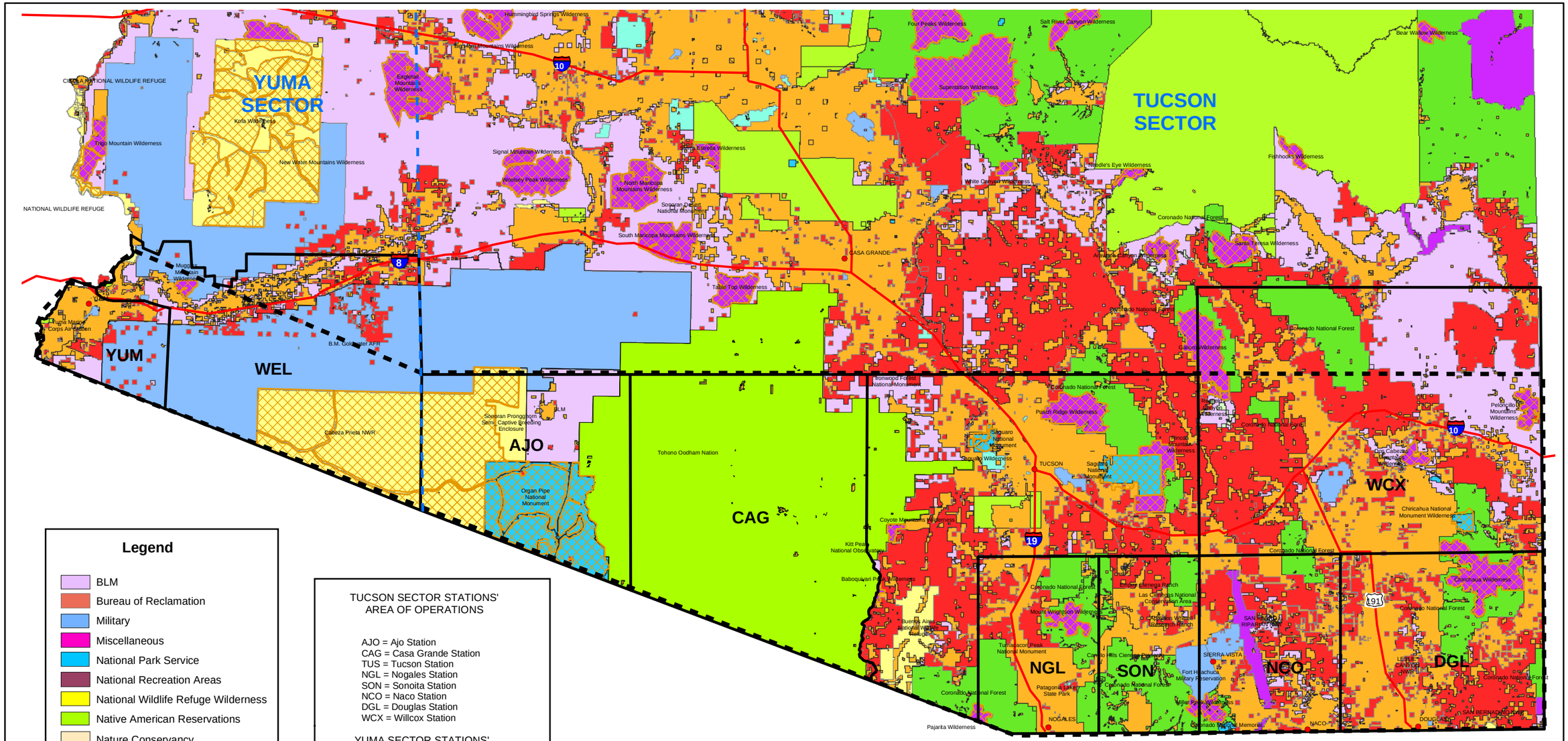

Source: El Centro, Ajo, Salton Sea, Phoenix, Lukeville, Tucson, Nogales, Silver City and Douglas, Arixona USGS 1:250,000 topographic qualds
Arizona Gapownership 1999

Figure 1-3: Border Patrol Stations' Area of Operations and USGS Gap Ownership within the Project Area

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and seize terrorists' assets and funding sources, and enhance its support infrastructure to further develop targets and analyses.

In addition to its priority mission, the CBP must protect the US and its citizens and carry out its traditional missions. These include controlling the US borders by apprehending individuals attempting to enter the US illegally; stemming the flow of illegal drugs and other contraband; protecting agriculture and economic interest form harmful pests and diseases; and facilitating international trade; collecting import duties; and enforcing US trade, immigration and other laws of the US at and beyond the US borders.

1.2 BORDER PATROL MISSION AND AUTHORITY

As the primary law enforcement agency between the POEs, the BP's mission is to prevent the entry of terrorists and their weapons of terrorism and to enforce the laws that protect America's homeland by the detection, interdiction, and apprehension of those who attempt to illegally enter or smuggle any person or contraband across sovereign borders of the US. Since the terrorist attacks of September 11, 2001, even greater importance has been placed on securing the Nation's borders. CBP Commissioner Robert C. Bonner summarized the current BP mission in a speech at the BP Change of Command Ceremony on March 3, 2003:

> *"...We need a strong and effective Border Patrol between our ports of entry to enforce the laws of the United States, to apprehend those who attempt to enter the United States illegally or attempt to bring in illegal drugs or other harmful substances. And we need the Border Patrol now more than ever to do all we can to make sure that terrorists and terrorists weapons, including even weapons of mass destruction, are not permitted to be smuggled into the United States between our ports of entry..."*

The primary sources of authority granted to officers of the BP are the Immigration and Nationality Act (INA), found in Title 8 of the United States Code (U.S.C.), and other statutes relating to the immigration and naturalization of aliens. The secondary sources of authority are administrative regulations implementing those statutes, primarily those found in Title 8 of the Code of Federal Regulations (8 C.F.R. Part 287), judicial decisions, and administrative decisions of the Board of Immigration Appeals. Subject to constitutional limitations, BP officers may exercise the authority granted to them in the INA. The statutory provisions enumerating BP's enforcement authority are found in INA Sections 287 (8 U.S.C. **§** 1357); 235(a) (8 U.S.C. **§** 1225(a)); and 274(b) and (c) (8 U.S.C. **§** 1324(b and c)).

INA Section 287(a)(3) provides further authority to BP agents to enter any lands within 25 miles of the international borders, without prior approval of the property owner, in the pursuit of IEs (8 U.S.C. § 1357(a)(3)). Other statutory sources of authority include Title 18 of the United States Code, which has several provisions that specifically relate to enforcement of the immigration and nationality laws; Title 19 (19 U.S.C. § 1401(i)), relating to Customs cross-designation of INS officers; and Title 21 (21 U.S.C. § 878), relating to Drug Enforcement Agency cross-designation of INS officers.

1.3 HISTORY AND BACKGROUND

In the late 19th century, Congress passed the Immigration Act of 1891, the Nation's first comprehensive immigration law in the US. The Act created the Bureau of Immigration within the Treasury Department and placed the Commissioner of Immigration in the Port of New York. The Bureau of Immigration was transferred to the Department of Commerce in 1903. Immigration continued to rise, reaching a peak in 1907 when 1,285,349 immigrants arrived. Subsequent legislation (*e.g.*, Immigration Act of 1924) created more stringent requirements and, coupled with the events surrounding World War I and the Great Depression, resulted in declining immigration rates over the next few decades.

In the years preceding World War II, the numerical quota system continued under amendments to the Immigration Act of 1924. Immigration increased quickly after the war partially due to new legislation that relaxed or waived some quotas to allow immigration of war brides, refugees, and orphans. The Displaced Persons Act of 1948, the Immigration and Nationality Act (INA) of 1952, and the Refugee Relief Act of 1953 were among those legislative acts.

In 1924, the Congress created the BP to serve as the law enforcement entity of the INS, and it did so until November 25, 2002, when Congress transferred all INS responsibilities to the newly created Department of Homeland Security with the passage of the Homeland Security Act of 2002 (P.L. 107-296). The official transfer of responsibilities occurred on March 1, 2003. The BP was transferred into the CBP under the Office of Border Patrol. The CBP also assumed many responsibilities and functions of other branches of the INS as well as those of the US Customs Service and the Animal and Plant Health Inspection Service.

Until the 1960s, the majority of immigrants to the US came from Europe, with smaller numbers coming from Asia and other countries in the Western Hemisphere. In the 1960s the national origins principle of determining immigration quotas was discontinued after 40 years of use. During the 1960s and 1970s, various legislation allowed for the immigration of refugees fleeing from political upheavals in specific countries and fleeing due to fear of persecution because of race, religion or political beliefs. In October of 1965, the INA was amended, placing the first numerical ceiling on the total number of immigrants but abolishing quotas by nationality. The new system provided an annual ceiling of 290,000 immigrants, which was later reduced to 270,000 in 1980 by Congress.

Since 1980, an average of 390,922 immigrants have been naturalized every year (INS 2003). At the same time, however, IEs have become a significant issue. During the period 1995 to 2001 apprehension rates averaged more than 1.2 million IEs per year throughout the southwest border (INS 2003). The INS, Office of Policy and Planning estimated approximately seven million IEs reside in the US (US Citizenship and Immigration Service (USCIS) 2004). For the past several years, Mexicans have comprised the largest number of legal as well as IEs to the US. However, IEs from other countries, including Middle Eastern, European and Asian countries also attempt to illegally enter the US along the borders.

Until the early 1990s, there was limited awareness of southwest border issues and little national attention was given to illegal border activity. As a result, the BP's growth was nominal, funding for enforcement efforts fell short, and the BP was required to function under severe resource constraints. Various events in the 1990s elevated the Nation's awareness concerning illegal immigration and narcotics smuggling. Increased national concern led to increases in funding and staffing and enabled the BP to develop effective enforcement strategies.

As mentioned previously, the BP's primary function is to detect and prevent terrorists and other IEs from crossing the land and water borders of the US Additionally, with the increase in illegal drug trafficking, the BP has assumed a major Federal responsibility for illegal drug interdiction. In fiscal year (FY) 2001, the BP made over 11,387 drug seizures along the southwestern border, resulting in the removal of approximately 1,449,947 pounds of marijuana and approximately 446,330 pounds of cocaine from the US. The combined value of these and other drugs seized by the BP was over two billion dollars (USCIS 2003).

The BP patrols the US borders to prevent and deter the unlawful entry of IEs into the US. Deterrence is affected through the actual presence (24 hours per day, 7 days per week) of the BP agents on the border, fences and other physical (natural and man-made) barriers, lighting, and the certainty that the IEs would be detected and apprehended. Detection of the IEs is accomplished through a variety of low-technology and high-technology resources including observing physical signs of illegal entry (vehicle tracks, footprints, refuse, human waste, clothes, etc.), visual observation of the illegal entries, information provided by private landowners or the general public, ground sensors, and remote video surveillance systems. The continuation and expansion of historic enforcement operations such as "sign-cutting" (detection and the interpretation of any disturbances in natural terrain conditions that indicate the presence or passage of people, animals, or vehicles), aerial reconnaissance, remote sensing, lighting, increased patrol by agents, and expansion of infrastructure and technology-based systems greatly facilitate deterrence of illegal crossings and will allow the BP to gain and maintain control of the border.

In response to the continued problems of IEs, Congress passed the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) of 1996 (P.L. 104-208). Title 1, Subtitle A, Section 102 of IIRIRA states that,

> *…the Attorney General, in consultation with the Commissioner of Immigration and Naturalization, shall take such actions as may be necessary to install additional physical barriers, roads and other infrastructure deemed necessary in the vicinity of the US border to deter illegal crossings in areas of high entry into the United States*.

A combination of infrastructure (*e.g.*, roads, fences, barriers) and adequate resources (*e.g.* vehicles, field agents, support personnel, aircraft, etc.) is essential for the effective enforcement of the border and integral to the success of the BP to gain, maintain, and extend control of the border.

1.4 PURPOSE AND NEED

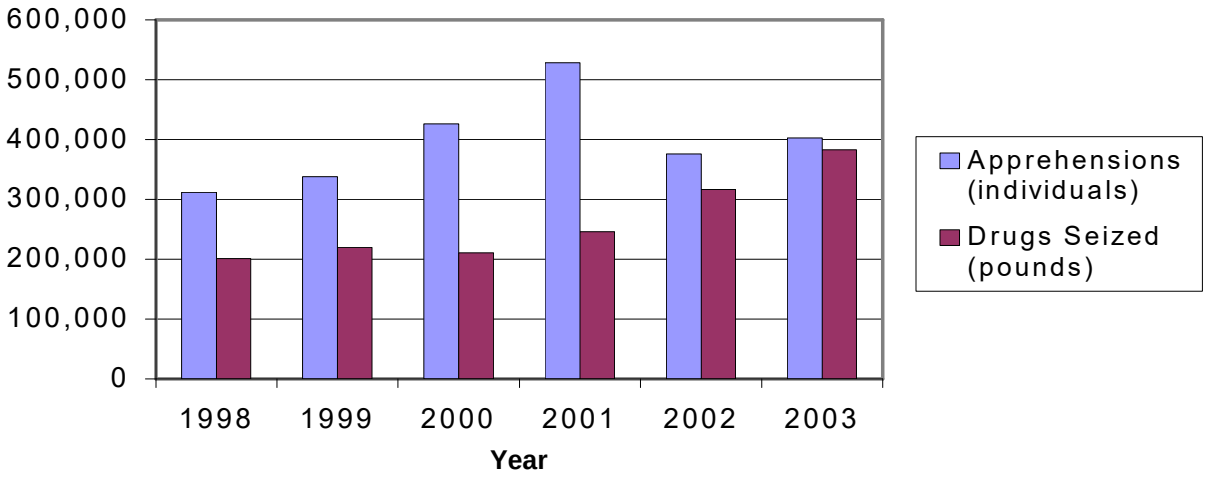
The purpose of the operational programs and support infrastructure discussed in this revised draft PEIS is to facilitate BP law enforcement activities along the identified section of the US-Mexico border. The need for these programs is illustrated in the following section.

The US experiences a substantial influx of illegal immigrants and illegal drugs each year. Both of these illegal activities cost US residents billions of dollars annually directly from crime and the apprehension, detention, and incarceration of criminals, and indirectly in loss of property, personal injury to US residents, increased insurance costs, and environmental damage.

Rising rates of violent crime, serious damage to the Nation's health and economy, and strains on vital relationships with international allies led Congress to develop the National Drug Control Strategy (White House Office of National Drug Control Policy [ONDCP] 2003). The National Drug Control Strategy included the BP and mandated a "prevention through deterrence" strategy.

The BP stations along the US-Mexico border experienced a 90 percent increase in the number of drug seizures from Fiscal Year (FY) 1998 to FY 2003. More importantly, the value and number of drug seizures along the southwest border represent at least 95 percent of those made by the BP throughout the US. During the period from FY 1998 to FY 2003, the Tucson and Yuma Sectors experienced a 29 percent increase (an increase of 90,468 individuals) in the number of IE apprehensions and a 90 percent increase (an increase of 181,635 pounds) in the amount of drugs seized (Figure 1-4).

Figure 1-4. Apprehension and Drug Seizure Data for Tucson and Yuma Sectors



To combat these rising numbers, the Clinton Administration committed additional resources to law enforcement agencies, including the BP. Since 1998, the Tucson and Yuma Sectors have seen a 60 percent increase in resources.

The constant flow of IEs passing through the US-Mexico border area also threatens public lands, historical structures, and endangered species. Vehicles used by IEs are continuously being abandoned in National Parks, the Tohono O'odham Nation of Arizona (TON), Cabeza Prieta National Wildlife Refuge (CPNWR and other natural and sensitive areas (Photograph 1-1).

Photograph 1-1. Abandoned Vehicle on the Cabeza Prieta National Wildlife Refuge

During the first half of FY 2004, 890 abandoned vehicles have been removed from the TON (TON 2004). Removal of these vehicles is becoming an ever-increasing burden on Federal and State land managers, the TON, private landowners, and the BP. IEs have trampled vegetation (Photograph 1-2) and left litter (Photograph 1-3), abandoned vehicles, and deposited human excrement in an area that extends from the Bureau of Land Management's (BLM) Guadalupe Canyon in the southeast corner of Arizona to the National Park Service's (NPS) Coronado National Memorial south of Sierra Vista (Arizona Daily Star 2000). These deplorable conditions continue today. The following description was taken from a letter written by James Bellamy, former Superintendent at the Coronado National Memorial, to Senator Jon Kyl on June 20, 2000:

> *"This activity* [illegal entrant) invasion into protected areas] *has significantly impacted park resources. Human foot traffic has created several trails the width of one-lane roads. The large numbers of people have destroyed vegetation, exposed bare ground, eroded deep hillsides, and caused scars that will take years to heal. Smaller trails cover some parts of the park like spider webs. Litter covers the ground in many places, particularly plastic water bottles, food containers, discarded clothing and blankets. Conditions are very unsanitary in many places due to the amount of feces and toilet paper."*

Photograph 1-2. Heavily Used Illegal Entrant Trail

Photograph 1-3. Trash Deposited by Illegal Entrants

As discussed previously, past IE traffic has greatly degraded the appeal of the landscape. Also, human-caused fires, which destroy thousands of acres, excessive amounts of litter such as plastic water bottles, and illegal roads that impact pristine landscape, such as on the Coronado National Memorial, have all taken a negative toll on the landscape (INS 2002d). Similar damages have incurred on other public and private lands.

Photograph 1-4. Illegal Entrant Roads on the Cabeza Prieta National Wildlife Refuge

Based on US Forest Service (USFS) estimates, IEs leave behind 8 to 10 pounds of trash per person at a cost of $0.25 per pound for clean-up (USFS 2003). Given the 2003 IE apprehension rate (402,000 individuals) for the Tucson and Yuma Sectors, this amounts to an average of $904,500 in annual trash removal costs. This figure does not account for IEs that avoid apprehension. Photograph 1-4 shows roads created by IEs on the CPNWR. The number of illegal roads and foot trails created by IEs within the CPNWR has increased substantially from 1998 (first year data were collected) through 2002 (Figures 1-5 and 1-6 [CPNWR 1998 and 2002]). Data have not been finalized for FY 2003 and FY 2004 at the time of printing.

The problem is equally severe at the San Pedro River, which flows north from Mexico and is considered an important bird migration corridor. Officials at the San Pedro Riparian National

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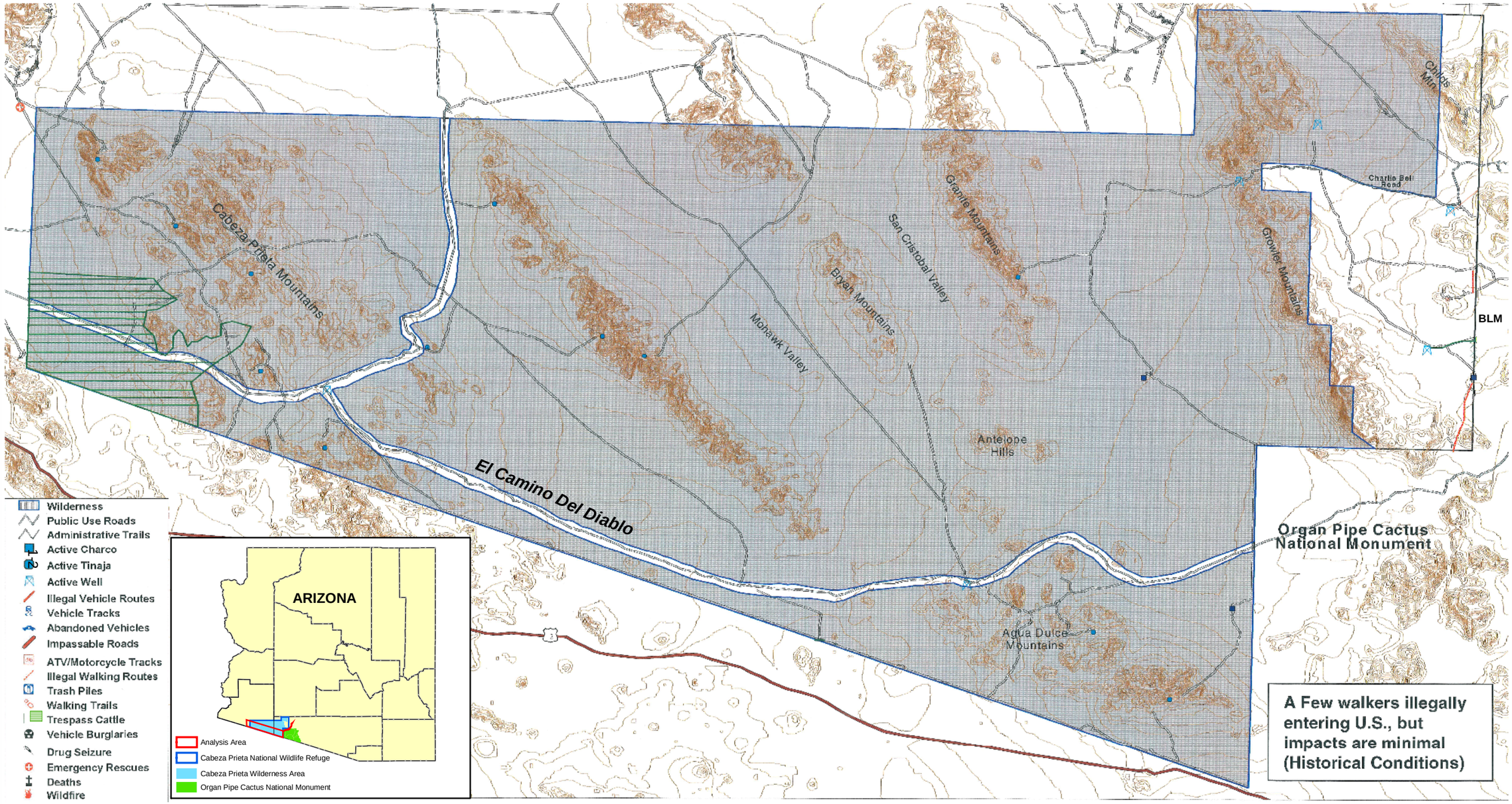
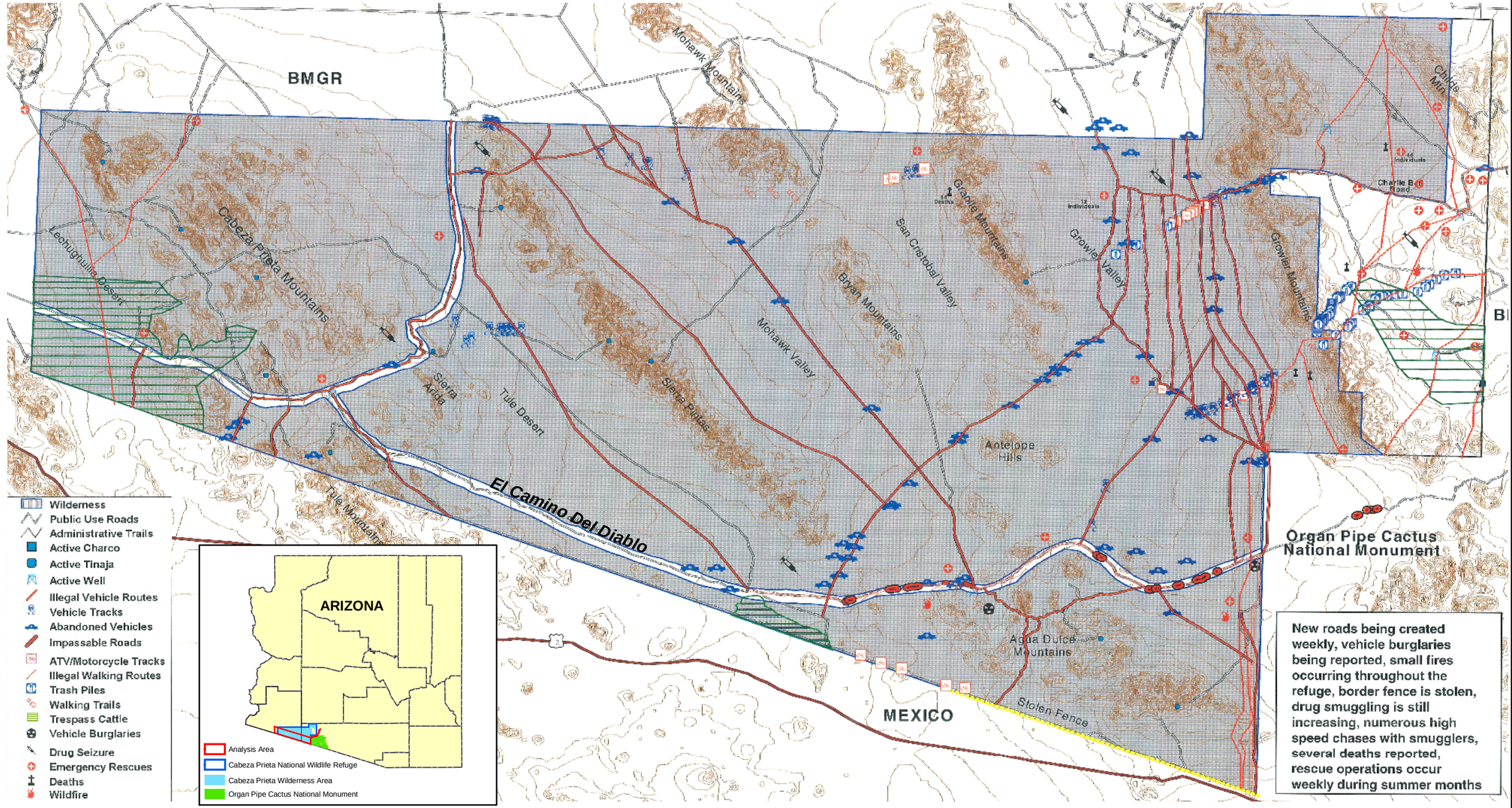


Source: Border Impact Map created by Cabeza Prieta National Wildlife Refuge, 2002.

Figure 1-5: Border Impacts on Cabeza Prieta National Wildlife Refuge (1998)



Source: Border Impact Map created by Cabeza Prieta National Wildlife Refuge, 2002.

Figure 1-6: Border Impacts on Cabeza Prieta National Wildlife Refuge (2002)

Conservation Area (SPRNCA) estimate that as many as 500 IEs per day are moving along the river, nearly twice the number of people who visited the area legally in 1999 (Arizona Daily Star 2000). Managers of Federal and state administered lands in the area are also voicing concern:

> *We consider it to be a very serious environmental problem. We're talking about thousands of people walking from south to north, breaking through brush and making their own trails. That's not a positive*. (Radke 2000).

There is also a growing concern for the safety of employees and visitors of public lands. In February 2000, a Coconino County Superior Court judge and several others complained to agency officials after more than 100 IEs ran through their San Pedro River campsite during the night (Arizona Daily Star 2000). Such complaints prompted the BLM to advise SPRNCA visitors not to camp within the conservation area. At the Coronado National Memorial, the greater safety problem is for park employees and their families since park rangers have been assaulted in the past. In August 2002, NPS Ranger Kris Eggle, while working with the BP, was murdered by a Mexican drug smuggler at the Organ Pipe Cactus National Monument (OPCNM). The BLM employees are so concerned about encountering IEs during their work that they often have to work in pairs. Additional safety hazards to both visitors and staff are those posed by speeding vehicles transporting IEs and the potential for wildfires from cigarettes and warming fires.

Thus, the purpose and need for the expansion of operations, existing and technology-based systems, and completion of approved infrastructure proposed by the BP are to:

(1) Enhance the BP mission to prevent the entry of terrorists and their weapons and to enforce the laws that protect the US homeland by the detection, interdiction, and apprehension of those who attempt to illegally enter or smuggle any person or contraband across the sovereign borders of the US;
(2) Provide a safe, effective, and efficient environment for BP agents in which to accomplish the BP mission;
(3) Enhance the effectiveness of the apprehension activities through the combined use of manpower, technology, and infrastructure and to increase deterrence;
(4) Increase deterrence through enhanced detection and apprehension;
(5) Create a limited zone of certain apprehension in proximity to the US-Mexico border;
(6) Prevent the loss of life of IEs traversing the desert; and
(7) Protect sensitive resources, public and private lands, and US residents from IEs, illegal activities, and terrorists.

1.5 OPERATIONS/ACTIVITIES

Several measures have to be employed by the BP in order to observe illegal activity or signs of illegal activity including patrolling, low-level flights, sign-cutting on drag roads, stopping vehicles at tactical checkpoints, and observing activity from elevated locations. Once illegal activity has been detected, the BP agents, by law, must attempt to apprehend and detain IEs. Ground vehicles, horses, and aircraft may be used, individually or collectively, to make the apprehensions. When possible, the BP agents remain on existing roads while attempting to apprehend IEs; however, since IEs attempt to avoid detection by avoiding existing roads, off-road activity by the BP is sometimes required. As stated previously, Section 287(a)(3) of INA provides the authority for BP agents to enter any lands within 25 miles of the international border in pursuit of IEs. The combination of infrastructure (*e.g.*, roads, fences, and barriers) and adequate resources (*e.g.*, vehicles, field agents, support personnel, etc.) is essential for the effective enforcement of the border and integral to the success of the BP to gain and maintain control of the border.

The BP operations have been placed into activity groups to evaluate the potential impacts of various methods of apprehending IEs. The activity groups include, but are not limited to, patrolling in support vehicles, air support, border barriers, lighting, and remote video surveillance (RVS) systems. The following paragraphs describe each of these activity groups.

1.5.1 Routine Patrols

Road patrols are conducted as routine, normal BP operations on existing roads. Most of these roads are improved or semi-improved roads (Photograph 1-5), located on public and private land, and are traveled by the general public and other agencies. Four-wheel drive vehicles, all terrain vehicles (ATVs), and horses are used by the BP to patrol roads. The BP traffic constitutes a small fraction of the total traffic volume on most public roads.

Photograph 1-5: Semi-Improved Road

1.5.2 Drag Road Operations

Drag roads are used by BP agents to identify visual evidence of illegal entires. Drag roads are typically parallel to existing patrol roads and/or on the shoulder of patrol roads in areas, which are highly traveled or regularly crossed by IEs. The surface of these roads is prepared using a method known as "dragging" (Photograph 1-6). "Dragging" is accomplished by the use of a four-wheel drive vehicle towing several tires bolted together and pulled on sections of the road at speeds between five and seven miles per hour. This method erases old tracks and smoothes the road surface so any new tracks crossing the road can be easily detected. Many of these roads are used by the public and other agencies and are located on public and private lands. The frequency at which these roads are prepared varies for each road and station but can occur several times daily.

Photograph 1-6: Drag Road

1.5.3 Off-road Operations

Off-road operations are defined as any ground activities conducted by the BP outside of established roads or trails. Off-road operations are conducted at intervals that range from daily to once per month, depending on the station. Off-road operations may include foot patrol, horse patrol, four-wheel drive vehicles, ATVs, and motorcycles. Off-road pursuit by vehicle occurs only when it is determined that the IEs are in a specific area. Again, Section 287(a)(3) of the INA authorizes entry into public and private lands within 25 miles of the international border while in pursuit of IEs.

1.5.4 Air Operations

The Tucson and Yuma Sectors maintain helicopters and aircraft that can provide assistance to any station within the two Sectors (Photograph 1-7). The air operations are located at the Tucson International Airport, Fort Huachuca Libby Army Airfield/Sierra Vista Airport, and Yuma International Airport, Yuma. However, one airplane and one helicopter are also

Photograph 1-7. OH-6 Alpha Helicopter

stationed at the Nogales International Airport. Currently, the BP, in support of the ABCI, is conducting a pilot test of unmanned aerial vehicles (UAVs) at the Fort Huachuca Libby Army Airfield/Sierra Vista Airport as part of Operation Skywatch. Details of the test program are discussed in detail in Section 1.6.2. Several stations within the two Sectors maintain refueling tanks and a helipad. The BP air operations are currently used in detection, deterrence, and search and rescue (SAR) missions. The frequency of air patrols are defined by illegal traffic patterns. Helicopters fly along the border at elevations high enough to be seen and to deter IEs. There are established flight patrol routes within some stations of the Tucson Sector; however, when assistance is requested, helicopters fly as far north as Tucson and Casa Grande. There are established helicopter flight routes within the Yuma Sector. Fixed-wing aircraft are used at higher altitudes for surveillance and pilot training.

As mentioned above, aircraft are also used for SAR missions. During the height of summer, extreme temperature and low humidity levels can occur, making the area extremely treacherous. The lives of IEs are routinely jeopardized while crossing this harsh environment. The BP's aircraft are used to locate and rescue these people who fall victim to the desert heat.

1.5.5 Checkpoints

Checkpoints are vehicle inspection points located along major highways leading away from the international border. The checkpoints are established to inspect vehicle traffic and intercept smuggling operations (Photograph 1-8). There are no permanent checkpoints in the Tucson Sector; however, permanent checkpoints are used in the Yuma Sector.

Photograph 1-8. Vehicle Checkpoint

1.5.6 Observation Points

Observation points are elevated locations overlooking routes used by IEs. These observation sites are used as platforms for infrared tracking scopes, skywatch towers, and other optical devices (Photograph 1-9). These locations are accessible by vehicle on established roads or trails. Skywatch towers are

Photograph 1-9. Observation Point

portable enclosed observation posts that can be elevated to observe the surrounding area and are generally located near high illegal traffic areas (Photograph 1-10). The skywatch towers are generally equipped with lights and infrared spoting scopes.

Photograph 1-10. Skywatch Tower

1.5.7 Rescue Beacons

Rescue beacons are used by the BP in the desert region of Arizona as a means to locate and rescue individuals who fall victim to the harsh desert environment. A rescue beacon is a 30-foot high pole mounted on a concrete block (approximately 4 to 9 square feet and approximately 2 feet high) placed on the ground surface (Photograph 1-11). The beacons are pre-assembled at the respective Sector's maintenance facility and placed along extant roads using a track on wheel-mounted lift. Installation of a rescue beacon does not require vegetation removal or soil excavation.

Photograph 1-11. Rescue beacon

Each pole is illuminated with a flashing blue or white light (maximum of 300 lumina per second) to enhance night visibility and free-mounted mirrors to enhance daytime visibility. The beacon light only operates at night. Solar panels located on the pole recharge the battery used to power the beacon and transmitter. Signs in English and Spanish direct people who are in need of assistance to press a red button that would send a signal to the BP. The BP will dispatch a helicopter to the location transmitting the signal. The presence of rescue beacons greatly increase the chances of the BP to rescue IEs who are suffering from exposure.

1.5.8 Temporary Camp Details

Temporary camp details, which are a part of Operation Desert Grip (discussed in detail in Section 1.6.1), within the Tucson and Yuma Sectors consist of one or two 27-feet camp trailer(s) or a semi-permanent structure (Yuma Sector) and amenities located in disturbed or semi-un-vegetated areas along established roads within public lands (Photograph 1-12). These roads

are dirt/gravel roads that are routinely used by the public, BP, NPS, and US Fish and Wildlife Service (USFWS) staff. The trailers and semi-permanent structures serve as administrative, mess, and housing quarters for BP agents, who are assigned to the camp details on 6 or 7-day shifts, depending on the BP station. The temporary camp details may be operational for as few as 120 days a year during the summer months or may need to be extended for longer periods of time if the number and frequency of attempted crossings and drive-throughs continue to increase in remote areas.

Photograph 1-12. Temporary Camp Site

1.5.9 Portable Lights

Portable lights allow the BP the flexibility to move lights to sites where the BP intelligence indicate increases in IE activities may occur. Portable light systems are an integral component of the detection process. Enhancing the agents' ability to see IEs during the night aids in their apprehension without increasing the number of agents in the field. The addition of portable light systems aid in the deterrence and detection of IEs, thus providing more effective control of high IE traffic areas and enhancing the safety of BP agents. A 6-kilowatt self-contained diesel generator powers these lights. Each unit typically has four 1000-watt lamps, totaling 4000 watts of illumination (Photograph 1-13). Portable lights will generally operate continuously every night and require refueling every day. The portable light systems can be towed to the desired location by the BP vehicles and are typically spaced 100 to 400 feet apart, depending upon topography and IE traffic patterns. Placement of the portable lights is estimated to temporarily affect approximately 100 square feet (*i.e.*, 10-feet x 10-feet). The area affected by illumination from the lights is limited to 200 feet from the light source, mostly in a southerly direction. Also, the lights have shields placed over the lamps to reduce or eliminate the effects of backlighting. Permanent lights are discussed in Section 1.8.3.

Photograph 1-13. Portable light

1.6 SPECIAL OPERATIONS

Special operations are conducted on an as-needed basis to address circumstances out of the ordinary. During the period of May to September 2001, the Ajo Station, in conjunction with the Yuma Sector, Wellton Station, maintained a 24-hour presence on the Los Vidrios Trail. This action was in response to increased drive through entries in the Los Vidrios Trail area.

1.6.1 Operation Desert Grip

The primary purpose of the operation is to assist in identifying and rescuing IEs who may be at risk of dying due to overexposure along the US-Mexico border. A secondary purpose of the operation is to reduce illegal immigration and drug trafficking along the border by increasing the BP's presence in these remote areas. Current BP operations within this area are minimal due to the distance, time involved to drive to this area, conditions of the roads into the area, and the limited manpower available from the Wellton and Ajo stations. As a result, within the past several years this area has become the route of choice for IEs. This area of the border is very remote and numerous walking groups ill-prepared for the 50 to 70-mile journey from the international border to the perceived safety of Interstate 8 fall victim to the harsh environment of the desert. IEs often deviate from established administrative roads and abandon disabled vehicles without regard to environmentally sensitive areas. Operation Desert Grip allows the BP to detect and deter IEs, prevent damage to valuable habitat on the CPNWR and OPCNM, and avoid deaths associated with the harsh desert environment.

The Tucson and Yuma Sectors initiated Operation Desert Grip on May 5, 2002. This operation has allowed the BP to establish a 24-hour presence along the US-Mexico border near the Los Vidrios Trail and El Camino Del Diablo. The original operation was a cooperative action where BP agents patrol an area from near Monument 180 east into the Ajo Station's AO at Monument 175 using El Camino Del Diablo as a base route. The agents patrol east and west along the El Camino Del Diablo, which is used as the primary operational route for this action (INS 2002e).

Under Operation Desert Grip in 2002, two camp detail sites were established, one in the Ajo Station's AO and one in the Wellton Station's AO. The Ajo camp detail site is located at Bates Well in the OPCNM and the Wellton camp detail is at the Los Vidrios camping area (Desert Grip camp detail) in the CPNWR. The camp details consisted of a 27-foot camp trailer parked in a disturbed area along an established road. Five agents were detailed at the temporary camp

details on 7-day shifts and worked two 12-hour shifts (INS 2002e). In 2003, seven additional temporary camp details were added in the Ajo (1), Casa Grande (4), and Tucson (2) stations' AOs (DHS 2003b and DHS 2003c). In 2004, the Yuma Sector Operation Desert Grip included one additional temporary camp detail at Tule Well and upgraded the existing Desert Grip camp detail to a 3,840 square-foot modular building. Other upgrades included a helipad and deep septic system (DHS 2004b). The Desert Grip camp detail would typically be operated from March through October. However, under the circumstance of increased crossings, drive-throughs or other similar illegal activity, the operation of the camps may occur 365 days per year. Operation Desert Grip will continue as long as illegal activities require it (DHS 2004b).

1.6.2 Operation Skywatch

During the summers of 2000 and 2001 the Tucson and Yuma Sectors initiated Operation Skywatch. The purpose of Operation Skywatch was to conduct aerial reconnaissance along the US–Mexico border to detect or rescue IEs during the extremely hot summer months (May/June to September). Operation Skywatch typically commences in early June and continues for approximately 125 days annually, if needed. The BP Tucson Sector maintains and operates two additional fixed-winged single engine aircraft and up to 20 helicopters (including the nine helicopters normally maintained by the Tucson Sector), reassigned on a temporary basis from the Yuma Sector and other BP Sectors, for aerial reconnaissance missions along the US-Mexico border in Arizona. The aircraft support personnel for the action generally include two supervisory aircraft pilots, 24 journeymen pilots, and up to 12 mechanics (INS 2002b). The BP has proposed to conduct Operation Skywatch annually. Environmental Assessments were prepared for the 2000, 2001, and 2002 Operation Skywatch programs (INS 2002b). Emergency Section 7 consultation with the USFWS, Phoenix Field Office was conducted for the 2000 Operation Skywatch program.

The aircraft have been primarily staged at the Tucson International Airport. However, a secondary staging site has been established at the Fort Huachuca Libby Airfield. Other staging areas might be required, depending on changing operational needs. The Yuma Sector will also assist in the Tucson Sector's SAR mission by providing two fixed-wing aircraft on an as-needed basis. During the operations, all aircraft provided by the Yuma Sector would remain under the operational control of the Yuma Sector and based out of Yuma. Effects to Federally protected species from air support provided by the Yuma Sector were addressed in a BA for that Sector (INS 1998). The legacy INS and the BP requested re-initiation of formal Section 7 consultation

for BP operations in the Yuma Sector in a letter dated 8 May 2002. The BP is currently preparing a BA for BP operations in the Tucson Sector. The emergency Section 7 consultation for the Operation Skywatch Program is included as part of the Yuma Sector formal consultation and will be included as part of the Tucson Sector formal consultation.

The helicopters would typically fly at an altitude of 100 to 200 feet above ground level (agl). Typical reconnaissance missions (*i.e.*, fixed wing aircraft) will be flown at 2,000 to 4,000 feet agl, but pilots may drop down to 200 feet agl to accurately evaluate IE conditions to determine if rescue operations are necessary. Shifts for the aircraft crew (pilots, mechanics, and other support personnel, as needed) would initially be 4:00AM to 10:00AM, 10:00AM to 4:00PM, 4:00PM to 10:00PM, and 10:00PM to 4:00AM to provide at least one aircraft aloft at any time (from Douglas/Naco to Ajo). Fixed wing aircraft would normally fly along the border corridor during daylight hours only and typically at higher altitudes. Most of the aerial reconnaissance efforts would be conducted over Pima, Santa Cruz, and Cochise counties (INS 2002b).

In support of the ABCI the BP has established an operational test of UAVs (previously discussed in Section 1.5.4) as part of Operation Skywatch. The initial test is being conducted to determine if UAVs would increase border surveillance effectivness and enhance the mission of the BP and, if so, to identify, evaluate, and quantify the resources required for, versus the benefits derived from, a long-term BP UAV program. The UAVs are deployed in remote areas of the US-Mexico border where resources and personnel are limited.

The mission of the UAVs is (1) to deter illegal entry through the public knowledge of their use, (2) to assist ground patrol units, track IEs, and facilitate apprehension, (3) to act in a rescue assist mode, and (4) to gather additional intelligence data, where possible, to transfer to the appropriate BP station.

The BP maintains and operates two Hermes 450 UAVs for aerial reconnaissance missions along the US-Mexico border. The Hermes 450 is designed to perform surveillance and reconnaissance missions under adverse environmental conditions. Support personnel for the UAVs include four pilots, 15 mechanics, and six data analysts detailed to the Tucson Sector for a period of approximately 125 days. These personnel are in addition to the BP air support staff maintained at the Libby Army Airfield. The UAVs are staged at and operate from the Libby Army Airfield, Fort Huachuca, Arizona. Libby Army Airfield is co-located with the Sierra Vista

Municipal Airport and serves as the operations, logistics, and maintenance center for BP UAV operations in support of the ABCI. Two maintenance buildings support UAV operations and a 1,500-foot extension to the southeastern-most taxiway serves as a UAV-only runway. The aircraft are operated from established aircraft operating areas that are equipped with proper fuel and hazardous materials (*e.g.* cleaning solvents, petroleum, oils, and lubricants) storage and handling facilities.

Flight operations are conducted along the US-Mexico border from the Ajo Station's AO eastward to the Arizona-New Mexico boundary, typically at altitudes of 9,500 feet above mean sea level (amsl) or higher. Flights are generally confined to Fort Huachuca Special Use Airspace and to designated Special Use Airspace and Military Operation Areas along the US-Mexico border. Flights along the border vary in times of operation but typically occur during the nighttime hours to allow the BP agent to make visual observations and assessments by taking advantage of the UAVs electro-optical and infrared sensor capabilities.

Several major organizations currently participate in UAV-related activities on Fort Huachuca. These organizations represent both testing and training in support of a variety of UAV platforms and include:

- 111th Military Intelligence (MI) Brigade, US Army Intelligence Center;
- White Sands Missile Range-Electronic Proving Ground;
- Intelligence Electronic Warfare Test Directorate;
- TRADOC System Manager (TSM), UAVs; and
- Naval Air Maintenance Training Group Detachment.

1.6.3 Arizona Border Control Initiative

On March 16, 2004, Mr. Asa Hutchison (DHS Under Secretary for BTS) announced the ABCI. The ABCI is a collaborative effort among DHS/BTS agencies (*e.g.*, BP, Transportation Security Administration (TSA), and Immigration and Custom Enforcement (ICE)) and local law enforcement agencies. The ABCI went into effect June 1, 2004. Implementation of the ABCI increased BP operations in the Tucson Sector. The Tucson Sector received enhancements as part of the ABCI. Enhancements included additional permanent and trainee agents, additional special operation personnel, additional permanent and detailed air assets, pilots, and aircraft mechanics, interior repatriation, and UAV mission support, as discussed in the following paragraphs.

1.6.3.1 Routine Patrols

The deployment of additional officers would increase the number of patrols on historically patrolled roads in the Tucson Sector. As part of the ABCI, the BP has proposed to use identified illegal trails and all administrative trails on public lands.

1.6.3.2 Off-road Operations

The deployment of additional officers would increase the potential for off-road operations in the Tucson Sector. As part of the ABCI, the BP has proposed the use of horses, ATVs, motorcycles, and four-wheel drive vehicles for tracking IEs off-road on public lands in circumstances that require immediate aid or action. Methods of off-road enforcement action will be coordinated with the affected land manager to minimize impacts.

1.6.3.3 Air Patrols

Additional aircraft and air support staff would also be assigned to the Tucson Sector. As part of the ABCI, UAVs, currently under operational testing, could be more widely used along the border in remote areas. The BP agents could potentially manage security of these remote areas more effectively and efficiently through prompt detection, interdiction, and apprehension of those who attempt to illegally enter or smuggle contraband or tools of terrorism across US borders.

1.6.3.4 Temporary Camp Details

In support of the ABCI five additional temporary camp details have been proposed in the Tucson and Yuma Sectors. A project specific NEPA document would be prepared for this action prior to implementation. The existing Desert Grip camp detail in the Yuma Sector has been improved to a 3,840 square foot or 172.5 square foot/person modular building in support of the ABCI (DHS 2004b).

1.7 TECHNOLOGY-BASED SYSTEMS

Technology-based systems include items that assist in the detection of illegal activities from remote locations. The following paragraphs discuss the typical technology-based systems used by the BP and how they are operated and maintained.

1.7.1 ISIS Components

Components of the CBP's Integrated Surveillance Intelligence Systems (ISIS) have become an integral part of the detection process and thereby enhance the BP agents' ability to apprehend IEs. The ISIS components include, but are not limited to, operational repeaters, unattended ground sensors, low-light television cameras, remote video surveillance (RVS) infrared cameras (Photograph 1-14), towers (and their connections to power and communication lines), and intelligent computer-aided detection equipment (ICAD). The BP is currently exploring the use of sensor operated radar systems to aid in the detection of IEs.

Photograph 1-14. RVS system

1.7.7.1 Operational Repeaters

Operational repeater locations are also used by the BP for radio and sensor communications. These locations are mountain or hilltop sites where antennas and electronic signal receiving and sending equipment are placed. Generally, several companies and organizations use these sites for similar purposes. The locations often have radio, television, and telephone equipment at the sites. Access to operational repeater sites is by established road or by helicopter.

1.7.7.2 Sensors

Sensors are small transmitters buried underground. Generally, sensors are located along illegal traffic corridors in areas previously disturbed by illegal traffic. Sensors have historically been used by the BP to improve apprehension efficiency by increasing the area that agents can protect from illegal entry. The use of sensors also reduces the number of agents needed to patrol a station's AO. Furthermore, strategically placed sensors help agents determine the number, direction, and speed of IEs entering the US. In some instances, sensors will malfunction, requiring additional maintenance. Sensors are generally serviced and placed by vehicle or by foot. Routine maintenance is conducted as required. Sensor locations may be changed as dictated by operational needs. The installation of sensors does not require the removal or disturbance of vegetation. Sensors are deployed by all the BP stations within the Tucson and Yuma Sectors. The location and specific number of sensors in use by each station are law enforcement sensitive information and are not provided in this public document.

However, a range of the number of sensors on inventory is provided for each station in the Tucson and Yuma Sectors in Section 2.

1.7.7.3 Remote Video Surveillance (RVS)

RVS systems allow the BP to remotely monitor the US border for illegal activity. They generally consist of two cameras (color and infrared) and microwave transmitters mounted on either a single pole or three-legged tower. The poles are generally 80 feet agl and the towers are generally 140 feet agl. Primary power is provided from existing electrical grids or propane powered generators. Propane powered generators are typically used as a secondary power source. Typical RVS designs requires 900 square feet or 2,500 square feet (30 feet x 30 feet or 50 feet x 50 feet, respectively) at each site depending on power source and associated facilities. Some larger RVS relay towers require up to 10,000 square feet (100 feet x 100 feet).

1.7.7.4 Remote Radar/Optical System

The BP is currently exploring the use of two types of remote radar/optical detection systems as a potential source for detecting and tracking illegal traffic. The first system consists of highly sensitive radar for detecting personnel, vehicles, and aircraft, a day/night optical system (video and infrared) cued by the radar for classification, and microwave transmitter. The system can be powered using an existing electrical grid, battery, or solar panels. If integrated into the ISIS program, this type of system would be located in remote areas along the US-Mexico border. The second system consists of a portable radar that can detect personnel and vehicles. This system does not have an optical detection system.

The various remote sensing systems can be used separately or in combination with several types of systems or with other, more routine, enforcement activities (*i.e.*, patrols). However, to be most effective, or for maximum optimization, the ISIS need to be utilized in conjunction with other infrastructure and resources.

1.8 INFRASTRUCTURE

Infrastructure is an essential part of the BP's operational capability to apprehend and, ultimately, deter IEs. Infrastructure can include items that impede entry, such as fences and vehicle barriers, or assist in apprehension, such as border roads, fences, and permanent lights. The following paragraphs discuss the typical infrastructure used by the BP.

1.8.1 Fences and Barriers

Fences are generally 10 to 15 feet high and usually constructed within 6 feet of the US-Mexico border. The designs depend upon the presence of other natural or man-made physical barriers, local water flows, local terrain, type and frequency of illegal traffic, and the BP station's enforcement strategy. Environmental analyses of fences and barriers precede any installation. Border fences have proven to be effective deterrents in numerous areas (*e.g.*, San Diego, Naco, Nogales, and Tecate), even though a single fence can be breached (since BP agents cannot protect the south side of the fence). Fences are typically constructed in urban and developed areas, particularly around ports of entry (POE), although some barriers and fences are installed in remote areas where there is high volume of illegal traffic. Military surplus steel landing mat fences have been the type of fence most commonly constructed along the border. Numerous other styles, including bollard, sandia, and steel picket fences, have also been used as shown in Exhibit 1-1.

Exhibit 1-1. Various Styles of Fences Used Along the Border

Picket or decorative fence

Sandia fence

Bollard fence

Landing mat fence

Vehicle barriers are temporary or permanent structures designed to prevent illegal entry of vehicles across the US-Mexico border. As the name implies, vehicle barriers are designed to impede illegal vehicle entry only; they do not necessarily preclude pedestrian or wildlife movement. The barriers are typically placed immediately adjacent to the north side of the US-Mexico border to minimize disturbance to wildlife and vegetation. Generally, impacts are minimal because existing road construction has previously disturbed these areas. Various styles of vehicle barriers that have been used previously are shown in Exhibit 1-2.

Exhibit 1-2. Various Styles of Vehicle Barriers Used Along the Border

Permanent Vehicle Barrier with 10-foot Fence Extensions

Temporary Barrier Constructed from Railroad Rails

Permanent Low Vehicle Barrier

Temporary Barrier Constructed from Pipe

1.8.2 Roads

Roads are probably the most important supporting infrastructure element for BP operational activities. The BP patrols improved and semi-improved roads, located on public and private property, and traveled by the general public and other agencies. These roads are primarily used as patrol routes, drag roads, and firebreaks. The roads patrolled by the BP constitute a fraction of the existing roads in the Tucson and Yuma Sectors. For purposes of this PEIS, roads are classified into four categories: private, public, administrative, and illegal. Private roads occur on private lands. Public roads are open to public traffic at least part of the year and can be improved or unimproved. Administrative roads are located on public lands (*e.g.*, OPCNM, Coronado National Forest, CPNWR, etc.) and are closed to public traffic. However, administrative roads (or trails) are used by the affected land manager for maintenance and management of the public lands. These roads can also be used by emergency vehicles (*e.g.*, fire suppression) during exigent circumstances. Illegal roads have been created by IEs and smugglers or by off-road vehicles used by the general public.

Photograph 1-15. Unimproved Border Road

The condition and maintenance of southwest border roads are, therefore, serious enforcement concerns. Many of the dirt roads within the border region of the Tucson and Yuma Sectors were about 24 feet wide when built. Over the years, vegetation has encroached to the point that some of these roads are now less than 10 feet wide (Photograph 1-15). In addition, many roads have experienced wind and water erosion that has resulted in impassable stretches (Photograph 1-16). The current condition of the deteriorated roads does not allow the safe or efficient use of some roads by the BP. Also, their condition prohibits adequate enforcement activities within some regions. Routine maintenance of these roads requires grading and leveling. Routine road

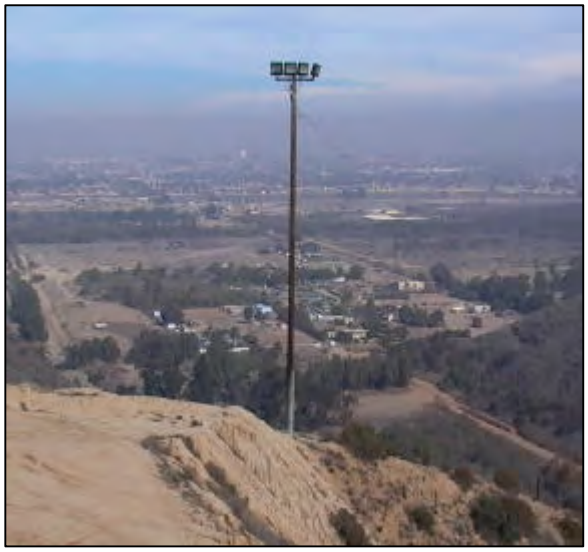
Photograph 1-16. Impassable Road Section

maintenance is required periodically and is part of normal BP operations. Improvements to the roads require new road material, drainage structures, and water/ditch crossings (Photograph 1-17). Any improvements to roads beyond routine maintenance activities will require site-specific environmental analysis.

Photograph 1-17. Border Road with Improvements

1.8.3 Permanent Lighting

Light systems are used by the BP along the US-Mexico border to aid in the deterrence and detection of IEs in the Tucson and Yuma Sectors. Permanent, fixed stadium-style lights are used in areas with utilities, specifically near POEs (Photograph 1-18); and portable, diesel generator lights are used in remote areas or areas lacking utilities. Permanent lights consist of stadium-type lights on approximately 30 to 80-foot poles with two to six lights per pole with lighting systems typically spaced about 150 to 350 feet apart, depending upon the local terrain and BP needs. Light bulbs can range from 400 to 1,500 watts. Two types of poles are used for most projects: wooden poles, encased in concrete and steel culverts (to prevent them from being cut down), or steel poles with concrete footings. Overhead or underground electrical lines power permanent lights. The lights are generally operated 10 to 12 hours, from dusk until dawn.



Photograph 1-18. Permanent light

Permanent and portable lighting systems can be used separately or in combination with other, more routine, enforcement activities (*i.e.*, patrols). However, to be most effective, or for maximum optimization, light systems need to be utilized in conjunction with other infrastructure and resources. No new lighting systems are installed without environmental analysis of the site location, applications, and controls of the proposed lighting system.

1.8.4 BP Operational Activities Summary

As discussed above, the operational activities can be categorized as technology aided or infrastructure dependent. Technical aided operational activities use technological tools (*i.e.*, RVS towers and portable lighting systems). Operational activities dependent on infrastructure include drag roads, routine patrols, and checkpoints. Table 1-1 outlines the activities discussed and their categorization.

Table 1-1. Summary of Technology Aided and Infrastructure Dependent BP Operational Activities

Action/Item	Operational Activity	Technology Aided	Infrastructure Dependent
Routine Patrols	X		X
Drag Road Operations	X		X
Off Road Operations	X		
Air Operations	X	X	X
Checkpoints	X		X
Observation Points	X	X	
Rescue Beacons	X	X	X
Temporary Camp Details	X		X
Portable Lights	X	X	
Operation Desert Grip	X		X
Operation Skywatch	X	X	X
ABCII	X	X	X
ISIS Components		X	X
Fences and Barriers			X
Roads			X
Permanent Lighting			X

1.9 REPORT ORGANIZATION

The operational activities discussed above are considered to have various degrees of impact upon the natural environment along the US-Mexico Border. Consequently, the BP elected to prepare the revised draft PEIS to determine the extent of these impacts.

This revised draft PEIS is organized into 10 major sections including this section.

- Section 2.0 will describe the stations and their operations, as well as the alternatives being considered;
- Section 3.0 will describe the affected environment of the project study area;

- Section 4.0 will discuss the environmental consequences of implementing the viable alternatives;
- Section 5.0 will discuss cumulative impacts from this and other proposed projects;
- Section 6.0 will discuss the proposed environmental design measures;
- Section 7.0 provides the references cited in the revised draft PEIS;
- Section 8.0 provides a list of the persons involved in the preparation of the PEIS;
- Section 9.0 provides a list of persons and agencies who received the revised draft PEIS; and
- Section 10.0 provides a list of acronyms used in the revised draft PEIS.

Appendix A includes supporting documents for the public involvement program such as copies of the scoping meeting notices and notices of availability published in local newspapers. Appendix B is a list of USFS sensitive species in the Coronado National Forest. Appendix C is a list of state protected species for the affected counties. Appendix D is a broad overview of southern Arizona prehistory and previous investigations within the study area. Appendix E is a list of National Register of Historic Places (NRHP) properties within the study area.

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SECTION 2.0
OVERVIEW OF EXISTING OPERATIONS AND ALTERNATIVES CONSIDERED

2.0 OVERVIEW OF EXISTING OPERATIONS AND ALTERNATIVES CONSIDERED

2.1 OVERVIEW OF THE TUCSON AND YUMA SECTORS

The following paragraphs describe the existing operations and infrastructure located within the Tucson and Yuma Sectors.

2.1.1 Tucson Sector

The Tucson Sector encompasses all counties in southern Arizona except for Yuma, La Paz, and Mojave, and is responsible for approximately 260 miles of the US-Mexico Border. The Sector is comprised of 8 BP stations. These stations include the following: Ajo, Casa Grande, Tucson, Nogales, Douglas, Naco, Sonoita, and Willcox. Most of these stations are located near the US-Mexico border. Existing infrastructure and operations within the stations that comprise the Tucson Sector are summarized in Table 2-1. The following subsections provide descriptions of the activities that occur within each of the station's AO. Although the stations operate independent of each other, operational needs may require the sharing of resources between stations. Included in the Tucson Sector's AO is the TON, which is home to over 25,000 indigenous people. The TON Police Department and Tribal Councils work with various Federal agencies assisting in the control of IEs.

During the spring and summer months, when temperatures in the desert can exceed 120 degrees Fahrenheit (°F) with very low humidity, IEs often suffer from exposure which can and does result in death. Consequently, agents must routinely conduct SAR operations in the Sector. In FY 2003, 121 SAR operations and 139 deaths were recorded in the Tucson Sector. To date 96 SAR operations and 99 deaths have been recorded in the Tucson Sector during FY 2004 (BP 2004a).

2.1.1.1 Ajo Station

The Ajo Station is located at Why, Arizona on State Route (SR) 85, about 30 miles north of the Lukeville, Arizona POE. There are up to approximately 130 agents currently assigned to the Ajo Station, including enhancements from the ABCI. The Ajo Station's AO consists of approximately 9,000 square miles, and approximately 80 linear miles of the US-Mexico border, all within Pima County. Within the Station's AO are the towns of Ajo, Gila Bend, Lukeville and

Table 2-1. Approximate Existing Operations/Infrastructure within the Tucson Sector

ACTIVITY	STATION								
	Ajo	Casa Grande	Tucson	Nogales	Sonoita	Naco	Douglas	Willcox	TOTALS
Miles of drag roads	20	81	35	9	23	7	78	0	253
Miles of roads patrolled	409	454	307	423	588	404	289	294	3168
No. of operational repeaters	2	3	4	1	2	1	2	1	16
Ground sensors	Up to 160	Up to 90	Up to 135	Up to 345	Up to 150	Up to 200	Up to 305	Up to 110	1495
No. of agents	Up to 130	Up to 265	Up to 240	Up to 500	Up to 110	Up to 390	Up to 515	Up to 121	2271
No. of RVS sites	0	0	0	10	0	9	13	0	32
Miles of portable generator lights (number of lights)	Stationary[1] (10)	0	0	3 (60)	0	10 (35)	47 (97)	0	60 (202)
Miles of stadium style lights	0	0	0	2	0	5	3	0	107
Miles of decorative fence	0	0	0	0.5	0	0	2	0	2.5
Miles of bollard fence	0	0	0	0	0	0	0.5	0	0.5
Miles of landing mat fence	0	0	0	3	0	5	4	0	12
Rescue beacons	6	0	0	0	0	4	0	0	10
Skywatch Towers	2	2	4	6	0	14	9	0	37
Temporary camp details	2	3	2	0	0	0	0	0	7
Miles of permanent vehicle barriers	14	0	0	0.1	0	6	1	0	21.1
Miles of temporary vehicle barriers	0	0	0	0	0	12			12
Miles of vertical fence extension	0	0	0	2	0	1	0	0	3
Air patrols	as needed	as needed	as needed	as needed	as needed	as needed	as needed	as needed	
Helipad	Yes	No	No	Yes	No	Yes	Yes	No	4 stations
Off road operations[2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8 stations
New station facility	Yes	No	No	No	Yes	Yes	No	Yes	4 stations
Horse patrols	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8 stations
Tactical Checkpoint	1	3	0	1	1	2	2	0	7 stations

[1] Portable lights are deployed at tactical checkpoint and temporary camp details.

[2] Off-road operations typically involve foot pursuit of IEs; however, ATVs, motorcycles, bicycles, and four-wheel drive vehicles can also be operated off-road in the pursuit of IEs.

Note: Values were derived from previous environmental analysis and geographic information systems data of existing BP infrastructure as of October 1, 2003. Totals have been rounded to the nearest integer

Why. The Ajo Station's AO includes the western region of the TON and portions of the CPNWR, OPCNM, and Barry M. Goldwater Range (BMGR). The BMGR is a multi-purpose gunnery range operated jointly by the US Air Force (USAF) and the US Marine Corps (USMC). In the Ajo Station's AO, the BMGR is controlled by the USAF and is known as the BMGR East. The terrain of the Ajo Station is characterized by arid and rural desert with valleys, arroyos and mountains. The majority of mountains in this area trend in a northwest to southeast direction. Valleys are relatively flat and sparsely vegetated allowing vehicles to enter the US in most areas without the need for roads.

There are four areas where the majority of IEs attempt to enter the station's AO: 1) Lukeville POE area, 2) Menagers Dam, 3) Quitobaquito Springs, and 4) Papago Farms. The majority of the station's resources are concentrated in these four areas. Figure 2-1 depicts the locations of activities and current infrastructure within the Ajo Station's AO. The BP activities within the Ajo Station's AO are discussed below and are presented in Table 2-1.

Patrols:

Roads patrolled consist of improved and semi-improved roads within the station's AO, including SR-85, SR-86, FR-1, and FR-24. Public roads on the CPNWR and OPCNM are routinely patrolled by BP agents. The roads are numbered in the Key to Figure 2-1. Patrols are conducted continuously; however, the patrol routes and frequency change in response to IE traffic patterns. Approximately 20 miles of drag roads are prepared in the Ajo Station's AO, as needed.

In support of the ABCI, the Ajo Station proposes the use of identified illegal roads and all administrative trails on the CPNWR and OPCNM. Use of these routes would enhance the BP agents ability to track and locate IEs, enhance SAR operations, and the presence of BP agents would act as a deterrence.

Tactical Checkpoints:

The Ajo Station currently operates one tactical traffic checkpoint on SR 85 at Milepost 57.4, and a second site on SR 85 is currently being analyzed in an environmental assessment.

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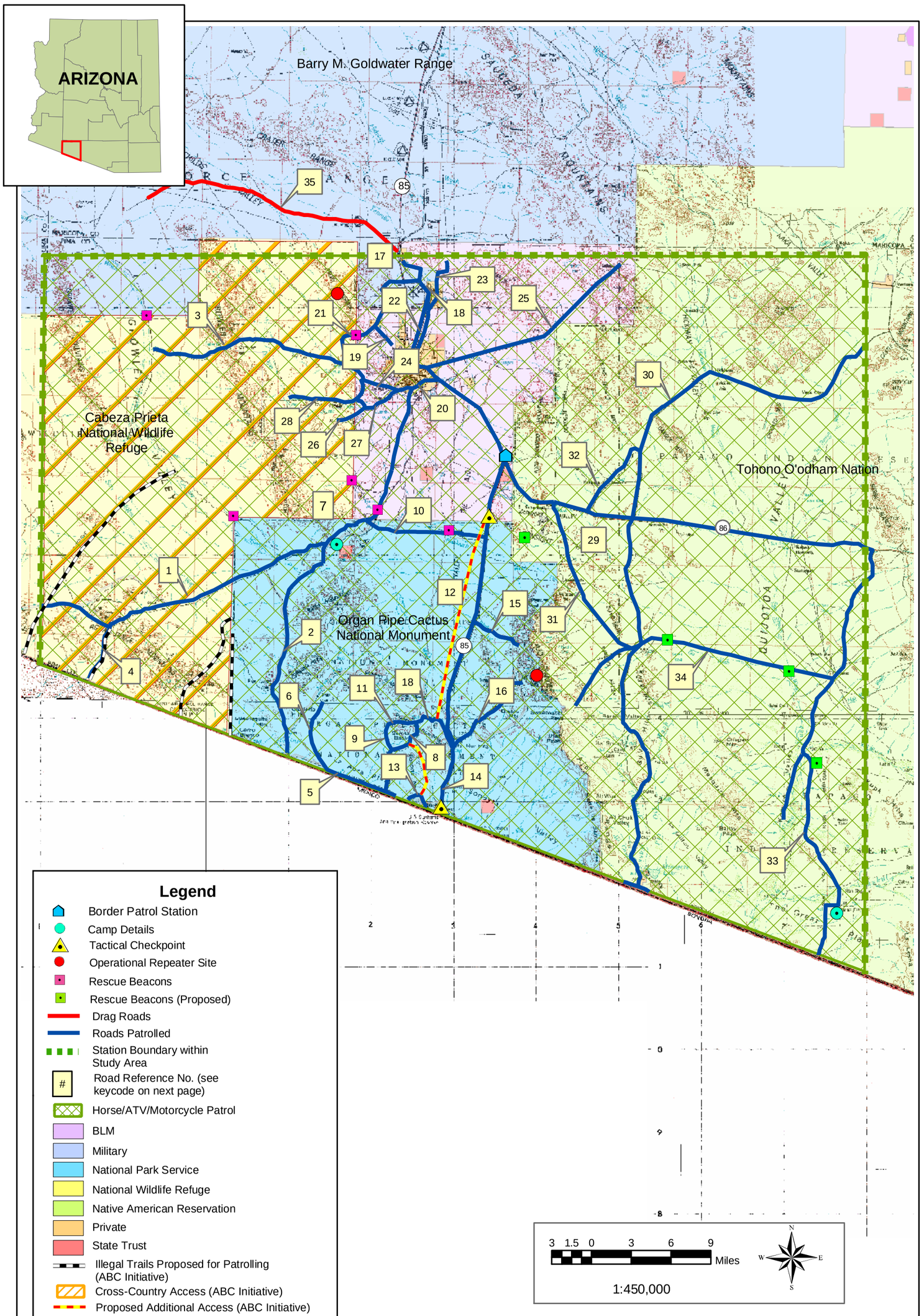

Source: Ajo & Lukeville USGS 1:250,000 topographic quads

NOTE: Road designated as "roads patrolled" are subject to operational needs

Figure 2-1: Border Patrol Activities within the Ajo Station's Area of Operations

GSRC GULF SOUTH RESEARCH CORPORATION

Date: September 2004

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Key to Figure 2-1: Ajo Station

Road Number	Road Name
1	El Camino del Diablo
2	Pozo Nuevo
3	Charlie Bell Pass
4	Davidson Canyon Road
5	Border Road
6	Organ Pipe West Boundary Fence Road
7	Bates Well Road
8	Victoria Mine Road
9	Senita Basin Road
10	59.4 Crossover Road
11	North Puerto Blanco
12	State Route 85
13	South Puerto Blanco
14	Camino de Dos Republicos
15	Alamo Canyon Road
16	Ajo Mt. Drive
17	Mead Road
18	Country Club Road
19	Rasmussen Road
20	Darby Road
21	Child's Mt. Road
22	Well Road
23	Range Road
24	Scenic Loop Road
25	Pipeline Road
26	Chico Shunie Road
27	Mica Mine Road
28	Adobe Well Road
29	State Route 86
30	Indian Route 1
31	Indian Route 5
32	Indian Route 7
33	Indian Route 21
34	Indian Route 28
35	Range 4 Drag Road

Off-Road Operations:

Off-road operations conducted in the station's AO include agents on foot, motorcycle, four-wheel drive vehicles, horses, and ATVs. Agents use the ATVs and motorcycles for SAR missions on BLM lands, CPNWR, TON and OPCNM when needed. In support of the ABCI, the Ajo Station proposes cross-country horse and motorcycle/ATV access on the CPNWR (see Figure 2-1). Horses and motorcycles/ATVs would be used to the extent practicable to track IEs off-road in circumstances that require immediate action. Cross-country access would be limited to following the sign of IEs.

Air Operations:

Air operations within the station's AO are infrequent and destinations are dependent upon the travel route of IEs. A helipad and refueling station are located at the Ajo Station facility. Flights generally trend along Growler Valley and are usually related to SAR missions for lost and/or distressed IEs, with most flights originating from the Yuma Sector to the west.

Sensors:

The Ajo Station maintains an inventory of up to 160 sensors. Sensors are routinely maintained as a part of operational activities.

Observation Points:

The Ajo Station has a current inventory of two skywatch towers. The towers are deployed in disturbed areas near high traffic areas.

Rescue Beacon:

There are currently six rescue beacons in operation within the Ajo Station's AO, located on the CPNWR, OPCNM, and adjacent BLM lands. Four additional rescue beacons have been proposed for placement on the TON within the Ajo Station's AO. Approval from the affected TON Legislative Districts would need to be secured prior to placing rescue beacons on the TON. The environmental analysis for these rescue beacon sites would need to be completed upon approval from the affected TON Legislative Districts.

Temporary Camp Details:

The Ajo Station currently has two established temporary camp details; one on the OPCNM and another on the TON. The temporary camp detail sites are located on previously disturbed

areas. The Ajo and Casa Grande Stations jointly run camp details on the TON, located in the Ajo Station's AO near the Papago Farms area, which is discussed in Section 2.1.1.2. Two additional temporary camp detail sites have been identified and proposed in support of the ABCI.

Portable Lights:

Portable lights are used at the tactical checkpoint on SR 85 and the two temporary camp details in the Ajo Station's AO. A total of approximately 10 lights are used at these locations.

ISIS Components:

Two operational repeater sites are currently maintained in the Ajo Station's AO.

2.1.1.2 Casa Grande Station

The Casa Grande Station's AO is approximately 7,000 square miles, mainly located in western Pima County. Including enhancements from the ABCI, there are currently up to 265 agents assigned to the Casa Grande Station. The station's AO encompasses approximately 40 linear miles of remote international boundary entirely within the TON. The station's AO includes metropolitan areas such as Casa Grande and Chandler, Arizona, and the TON. The station's AO is relatively flat desert terrain with numerous washes at the border and hills are scattered throughout the area. Vegetation is sparse in the open and heavy in the washes. There are no POEs within the station's AO, and the closest town to the border is Vamori, Arizona. During the spring and summer months, when temperatures in the desert can exceed 120^{o}F with very low humidity, IEs sometimes suffer from exposure. Consequently, agents must conduct SAR operations. BP operational activities within the station's AO are presented in Table 2-1. Figure 2-2 depicts the enforcement activities and current infrastructure within the Casa Grande Station's AO.

Patrols:

The Casa Grande agents patrol approximately 454 miles of public and unimproved roads. Approximately 81 miles of drag roads, with the largest segment located along the US-Mexico border, are currently maintained in the Casa Grande Station's AO. The roads are numbered in the Key to Figure 2-2.

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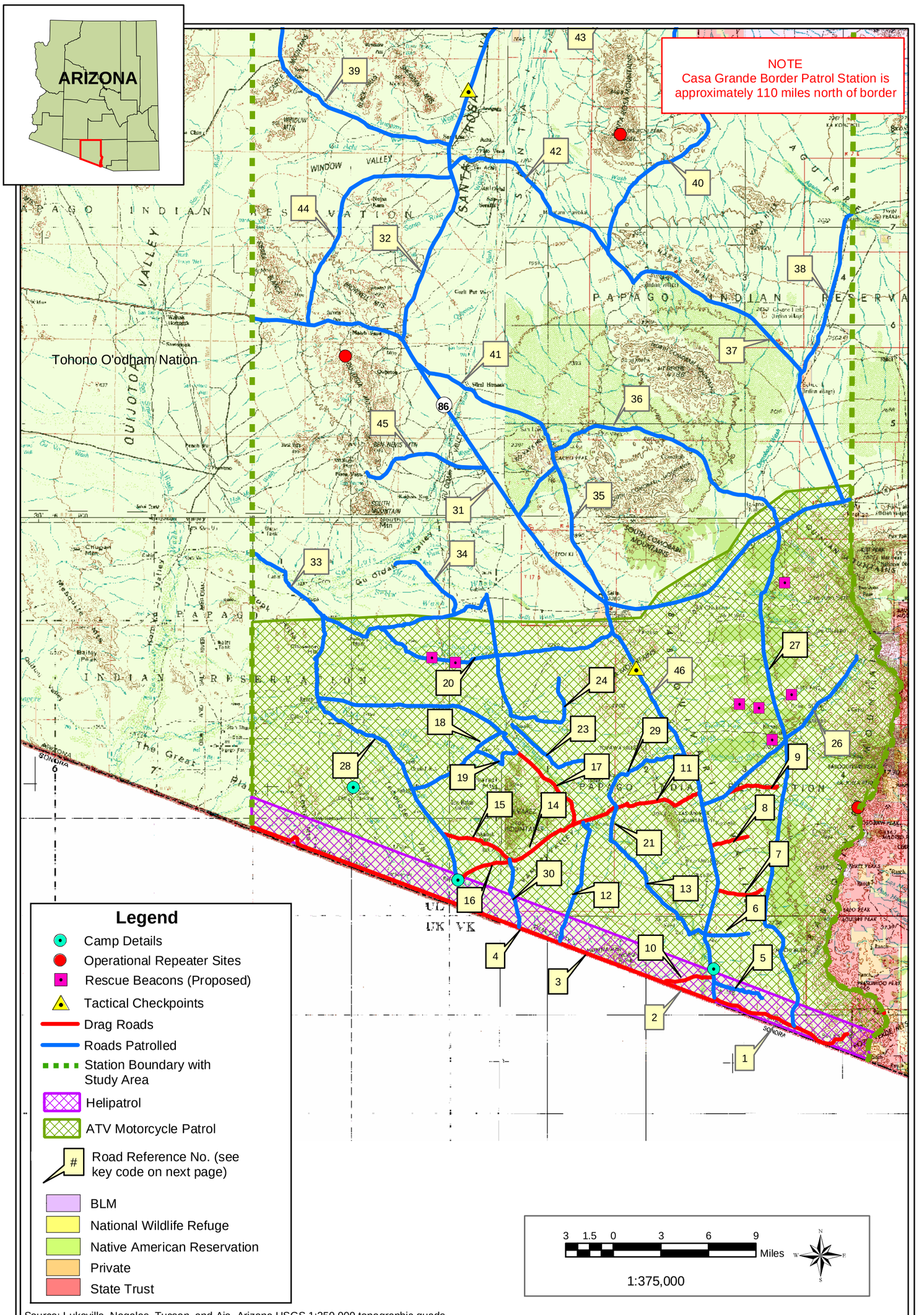

Figure 2-2: Border Patrol Activities within the Casa Grande Station's Area of Operations

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Key to Figure 2-2: Casa Grande Station

Road Number	Road Name
1	61 Drag
2	62 Drag
3	63 Drag
4	88-89 Drag
5	No Hair Drag
6	San Miguel Drag
7	Huarache Drag
8	Signcut Drag
9	Baboquivari Drag
10	Miles Drag
11	16 Drag
12	Wamul Tank Road
13	Horseshoe Well Drag
14	Vamori-Itak Ruins Drag
15	Itak Ruins-Tecolote Drag
16	Itak-Toros Ranch Drag
17	Vamori-Cowlic Drag
18	Cowlic-Aluminum Gate
19	Aluminum Gate-Mule Deer Gate
20	Pablo Charco Drag
21	Federal Route 2-Bone Gate
22	Cowlic-Bone Gate
23	Harper's Drag
24	Federal Route 20-Federal Route 31
25	18 Drag
26	EK Ranch Road
27	Trading Post Road
28	Federal Route 18-Kots Kug Ranch
29	Bone Gate-Topawa
30	Toros Gate-Tecolote
31	Highway 86
32	Federal Route 15
33	Federal Route 24
34	Chicago Windmill
35	Airport to Nolia
36	Nolia to FR 30
37	FR 34 to Quevo Well
38	FR 35
39	FR 34 to Ventana
40	Quevo Well to GAR
41	San Luis to Quisotoa Trading Post
42	Santa Rosa to Silnakya
43	N. Komilik to Silverbells
44	Covered Wells to Santa Rosa
45	South Mountain Pass
46	FR 19

Tactical Checkpoints:

There are currently three tactical checkpoints located within the station's AO on the TON. The tactical checkpoints are located at Milepost 21 on Federal Route (FR) 19, south of North Komelik on FR 15, and near Anegam on FR 15.

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO.

Air Operations:

The Casa Grande Station does not maintain a helipad or refueling facilities for helicopters. Routine helipatrols occur along the international boundary within the TON (see Figure 2-2). Deviations from this travel route are only made to follow tracks, persons, or vehicles that have entered the US illegally.

Helicopters also assist in SAR missions involving distressed persons. Flights are infrequent and dependent upon Tucson Sector priorities and pilot availability

Sensors:

The Casa Grande Station maintains an inventory of up to 90 sensors as part of its operations. The routine maintenance of sensors is conducted as a part of these operations.

Observation Points:

The Casa Grande Station maintains an inventory of two skywatch towers. The skywatch towers are deployed in disturbed near areas of high illegal traffic.

Rescue Beacons:

Currently, rescue beacons are not utilized in the Casa Grande AO. However, seven rescue beacons have been proposed for placement on the TON (see Figure 2-2). Approval from the affected TON Legislative Districts would need to be secured prior to placing rescue beacons on the TON. The environmental analysis for these rescue beacon sites would need to be completed upon approval from the affected TON Legislative Districts.

Temporary Camp Details:

The Casa Grande Station operates three temporary camp details on the TON. One additional temporary camp detail on the TON at Papago Farms is located in the Casa Grande Station's AO; however, the temporary camp detail is operated by the Ajo Station (see Figure 2-2). The camp details are located in previously disturbed areas. These temporary camp details are operated in the same manner as previously described.

Portable Lights:

Currently portable lights are not deployed in the Casa Grande Station's AO.

ISIS Components:

Three operational repeaters are located within the Casa Grande Station.

2.1.1.3 Tucson Station

The Tucson Station encompasses portions of Santa Cruz and Pima counties. There are currently up to 240 BP agents, including the ABCI enhancements, authorized for the Tucson Station. The AO for this station encompasses approximately 4,000 square miles including approximately 26 linear miles of the US-Mexico border stretching from the Pima/Santa Cruz County line west to the Baboquivari Mountains. The station includes the metropolitan area of Tucson. Large arid deserts, agricultural valleys and rugged mountains characterize the terrain of this station's AO.

Tucson Station operations are divided into three phases. The first phase is the responsibility for the immediate border area with the majority of resources directed to those areas. The second phase entails the responsibility for backing-up the Douglas, Naco, Sonoita, and Nogales stations. The third phase is special operations, such as criminal alien prosecutions, intelligence, and narcotics prosecutions. During the spring and summer months, when temperatures in the desert can exceed 120^{o}F with very low humidity, IEs sometimes suffer from exposure. Consequently, agents must conduct SAR operations. The BP operational activities within the Tucson Station's AO were presented previously in Table 2-1 and are discussed in the following paragraphs. Figure 2-3 depicts current BP activities in the southern portion of the Tucson Station's AO.

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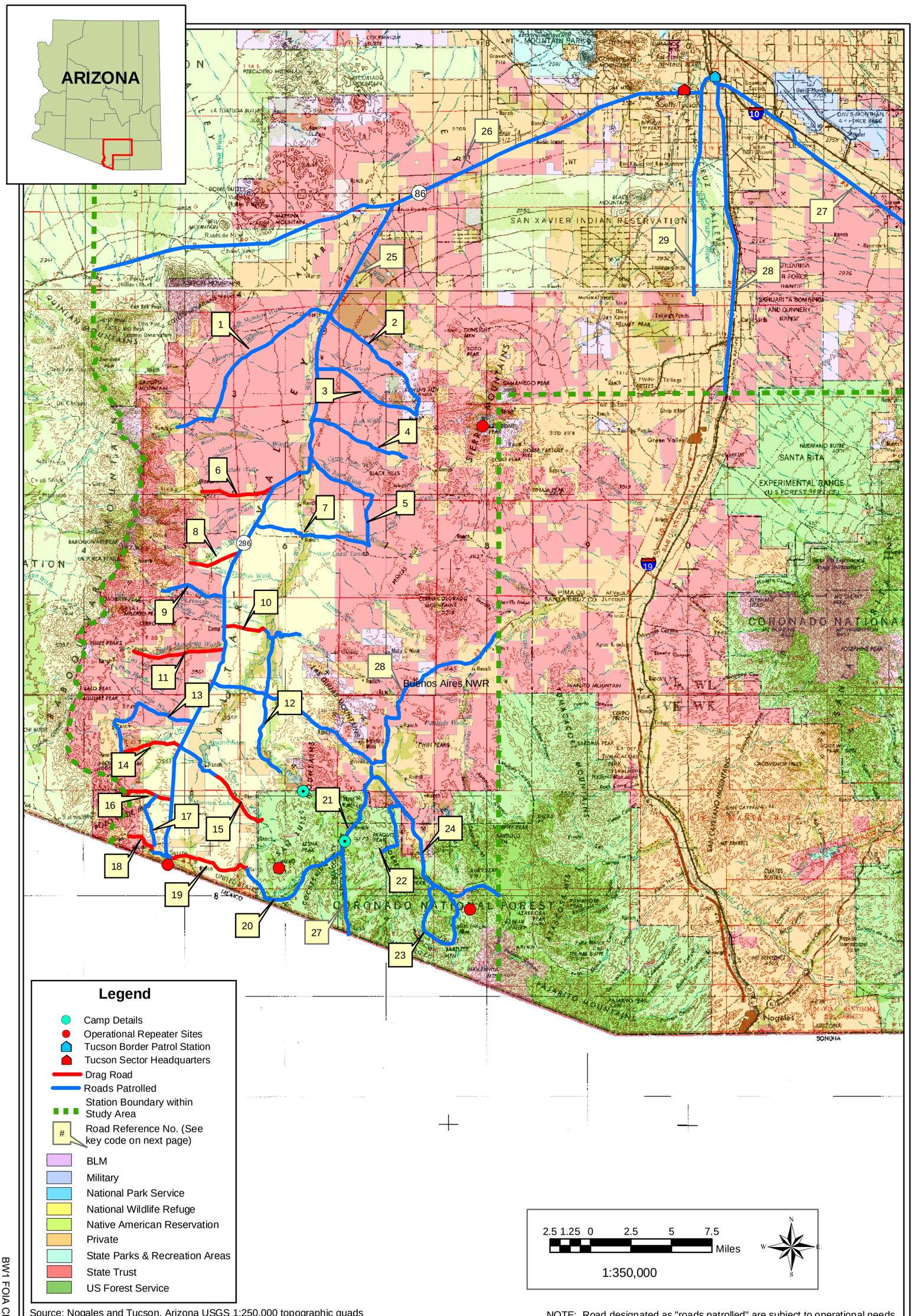

Source: Nogales and Tucson, Arizona USGS 1:250,000 topographic quads

NOTE: Road designated as "roads patrolled" are subject to operational needs

Figure 2-3: Border Activities within the Tucson Station's Area of Operations

Date: September 2004

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Key to Figure 2-3: Tucson Station

Road Number	Road Name
1	Anvil Ranch Road
2	Shaw Access Road
3	Wild Horse Ranch Road
4	Palo Alto Road
5	Black Hills Road
6	Elkhorn Ranch Road (Drag)
7	Pozo Nuevo Road
8	Brown Canyon Road (Drag)
9	Thomas Canyon Road
10	Secundino Road
11	Santa Margarita Ranch Road (Drag)
12	High Gates Road
13	Joe King Ranch Road
14	Aros Ranch Road (Drag)
15	B.A. Drag
16	Sierra Vista Road (Drag)
17	Connect Road
18	De La Osa Ranch Road (Drag)
19	Garcia Ranch Road (Drag)
20	Fresnal Canyon Road (FS-601)
21	Tres Bellotas Road (FS-216)
22	Yellow Jacket Road
23	Warsaw Canyon Road (FS-217)
24	Ruby Road (FS-39)
25	Highway 286
26	Highway 86
27	Tres Bellotos Road
28	Arivaca Road

Patrols:

Agents at the Tucson Station patrol approximately 307 miles of improved and unimproved roads within the station's AO. These roads primarily run east/west and branch off from State Highway 286. Approximately 35 miles of drag roads are currently maintained in the Tucson Station's AO. The Key to Figure 2-3 lists each of the Tucson Station's roads.

Tactical Checkpoints:

Currently, no tactical checkpoints are operated within the Tucson Station's AO.

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO. Off-road operations occur daily during all shifts when tracking IEs cross-country.

Air Operations:

The Tucson International Airport and Fort Huachuca Libby Airfield/Sierra Vista Airport are currently utilized as bases for air operations within the entire Tucson Sector. There are no specific flight routes or destinations within the Tucson Station. Air operations in this area are primarily used to assist ground units in the interdiction of IEs and narcotics.

Sensors:

The Tucson Station maintains an inventory of up 135 sensors as part of its routine operations. The routine maintenance of sensors is conducted as a part of these operations.

Observation Points:

The Tucson Station maintains an inventory of four skywatch towers.

Rescue Beacons:

Currently rescue beacons are not deployed in the Tucson Station's AO. Two potential sites were identified; however, the landowner would not grant permission to use the sites.

Temporary Camp Details:

Two temporary camp details are operated on the Coronado National Forest in the Tucson Station's AO. The temporary camp details are operated in the same manner as previously described.

Portable Lights:

Currently portable lights are not deployed in the Tucson Station's AO.

ISIS Components:

Four operational repeaters are maintained in the Tucson Station's AO.

2.1.1.4 Nogales Station

The Nogales Station encompasses approximately 27 linear miles of the US-Mexico border. Currently up to 500 BP agents are assigned to the Nogales Station, including authorized positions and enhancements under the ABCI. The BP activities within the Nogales Station's AO were presented in Table 2-1 and are discussed in the following paragraphs. Figure 2-4 depicts the locations of operational activities and current infrastructure within the Nogales Station's AO.

Patrols:

Agents patrol approximately 423 miles of semi-improved and unimproved roads on private and public lands within the Nogales Station's AO daily. These roads are primarily concentrated in the area around the City of Nogales. The roads are numbered in the Key to Figure 2-4. Approximately 9 miles of drag roads are maintained in the Nogales Station's AO.

Tactical Checkpoints:

The Nogales Station currently operates one tactical checkpoint outside the City of Nogales on Interstate 19 (I-19), which is alternated between two sites.

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO.

Air Operations:

The Nogales Border Patrol Station has a helipad and refueling capabilities. In addition, the Nogales International Airport is also utilized for air operations. Part of the border within the station's AO is patrolled by air due to the rugged terrain, with a concentrated effort in the area 1 mile east and 1 mile west of the City of Nogales. Helicopters also patrol along I-19 from Tucson to Nogales as needed.

Sensors:

The Nogales Station maintains an inventory of up to 345 sensors as part of its routine operations. The routine maintenance of sensors is conducted as a part of these operations.

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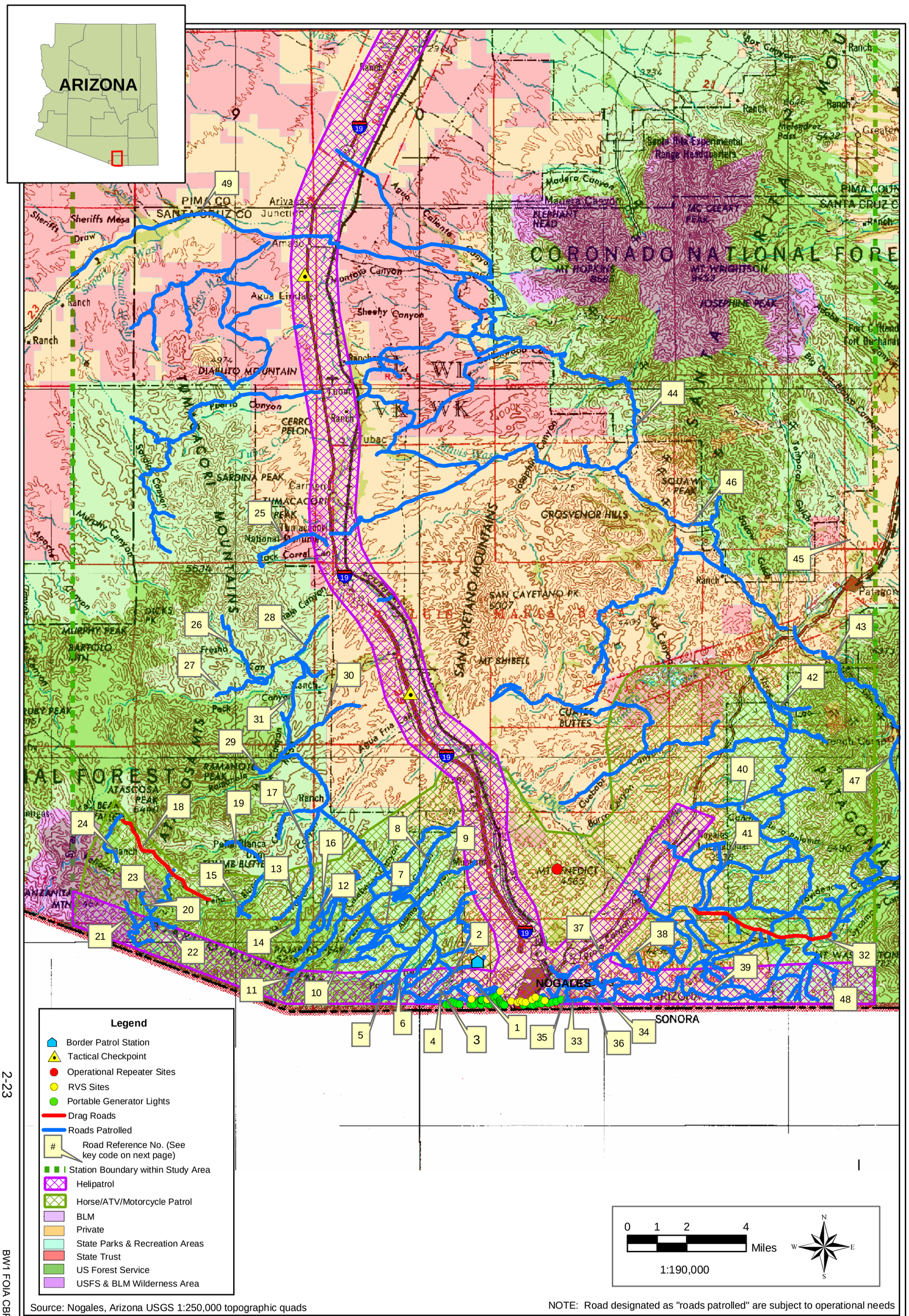

Figure 2-4: Border Patrol Activities within the Nogales Station's Area of Operations

Date: September 2004

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Key to Figure 2-4: Nogales Station

Road Number	Road Name
1	W. Border Road
2	50's Ridge Road
3	Mariposa Wash Road
4	60's Ridge Road
5	Forrest Service (FS) Road 4210 (Potrero Canyon)
6	FS Road 4207 (Green Canyon)
7	FS Road 4206 (3 Gates/Alamo)
8	FS Road 616 (Bellatosa)
9	FS Road 4204 (Pesquiera Canyon)
10	FS Road 623 (Pesquiera Canyon)
11	FS Road 222
12	FS Road 4202 (Calabasa Canyon Road)
13	FS Road 4203 (Walker Canyon left fork)
14	FS Road 221 (Walker Canyon right fork)
15	FS Road 4195 (Pena Blanca)
16	FS Road 4201 (Calabasas Camp/Ridge Road)
17	FS Road 223 (Walker Wash Road)
18	FS Road 39 (Dirt portion of Ruby/Drag Road
19	FS Road 4200 (Bellota Tank Road)
20	FS 4146 Tinaja Canyon/Bear Valley
21	FS 4189 Tinaja/Manzanita Peak
22	FS 4182 (Summit/Alamo West)
23	FS Road 39A (Summit Motorway)
24	FS Road 115 (Bear Valley)
25	FS Road 4145 (Rock Corral)
26	FS Road 4148 (Javelina Canyon)
27	FS Road 4149 (Peck Canyon dirt portion)
28	FS Road 4151 (Negro Canyon)
29	FS Road 4191 (Wise Mesa)
30	FS Road 4192 (Wise Mesa to Agua Fria)
31	FS Road 4198 (Ramanote Wells)
32	FS Road 61 (Duquesne Road/Drag Road)
33	"C" Road
34	"A" Road
35	Kimmer Road
36	Dairy Road
37	Live Oak
38	Hinds Ridge Road
39	Buena Vista Ranch Road
40	FS Road 235 (Paloma Road)
41	FS Road 125 (Wild Hog)
42	FS Road 215 (3R Road)
43	FS Road 812 (Flux Canyon)
44	FS Road 143 (Solero Ranch Road)
45	FS Road 72 (Temporal Gulch)
46	FS Road 144 (Squaw Gulch)
47	FS Road 49 (Harshaw Road)
48	FS Road 128 (Washington Camp Road)
49	Arivaca Road

Observation Points:

A total of six skywatch towers are maintainted in the Nogales Station's AO.

Rescue Beacons:

Currently, rescue beacons are not located in the Nogales Station's AO.

Temporary Camp Details:

No temporary camp details are currently deployed in the Nogales Station's AO.

Portable Lights:

Currently approximately 3 miles of portable lights (60 lights) are deployed along the international border in the Nogales Station's AO.

ISIS Components:

The Nogales Station currently operates one operational repeater. Currently, 10 RVS sites are operated in the Nogales Station's AO.

Other Infrastructure:

Currently, the Nogales Station maintains approximately 2 miles of stadium-style lights, approximately 3 miles of landing mat fence, 0.1 mile of vehicle barriers, and 0.5 miles of decorative fence.

2.1.1.5 Sonoita Station

The Sonoita Station's AO encompasses approximately 1,000 square miles and approximately 25 linear miles of the US-Mexico border within Santa Cruz County. The area extends from the Patagonia Mountains in the west to the Huachuca Mountains in the east. The northern border of the station's AO is approximately 6 miles south of I-10. Including enhancements under the ABCI, there are currently up to 110 BP agents authorized for the Sonoita Station. The station has a rough, rocky, mountainous terrain and rolling hills with deep canyons interspersed. Elevations within the station's AO range from 4,000 to 9,500 feet amsl. The station's AO is largely rural with cattle ranches and private residences intermixed with National Forest, BLM, Department of Defense (Fort Huachuca) and state lands.

The BP activities within the station's AO were presented previously in Table 2-1 and are discussed below. Figure 2-5 depicts the locations of current infrastructure within the Sonoita Station's AO.

Patrols:

Agents at Sonoita Station currently patrol approximately 588 miles of semi-improved and unimproved roads on a daily basis. There are approximately 23 miles of drag roads within the station's AO. Drag road preparation is conducted as needed. The roads are numbered in the Key to Figure 2-5.

Tactical Checkpoints:

One tactical checkpoint is operated on SR 83 at Milepost 40.8 within the Sonoita Station's AO.

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO.

Air Operations:

Helicopter flights in the station's AO originate from Sierra Vista, Nogales or Tucson and are used to assist and support agents. Helicopter flights occur throughout the station's AO in response to IE and narcotic trafficking patterns; however, there are no set flight paths. The Sonoita Station can potentially utilize four existing helicopter landing pads in the Huachuca Mountains within Fort Huachuca and proposes the use of three helicopter landing pads within the Miller Peak Wilderness Area for the purpose of inserting agents (see Figure 2-5).

Sensors:

The Sonoita Station maintains an inventory of up to 150 sensors as part of its operations. Sensors are routinely maintained as a part of operational activities.

Observation Points:

The Sonoita Station does not maintain an inventory of skywatch towers.

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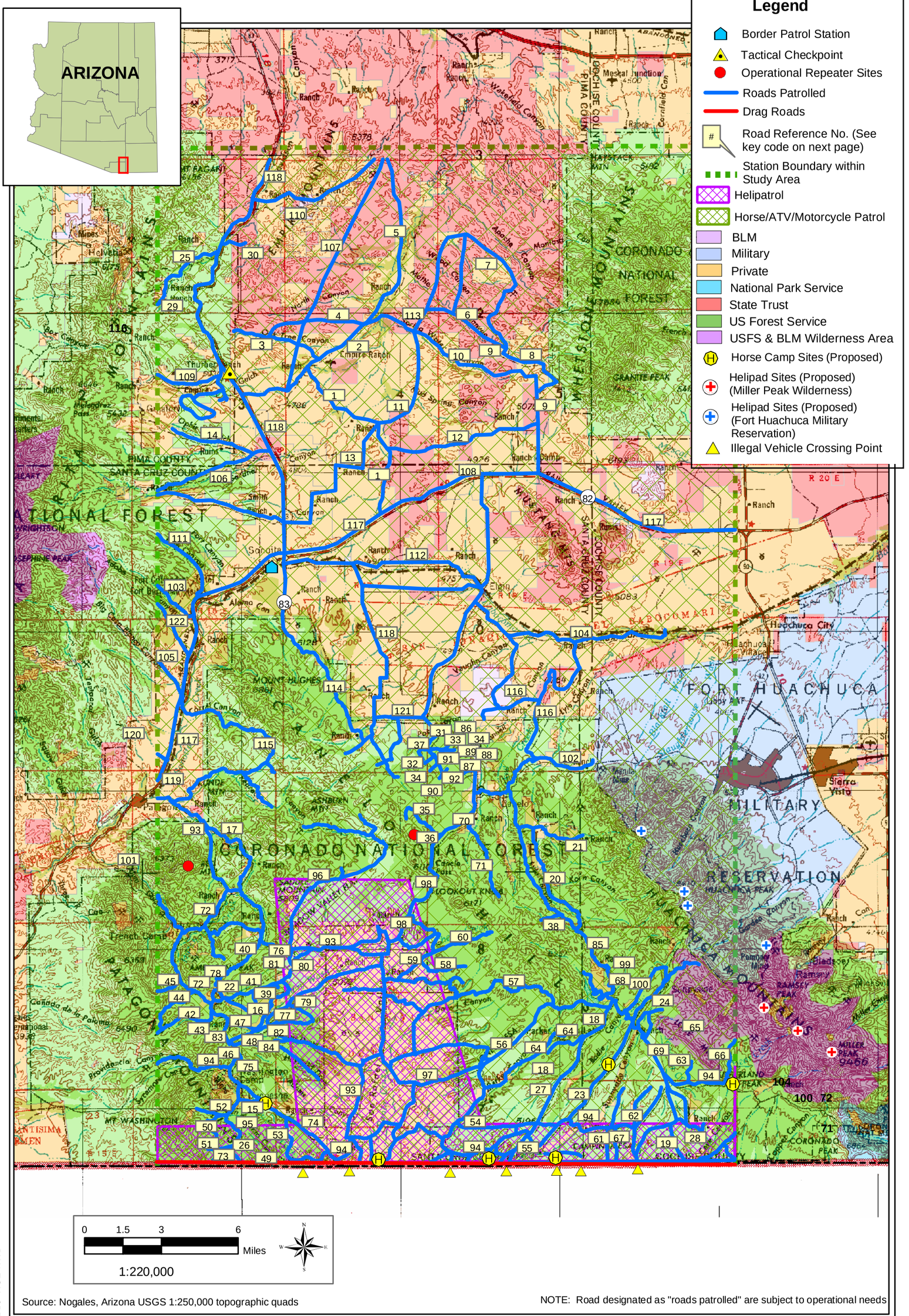

Source: Nogales, Arizona USGS 1:250,000 topographic quads

NOTE: Road designated as "roads patrolled" are subject to operational needs

Figure 2-5: Border Patrol Activities within the Sonoita Station's Area of Operations

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Date: September 2004

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Key to Figure 2-5: Sonoita Station

Road Number	Road Name
1	Empire Cienega 900
2	Empire Cienega 901
3	Empire Cienega 902
4	Empire Cienega 905
5	Empire Cienega 907
6	Empire Cienega 908
7	Empire Cienega 910
8	Empire Cienega 911
9	Empire Cienega 912
10	Empire Cienega 913
11	Empire Cienega 914
12	Empire Cienega 916
13	Empire Cienega 919
14	Fish Canyon
15	Forest Service Road 128
16	Forest Service Road 134
17	Forest Service Road 139
18	Forest Service Road 194
19	Forest Service Road 196
20	Forest Service Road 201
21	Forest Service Road 202
22	Forest Service Road 214
23	Forest Service Road 227
24	Forest Service Road 228
25	Forest Service Road 231
26	Forest Service Road 4015
27	Forest Service Road 4016
28	Forest Service Road 4019
29	Forest Service Road 4058
30	Forest Service Road 4061
31	Forest Service Road 4617
32	Forest Service Road 4619
33	Forest Service Road 4620
34	Forest Service Road 4622
35	Forest Service Road 4626
36	Forest Service Road 4627
37	Forest Service Road 4635
38	Forest Service Road 4636
39	Forest Service Road 4677
40	Forest Service Road 4690
41	Forest Service Road 4691
42	Forest Service Road 4695
43	Forest Service Road 4695A
44	Forest Service Road 4698
45	Forest Service Road 4701
46	Forest Service Road 4704
47	Forest Service Road 4712
48	Forest Service Road 4713
49	Forest Service Road 4716
50	Forest Service Road 4718
51	Forest Service Road 4719
52	Forest Service Road 4720
53	Forest Service Road 4722
54	Forest Service Road 4729
55	Forest Service Road 4730
56	Forest Service Road 4732
57	Forest Service Road 4735
58	Forest Service Road 4736
59	Forest Service Road 4740
60	Forest Service Road 4742
61	Forest Service Road 4764
62	Forest Service Road 4765
63	Forest Service Road 4770
64	Forest Service Road 4771
65	Forest Service Road 4772
66	Forest Service Road 4774
67	Forest Service Road 4777
68	Forest Service Road 4783
69	Forest Service Road 48
70	Forest Service Road 4889
71	Forest Service Road 4892
72	Forest Service Road 49
73	Forest Service Road 4909
74	Forest Service Road 4911
75	Forest Service Road 5508
76	Forest Service Road 5535
77	Forest Service Road 5539
78	Forest Service Road 5540
79	Forest Service Road 5541
80	Forest Service Road 5561
81	Forest Service Road 5563
82	Forest Service Road 5569
83	Forest Service Road 5589
84	Forest Service Road 5593
85	Forest Service Road 5609
86	Forest Service Road 5621
87	Forest Service Road 5622
88	Forest Service Road 5624
89	Forest Service Road 5626
90	Forest Service Road 5629
91	Forest Service Road 5630
92	Forest Service Road 5632
93	Forest Service Road 58
94	Forest Service Road 61
95	Forest Service Road 7015
96	Forest Service Road 765

Key to Figure 2-5, continued

Road Number	Road Name
97	Forest Service Road 766
98	Forest Service Road 799
99	Forest Service Road 8020
100	Forest Service Road 8021
101	Forest Service Road 812
102	Forest Service Road 827
103	Adobe Canyon
104	Babocomari
105	Casa Blanca
106	Gardner Canyon
107	Gas Line Road
108	Granite Peak
109	Greaterville/Bo
110	Hilton Ranch
111	Hog Canyon
112	Lower Elgin
113	Mattie Canyon
114	Papago Springs
115	Red Rock Canyon
116	Research Ranch
117	State Route 82
118	State Route 83
119	Stevens Canyon
120	Temporal Canyon
121	Vaughn Loop
122	Wood Canyon

*Routine patrols considered as part of the study area

Rescue Beacons:

No rescue beacons are currently located in the Sonoita Station's AO.

Temporary Camp Details:

Currently, temporary camp details are not deployed in the Sonoita Station's AO.

Portable Lights:

Portable lights are not currently deployed in the Sonoita Station's AO.

ISIS Components:

Two operational repeaters are maintained and operated in the Sonoita Station's AO. One of the operational repeaters is portable and can be moved via helicopter to other sites.

2.1.1.6 Naco Station

The Naco Station's AO is located within Cochise County and covers approximately 1,256 square miles. The Station's AO includes approximately 36 linear miles of US-Mexico border and the communities of Naco, Bisbee, Tombstone, Sierra Vista, Warren, Hereford, Palominas and Huachuca, Arizona. There are currently up to 390 BP agents, including enhancements under the ABCI, assigned to the Naco Station. The geographical terrain of the area is desert with rolling hills covered with brush thickets and numerous north-south trending washes; however, the Huachuca Mountains are located in the western portion of the station's AO. The station's AO is largely rural with private lands intermixed with National Forest, BLM, Department of Defense (Fort Huachuca) and state lands. The approximate elevation of the station is 4,800 feet amsl.

BP activities within the station's AO are discussed in the following paragraphs and were presented in Table 2-1. Figure 2-6 depicts the locations of current infrastructure within the Naco Station's AO.

Patrols:

Agents at the Naco Station patrol approximately 404 miles of improved and semi-improved roads within the Naco Station's AO. These roads are located on private and public lands and are used by the general public and other agencies. The roads are numbered on Figure 2-6 and correspond to the Key to Figure 2-6. The Naco Station currently conducts maintenance on 30 miles of existing unimproved road (border road). The Naco Station currently maintains approximately 7 miles of drag roads. Drag road preparation is conducted as needed.

Tactical Checkpoints:

There are two tactical checkpoint operated within the station's AO. One checkpoint is located on SR 90 and the second tactical checkpoint is located at the intersection of highways 80 and 82 (see Figure 2-6). The tactical checkpoint at the intersection of highways 80 and 82 is manned by BP agents from the Willcox Station.

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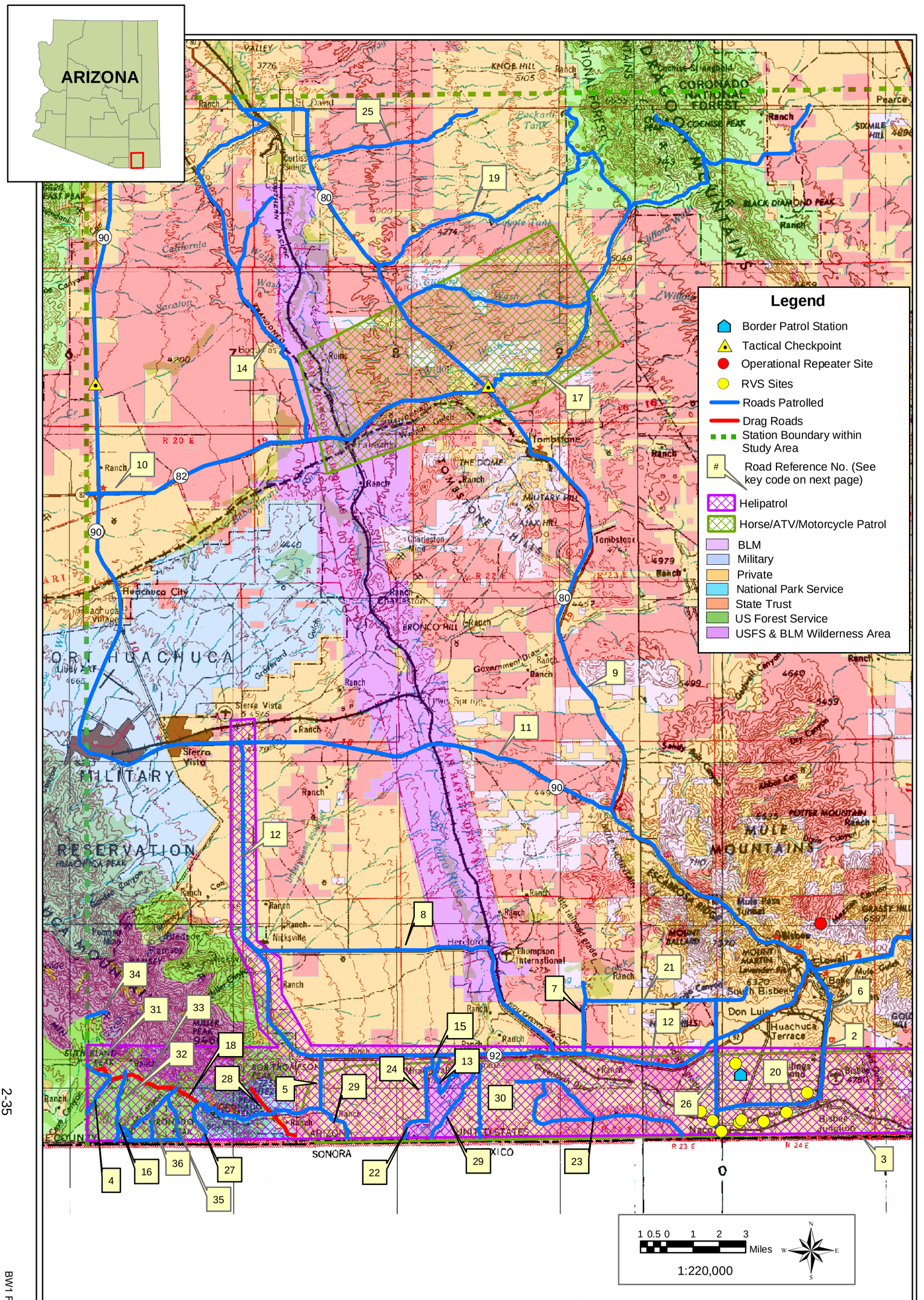

Figure 2-6: Border Patrol Activities within the Naco Station's Area of Operations

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Date: September 2004

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Key to Figure 2-6: Naco Station

Road Number	Road Name
1	Airport Road
2	Big Sandy Road
3	Border Road
4	Boundary Marker 104 Drive Thrus
5	Coronado Road
6	Knob Hill Road
7	Foudy Road
8	Hereford Road
9	Highway 80
10	State Route 82
11	Highway 90
12	Highway 92
13	Hutchinson Road
14	Iron Horse Road
15	Kings Ranch Road
16	Mesa Drive Thru
17	Middle March Road
18	Montezuma Pass
19	Pole Line Road
20	Purdy Lane
21	Red Mountain
22	Rough Rider
23	Secondary Road (Ladd Ranch)
24	Smith Road
25	Syble Ranch Road
26	Wilson Road
27	Yaqui Springs Drive Thru
28	Forest Lane
29	Brown Ranch Road
30	Border Monument Drive
31	Forest Service Road 4772
32	Forest Service Road 4726
33	Forest Service Road 61
34	Forest Service Road 4774
35	Forest Service Road 4772
36	Forest Service Road 5714

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO.

Air Operations:

There is a helipad and a small refueling facility at the Naco Station. Helicopter support is provided on an as needed basis. Flights generally occur along the US-Mexico border and SR 92.

Sensors:

The Naco Station maintains an inventory of up to 200 sensors as part of its operational activities. Sensors are routinely maintained as a part of operational activities.

Observation Points:

The Naco Station maintains an inventory of 14 skywatch towers.

Rescue Beacons:

Currently, four rescue beacons are located in the Naco Station's AO and there are plans to place additional rescue beacons. However, these plans are in the early stages of development, and the number of beacons to be placed has not been established. An environmental analysis for any proposed rescue beacon sites would be performed prior to placement.

Temporary Camp Details:

There are no temporary camp details operated in the Naco Station's AO.

Portable Lights:

There are currently 35 portable lights in use over a 10 mile corridor in the Naco Station's AO.

ISIS Components:

There are currently nine RVS sites and one operational repeater maintained and operated in the Naco Station's AO.

Other Infrastructure:

The Naco Station currently has approximately 5 miles of stadium style lights, approximately 6 miles of fence, and 6 miles of vehicle barriers, and approximately 12 miles of temporary vehicle barriers.

2.1.1.7 Douglas Station

The Douglas Station is located within southeast Cochise County and covers approximately 1,440 square miles. The station's AO includes approximately 47 linear miles of US-Mexico border. There are currently up to 515 BP agents, including ABCI enhancements, assigned to the Douglas Station. The communities of Douglas, Pirtleville, Elfrida and McNeal, Arizona are within the station's AO. The City of Douglas shares the border with Agua Prieta, Mexico. The terrain of the area is relatively flat high desert, with numerous washes, and is bordered by the Dragoon and Mule Mountains to the west, and the Chiricahua, Pedregosa, Perilla, and Peloncillo Mountains to the east. The approximate elevation of the station is 4,000 feet amsl.

BP operational activities within the Douglas Station's AO are discussed in the following paragraphs and were presented previously in Table 2-1. Figure 2-7 depicts the locations of current infrastructure within the Douglas Station's AO.

Patrols:

Activities are primarily concentrated near the City of Douglas and agents patrol approximately 289 miles of improved and semi-improved roads within the Douglas Station's AO. These roads are located on private and public lands and are used by the general public and other agencies. The roads are numbered in the Key to Figure 2-7. There are 78 miles of drag roads within the Douglas Station's AO that are used as needed.

Tactical Checkpoints:

There are two tactical checkpoints, at milepost 29.5 on SR 191 and at milepost 406.5 on Highway 80, in the Douglas AO. However, BP agents assigned to the Willcox Station operate this checkpoint. A third tactical checkpoint has been proposed at milepost 41 on SR 191 in the Douglas Station's AO. The Willcox Station would also be responsible for this checkpoint.

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO.

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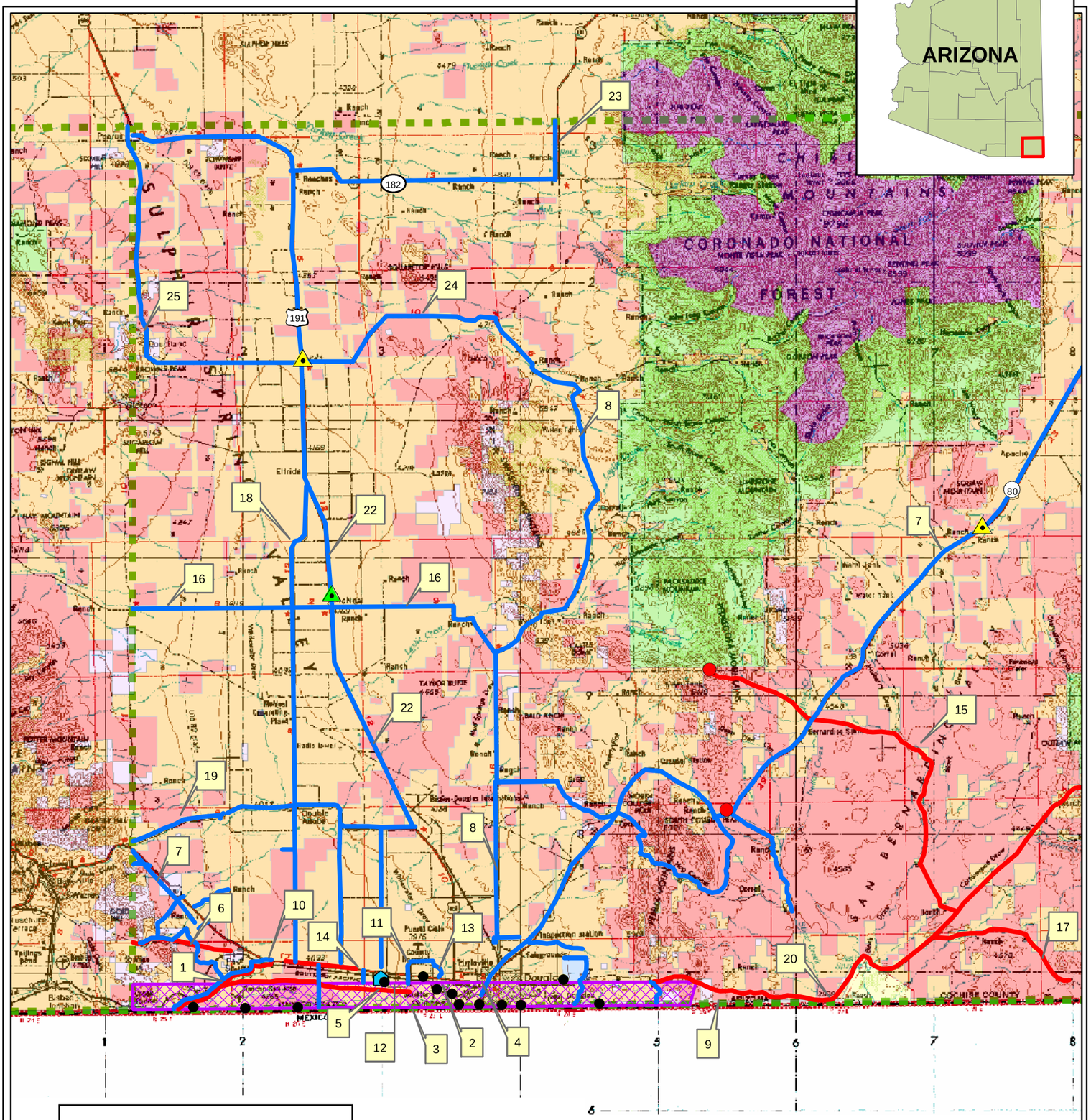

Source: Douglas, Arizona USGS 1:250,000 topographic quads

NOTE: Road designated as "roads patrolled" are subject to operational needs

Figure 2-7: Border Patrol Activities within the Douglas Station's Area of Operations

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Date: September 2004

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Key to Figure 2-7: Douglas Station

Road Number	Road Name
1	Border Road
2	Calumet
3	Cattleman's Road
4	Chino
5	Gas Line
6	Gravel Pit
7	Highway 80
8	Leslie Canyon
9	Line Road
10	Paul Spur
11	Plantation
12	Puzzi
13	Smelter
14	Kings Highway
15	Maddux Haul Road
16	Davis Road
17	Guadalupe Canyon
18	Central Highway
19	Double Adobe Road
20	Geronimo Trail
21	Brooks Road
22	State Route 191
23	State Route 182
24	Rucker Canyon Road
25	Courtland Road

Air Operations:

Douglas has helipad and refueling capabilities located at the local airport. There are currently no regular flights or set patrol routes in the Douglas area. When assistance is requested, helicopters fly along the border near the City of Douglas. Deviations from this route are only made to follow tracks, persons, or vehicles that have entered the US illegally.

Sensors:

The Douglas Station maintains an inventory of up to 305 sensors as part of routine operational activities. The sensors are maintained as part of routine operational activities.

Observation Points:

A total of nine skywatch towers are maintained in the Douglas Station's AO.

Rescue Beacons:

No rescue beacons are currently located in the Douglas Station's AO.

Temporary Camp Details:

An intermittent horse patrol camp detail is operated on private property in the eastern area of the Douglas Station's AO. The Douglas Station does not operate any temporary camp details as part of Operation Desert Grip.

Portable Lights:

The Douglas Station currently operates approximately 47 miles of portable lights (97 lights).

ISIS Components:

There are currently 13 RVS sites and two operational repeater sites operated in the Douglas Station's AO.

Other Infrastructure:

The Douglas Station currently operates approximately 3 miles of stadium-style lights, e generator lights (97 lights), 4 miles of landing mat fence, 2 miles of decorative fence, 1 mile of vehicle barriers, 0.5 mile of bollard fence, and 2 miles of temporary vehicle barriers. In addition, a new BP Station was assessed in prior NEPA documents (INS 2000b) and is currently in operation (INS 2000b).

2.1.1.8 Willcox Station

The Willcox Station's AO begins approximately 30 miles north of the US-Mexico border, but shares operational responsibilities and resources with the Douglas Station, on an as needed basis, in the southeast corner of Arizona. The Willcox Station's AO is located mostly in Cochise County but can respond as needed to other counties such as Greenlee, Pima, Graham, Apache, and Navajo. There are currently up to 121 BP agents, including ABCI enhancements, authorized for the Willcox Station.

BP operational activities within the Willcox Station's AO are discussed in the following paragraphs and were presented previously in Table 2-1. Figures 2-8 and 2-9 depict the locations of current operations and infrastructure within the Willcox Station's AO.

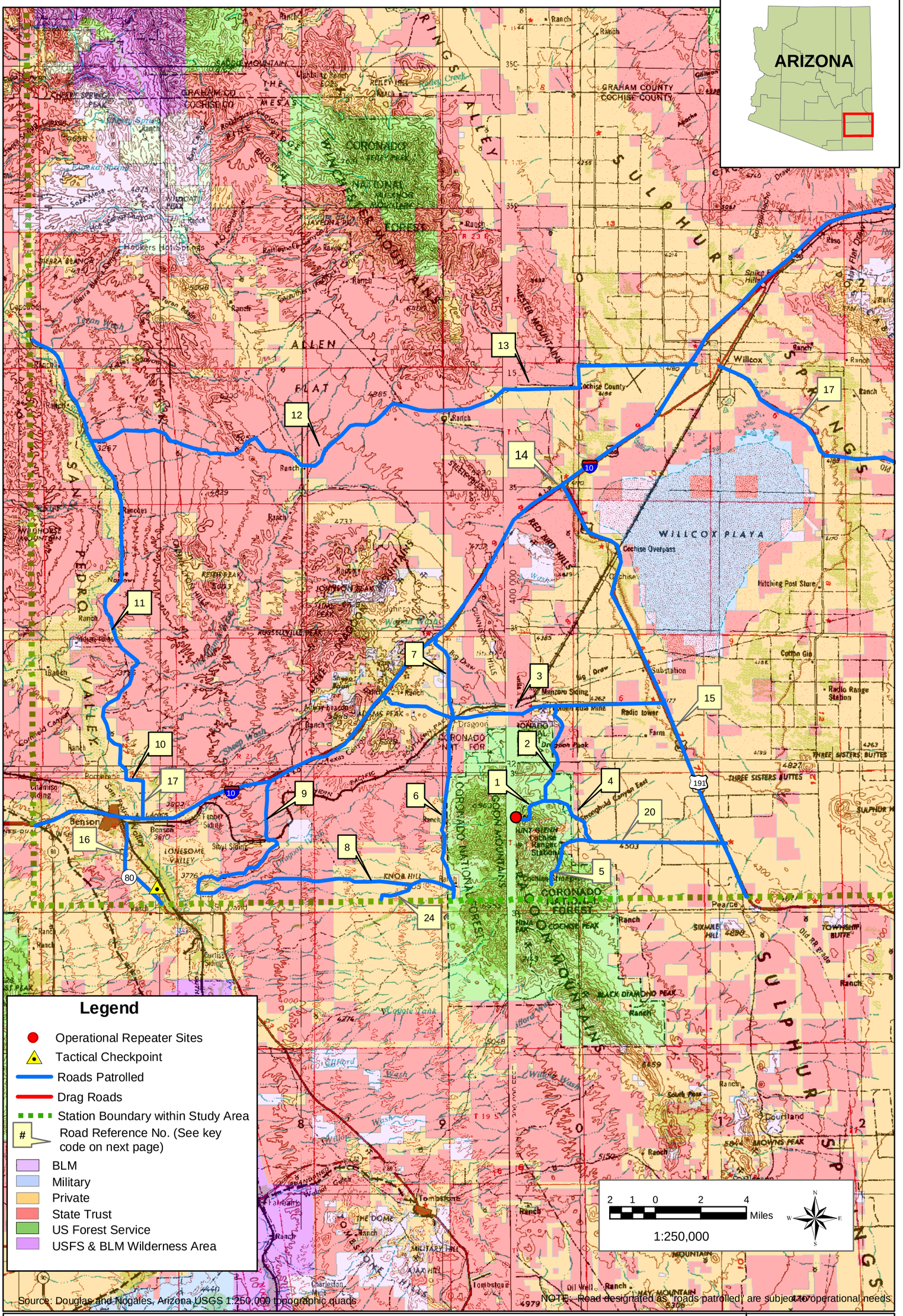

Figure 2-8: Border Patrol Activities within the Willcox Station's Area of Operations

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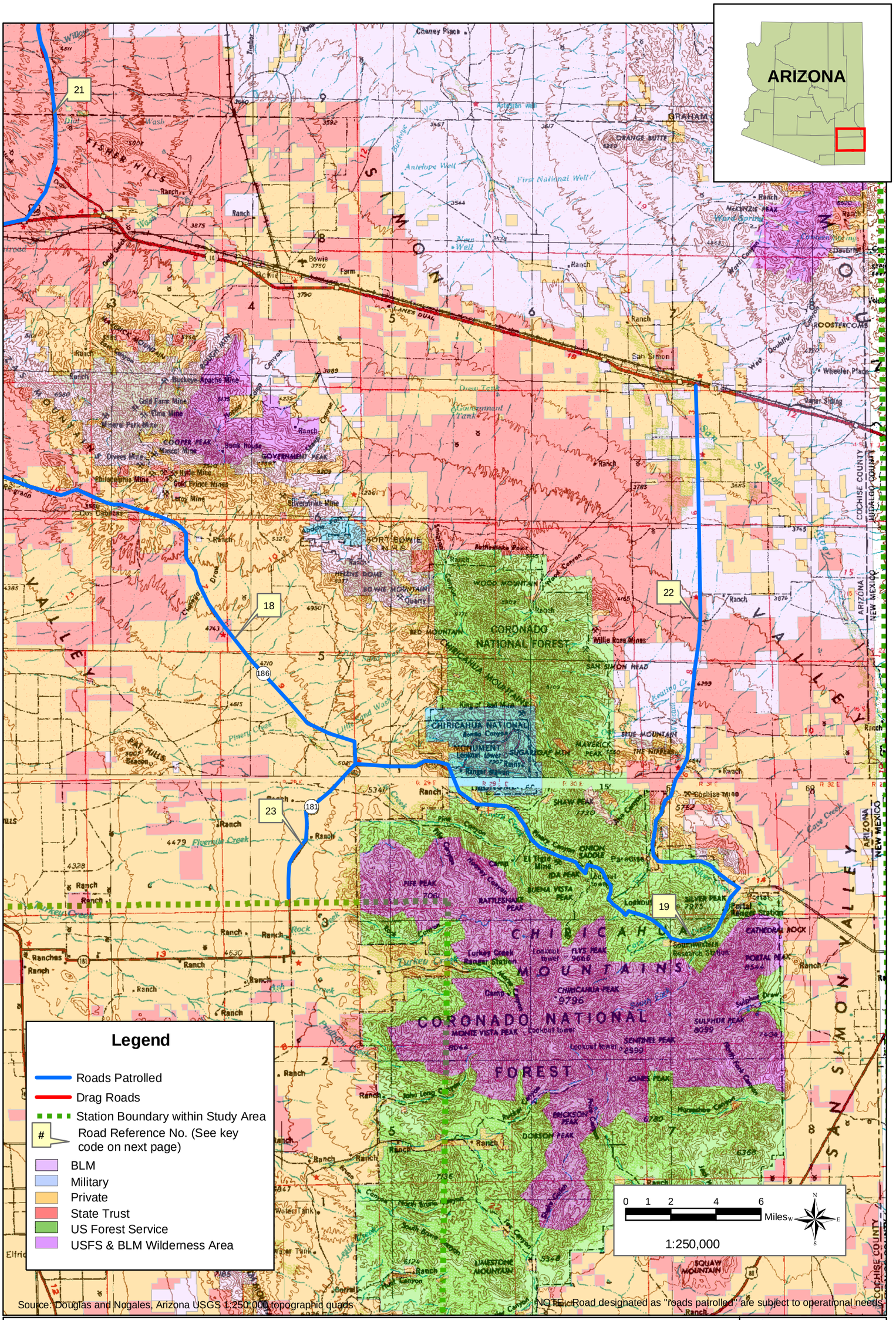
Date: September 2004



Source: Douglas and Nogales, Arizona USGS 1:250,000 topographic quads

NOTE: Road designated as "roads patrolled" are subject to operational needs.

Figure 2-9: Border Patrol Activities within the Willcox Station's Area of Operations

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Date: September 2004

Patrols:

There are approximately 294 miles of public and private roads and trails patrolled within the station's AO. The principal roads patrolled in the Willcox Station's AO are SR 80 and SR 191. Drag roads are not maintained in the Willcox Station's AO.

Roads patrolled by the Willcox Station in the study area are shown in Figure 2-8. The roads are numbered in the Key to Figures 2-8 and 2-9. The Willcox Station also patrols Courtland Road, Davis Road, Double Adobe Road, SR 181, Rucker Canyon Road, Leslie Canyon Road, and Dragoon Road in the Douglas Station's AO and the Iron Horse Road, Middle March Road, Pole Line Road, Syble Ranch Road, and SR 82 in the Naco Station's AO (see Figures 2-6 and 2-7).

Key to Figures 2-8 and 2-9: Willcox Station

Road Number	Road Name
1	Forest Service Road 795
2	Forest Service Road 795
3	Dragoon Road
4	Forest Service Road 795
5	Stronghold Road
6	Old Ranch Road
7	Johnson Road
8	Dragoon Wash
9	Sybil Road
10	Pomerene Road
11	Cascabel Road
12	Three Links Road
13	Airport Road
14	I-10
15	State Route 191
16	State Route 80
17	Old Mill Road
18	State Route 186
19	Pinery Canyon
20	Ironwood Road
21	US Highway 191
22	San Simon/Paradise Road
23	State Route 181
24	Sybil Ranch Road

Tactical Checkpoints:

The Willcox Station operates two tactical checkpoints. One is located at the junction of SR 80 and 82 in the Naco Station's AO and the other tactical checkpoint operated by the Willcox Station is at milepost 29.5 on SR 191 in the Douglas AO. The Willcox Station would also

operate the proposed tactical checkpoint at milepost 41 on SR 191 although the checkpoint would be physically located within the Douglas Station's AO.

Off-Road Operations:

ATVs, motorcycles and four-wheel drive vehicles are limited to existing roads except for hot pursuits and exigent circumstances. Horseback and foot patrols are conducted throughout the station's AO.

Air Operations:

Currently, there are no helicopter facilities, regular flights, or regular patrol routes at this time within the Willcox Station's AO. Helicopter facilities may be constructed in the future at the Willcox Station's AO.

Sensors:

The Willcox Station maintains an inventory of up to 110 sensors as part of its routine operational activities. Maintenance of sensors is performed as needed as part of routine operational activities.

Observation Points:

The Willcox Station does not maintain an inventory of skywatch towers.

Rescue Beacons:

Currently, rescue beacons are not located in the Willcox Station's AO.

Temporary Camp Details:

The Willcox Station does not operate any temporary camp details.

Portable Lights:

Currently, portable lights are not deployed in the Willcox Station's AO.

ISIS Components:

There is one operational repeater operated in Willcox Station's AO.

Other Infrastructure:

The construction of a new station is expected to be begin when funding is available, possibly as early as FY 05. The NEPA document was completed in September 2002.

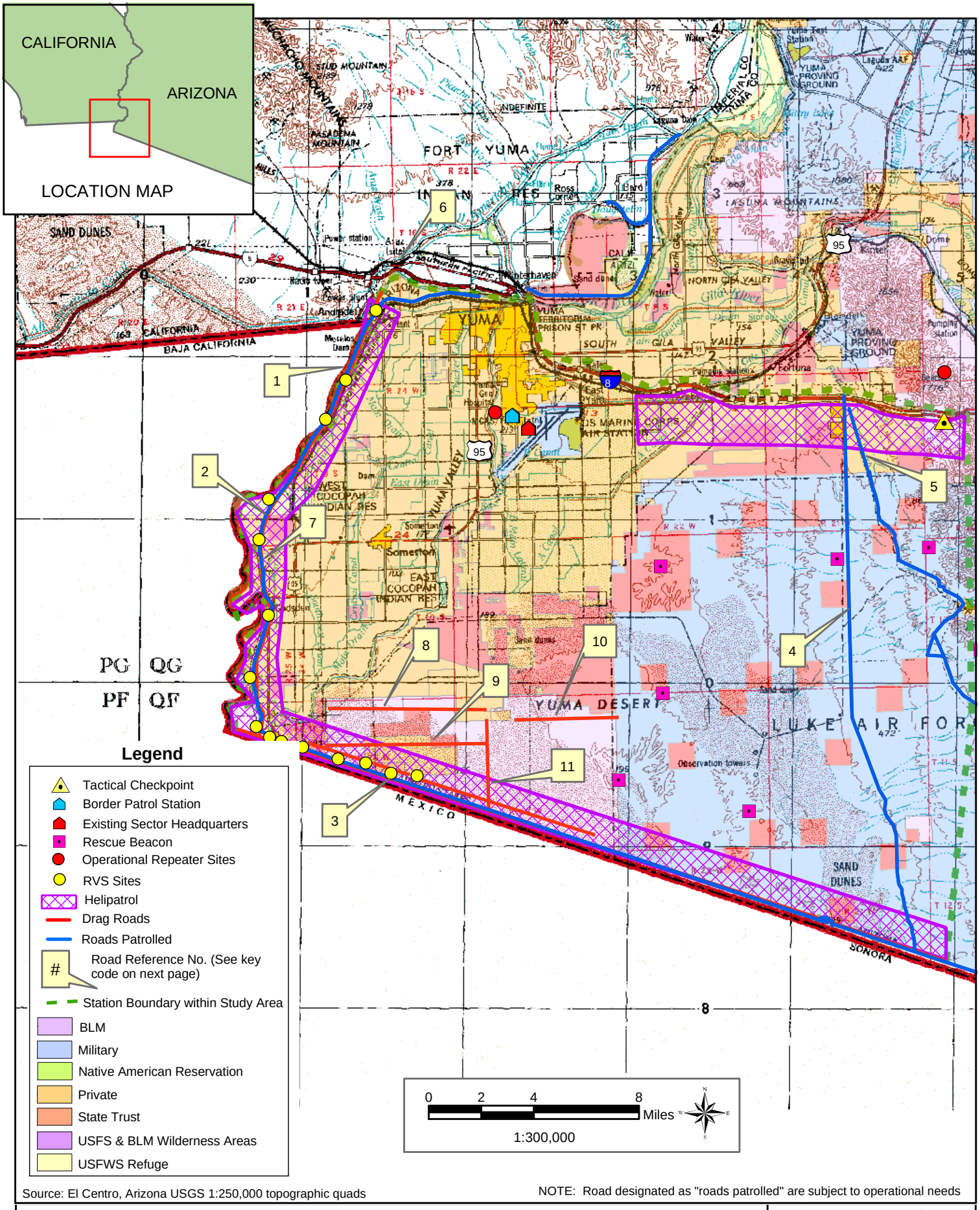
2.1.2 Yuma Sector

The Yuma Sector was established in 1955 and encompasses all or portions of Yuma, La Paz, and Mojave counties in Arizona; Riverside, San Bernardino, and Imperial counties in California; and Lincoln, Nye, and White Pine Counties in Nevada. The Yuma Sector Headquarters is located in the southwest corner of Arizona and has responsibility for 118 linear miles of US-Mexico border. The Sector's AO consists of approximately 76,000 square miles, falling under the responsibility of three stations. However, only Yuma and Wellton stations' activities (within southern Arizona) are addressed in this PEIS; the Blythe Station is located in California and their actions are not addressed in this PEIS.

A new 40,000 square foot Sector maintenance facility was completed in June 2001. This new facility is located on South Avenue A, directly across from the existing Yuma Station in Yuma, Arizona. A new 25,000 square foot Sector headquarters was completed in 2002 immediately north of the maintenance facility. The constructions of these facilities were analyzed in a previous NEPA document (INS 1999b). The Yuma Sector may receive up to 320 additional agents under the current plan of the ABCI. It has not been determined at this time where these agents will be stationed.

2.1.2.1 Yuma Station

The Yuma Station is located at 4030 South Avenue A in Yuma. A new 45,000 square feet station facility is proposed across Avenue A from the existing Yuma Station. The station patrols a total of 54 linear miles of the US-Mexico border, including 28 miles along the Sonora border, 17 miles of which is a river border where the international line is formed by the Colorado River between Arizona and Mexico. There are currently up to 260 BP agents assigned to the Yuma Station. Although the number of agents has not been determined, it is anticipated that additional agents would be assigned to the Yuma Station as part of the current plan of the ABCI. The Yuma Station's AO includes the southeastern portion of Imperial County, California. The north boundary of the station's AO in Arizona is generally considered the Union Pacific Railroad, which parallels I-8. The BP activities within the Yuma Station's southern Arizona AO are discussed below and shown in Figure 2-10.



Source: El Centro, Arizona USGS 1:250,000 topographic quads

NOTE: Road designated as "roads patrolled" are subject to operational needs

Figure 2-10: Border Patrol Activities within the Yuma Station's Area of Operations

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BWD-PGA-SEP-00402 Date: September 2004

Patrols:

There are approximately 365 miles of public and private roads patrolled within the Yuma Station's AO. The roads are numbered in the Key to Figure 2-10. It should be noted, however, that all of the public roads within the city of Yuma and surrounding roads are also patrolled, but are not depicted in Figure 2-10 or the Key to Figure 2-10. There are approximately 78 miles of existing public and private roads used as drag roads within the station's AO that are prepared as needed.

Key to Figure 2-10: Yuma Station

Road Number	Road Name
1	Salinity Canal Road
2	Levee Road
3	Border Road
4	Foothills Boulevard
5	El Camino Del Diablo
6	TV Drag (Drag)
7	River Drag (Drag)
8	New Drag (Drag)
9	Co. 24th Street (Drag)
10	Co. 23rd Street (Drag)
11	Avenue B (Drag)

Tactical Checkpoints:

The Yuma Station does not currently operate any tactical checkpoints in Arizona.

Permanent Checkpoints:

The Yuma Station operates two permanent checkpoints at milepost 17 on I-8 and at milepost 52 on Highway 95. The latter checkpoint is co-managed with the Wellton Station.

Off-Road Operations:

Off-road operations consist of agents on foot, ATVs and four-wheel drive vehicles throughout the station's AO. Currently, the Yuma Station patrols the US-Mexico border with ATVs. Marine operations (*e.g.*, hover craft, boat operations, SCUBA missions) are also conducted along the Colorado River and All-American Canal system.

Air Operations:

Fixed-winged aircraft and helicopters are used to patrol the US-Mexico border and for SAR missions. Day and night operational flights are conducted in the Yuma Station's AO (see Figure 2-10).

Sensors:

The Yuma Station maintains an inventory of up to 300 sensors as part of its routine operations. The sensors are maintained as part of the Yuma Station's daily operations.

Observation Points:

The Yuma Station maintains an inventory of one skywatch tower that is deployed along the Colorado River.

Rescue Beacons:

Currently, five rescue beacons are utilized in the Yuma Station's AO. The Yuma Station proposes to place four additional rescue beacons in the future. An environmental analysis of any proposed rescue beacon sites would be performed prior to placement.

Temporary Camp Details:

The Yuma Station has no temporary camp details in operation.

Portable Lights:

Currently, the Yuma Station operates and maintains 27 portable lights along an approximately 3-mile corridor near the San Luis POE.

ISIS Components:

There are currently 15 RVS sites and two operational repeaters operated in the Yuma Station's AO in Arizona.

Other Infrastructure:

Currently, the Yuma Station maintains approximately 6 miles of landing mat fence on either side of the San Luis POE.

2.1.2.2 Wellton Station

The Wellton Station was established on February 1, 1955. The station was closed from 1964 to 1967 and was operated as the Tacna Station from 1970 until 1990 when the current station was opened. The station is responsible for 64 linear miles of US-Mexico border. The station's AO includes the BMGR-West and the CPNWR, making their patrol area some of the most isolated in the nation. There are currently up to 85 BP agents assigned to the station. No additional agents were assigned to the Wellton Station as part of the ABCI. Although the number of agents has not been determined, it is anticipated that additional agents would be assigned to the Wellton Station. The Wellton Station's operational activities are shown in Figure 2-11.

Patrols:

There are approximately 325 miles of public and private roads used for patrol in the Wellton Station's AO and 145 miles of public roads used for dragging. The roads are numbered in the Key to Figure 2-11. In support of the ABCI, the Wellton Station proposes the use, including maintenance of all existing roads and administrative trails on the CPNWR. The Wellton Station also proposes the use of some illegal roads (those created by IE traffic) on the CPNWR as needed.

Permanent Checkpoints:

The Wellton Station currently maintains a permanent checkpoint at milepost 52 on Highway 95 (see Figure 2-11).

Tactical Checkpoints:

One tactical checkpoint is located with the Wellton Station's AO in Arizona at milepost 57 on I-8 (see Figure 2-11). This tactical checkpoint could be relocated in the near future.

Off-Road Operations:

Off-road operations consist of foot patrols and four-wheel drive vehicles throughout the station's AO.

Air Operations:

The Wellton Station has a designated helicopter flight route. Flights are made from the Yuma International Airport. Deviations from this route are only made to follow the tracks, persons, or vehicles that illegally entered the US or SAR missions. The helicopter flies along established dirt

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