

**REPORT TO THE
HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
ON
IMPACTS CAUSED BY
UNDOCUMENTED ALIENS
CROSSING FEDERAL LANDS IN
SOUTHEAST ARIZONA**



Natural resource damage caused by undocumented aliens.

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I. EXECUTIVE SUMMARY

The Immigration and Naturalization Service through the U.S. Border Patrol, the U.S. Department of the Interior, the U.S. Forest Service and the U.S. Environmental Protection Agency have prepared this report in response to requests by the House Committee on Appropriations to develop a coordinated plan to mitigate the environmental damage caused by illegal immigrant crossings through Federal lands in southeast Arizona and to report back to the Committee by October 1, 2001. This report is being submitted late due to the terrorist attacks of September 11, 2001 and the resulting need to review border issues with respect to homeland security. The coordinated plan for southeast Arizona is incorporated in this report as Appendix B.

The purpose of this report is to identify resources and actions necessary to mitigate and prevent environmental damage caused by illegal immigration through Federal lands in southeast Arizona and to restore safe public use and management of these lands through a multi-agency, coordinated effort. The detailed goals, objectives, and actions are stated in Appendix B. It does not address the social, economic or political factors that may be causing illegal immigration, the impacts on non-Federal jurisdictions (although most impacts are similar); and many other issues related to illegal immigration.

Southeast Arizona, as described in this report, has a total area of approximately 14,000 square miles (9 million acres). Approximately 37% of this area is administered by the Federal government and is the subject of this report. Southeast Arizona has 156 miles of border common with Mexico. This represents only 8% of the entire 1,952 miles of international border between the United States and Mexico. However, the environmental and other impacts caused by undocumented aliens crossing Federal lands in southeast Arizona are much greater than this small percentage indicates.

The natural and cultural resources in southeast Arizona have regional, national and international importance. There are four National Park Service units; three National Wildlife Refuges; 12 separate and uniquely distinct mountain ranges, “sky islands,” in the Coronado National Forest; all or part of three National Conservation Areas, one National Monument, and other public lands

¹ Congressional Report language uses the term “illegal immigrants,” a term that is commonly used interchangeably with the term “undocumented aliens.” However, the term “illegal immigrants” has been defined narrowly by the courts (see Glossary). This report uses the term “undocumented aliens,” which has a broader meaning and which includes all persons coming into the United States illegally (proven or unproven).

administered by the Bureau of Land Management (BLM); two military installations; and land held in trust for the Tohono O'odham Nation (San Xavier del Bac Mission) and the Pasqua Yaqui Tribe of Arizona. Additionally, Southeast Arizona includes 19 areas (three in National Parks, eight in National Forests, and eight on lands administered by BLM) designated as wilderness by the United States Congress and four wilderness study areas.

Southeast Arizona is a major international tourist destination due largely to its historical significance and the abundance and uniqueness of its natural and cultural resources. Recreation and tourism opportunities bring millions of visitors to the area each year. It is nationally and internationally recognized for its extraordinary bird watching opportunities, with over 400 species of birds recorded.

As a direct result of an unusual variety of climate and geology, there is a wide variety of vegetation and wildlife species in southeast Arizona, including a large number of species designated as threatened or endangered under provisions of the Endangered Species Act.

There are numerous prehistoric and historic sites and important cultural landscapes in southeast Arizona. Additionally, more than 100 properties are listed on the National Register of Historic Places.

Because Federal lands in southeast Arizona are, for the most part, remote and isolated areas adjacent or in close proximity to the Mexican border, they have become major arteries for smuggling humans and controlled substances into the United States. As a result, the extremely valuable, and many times irreplaceable, natural and cultural resources mentioned above are in jeopardy.

Undocumented aliens crossing Federal land in southeast Arizona not only cause damage to natural and cultural resources; they impact Federal land visitors, public services, Federal employees working in the area, and residents and businesses located on Federal and reservation lands. Furthermore, undocumented aliens themselves are impacted as they cross Federal lands due to the remoteness of many of these lands and the unexpected harsh conditions that they encounter there.

Certain Federal lands in southeast Arizona can no longer be used safely by the public or Federal employees due to the significance of smuggling undocumented aliens and controlled substances into the United States. The mere number of undocumented aliens traveling in the border area intimidates legitimate visitors and creates a reluctance by some of the public to use public lands. The volume of undocumented aliens also impacts Federal and other government employees' ability to feel safe while doing their job in the field. Staff exposure while conducting resource management activities in certain areas along the border is a serious safety concern.

Ranchers, farmers, miners and other legitimate users of Federal lands are heavily impacted financially by smuggling operations that cut fences, breakdown or leave gates open, damage water supplies, steal or damage equipment, and disrupt grazing and irrigation schedules.

Breaking and entering and burglaries along the border are common and include historic and government structures, employee and private residences, and businesses.

Federal law enforcement officers assigned to land management agencies and tribal police often face situations where they are at personal risk and must deal with overwhelming odds. Due to the remoteness of many Federal lands, timely assistance from other law enforcement agencies is not always possible. This leaves Federal land management law enforcement officers in difficult situations for extended periods of time because no back-up law enforcement officers are available from other cooperating agencies.

Literally hundreds, if not thousands of new trails and roads have been created on Federal lands in southeastern Arizona by undocumented alien crossings. This proliferation of trails and roads damages and destroys cactus and other sensitive vegetation, disrupts or prohibits revegetation, disturbs wildlife and their cover and travel routes, causes soil compaction and erosion, impacts stream bank stability, and often times confuses legitimate users of trails and roads on Federal lands.

Large numbers of vehicles are abandoned by smugglers and undocumented aliens. Such vehicles are difficult and costly for agencies to remove.

The character of Congressionally designated wilderness areas has been reduced by the creation of unwanted trails and roads, damage to existing trails, and large amounts of trash. Encounters with large groups of undocumented aliens reduces the quality of the wilderness experience for many visitors. Law enforcement operations and enforcement related aircraft flights in wilderness areas reduce the quality of the wilderness experience.

The international border fence is repeatedly cut or torn down in many locations forcing Federal agency staff and grazing permittees to constantly make repairs. Horses and cows from Mexico trespassing on Federal lands in the United States are a significant and reoccurring problem.

Gates are rammed, security locks are cut, signs are driven over and heavy damage or destruction of water developments and other improvements by undocumented aliens traveling through Federal lands and seeking drinking water in remote locations occur regularly. Recreational, cultural and administrative sites are repeatedly vandalized and damaged. All of this adds significantly to the cost of maintaining Federal improvements.

Tons of trash and high concentrations of human waste are left behind by undocumented aliens. This impacts wildlife, vegetation and water quality in the uplands, in washes and along rivers and streams. This also detracts from scenic qualities and can effect human and animal health from spread of bacteria and disease.

Warming and cooking fires built and abandoned by undocumented aliens have caused wildfires that have destroyed valuable natural and cultural resources. The fires pose a threat to visitors, residents and Federal and local firefighters as well as to the undocumented aliens camping in or migrating through the area.

State, county and local governments and private property owners experience most of the same problems caused by undocumented aliens crossing their land as mentioned herein. Additionally, there is a significant increased workload on Federal and local court systems and increased costs to medical providers caring for the sick and injured. Healthcare providers especially are heavily impacted.

A number of actions have taken place within the past year that respond to the concerns expressed by Congress regarding the impacts caused by undocumented aliens crossing Federal lands in southeastern Arizona (and elsewhere along the border). These include a memorandum of understanding between the U.S. Border Patrol, Department of the Interior bureaus, the U.S. Forest Service, and the Natural Resources Conservation Service covering activities in Arizona and New Mexico; the coordinated plan provided herein as Appendix B; and a Department of the Interior Southwest Border Law Enforcement Strategy.

A firm commitment by local Federal land managers has been made to address the environmental damage and other impacts on Federal lands caused by undocumented aliens in southeast Arizona. As indicated in the *Southeast Arizona Coordinated Plan to Mitigate and Prevent Environmental and Other Impacts Caused by Undocumented Aliens Crossing Federal Land* (Appendix B), numerous efforts will be initiated and accomplished using available resources. This plan identifies estimates of additional resources to accomplish the goals set out by federal land managers. The resource needs identified in this report will be evaluated for consideration in future budgets.

This report identifies estimates of additional funding and personnel to clean up, monitor biological impacts, remove vehicles, rebuild and repair fences and other damaged facilities, restore damaged habitats, and protect water management improvements; additional law enforcement personnel to provide public safety and security for staff, equipment, and facilities, and to deter undocumented aliens from accessing Federal lands; vehicle barriers along the border that will not impact wildlife migration, upgraded all-weather roads along the border with cattle guards, towers and cameras at key locations, signs to warn visitors of potential dangers, and signs to notify undocumented aliens of the risks and hazards they face.

First year estimates are 93.3 additional Full Time Equivalents (FTE) and \$23.5 million. To fully implement the five-year plan, is estimated to cost \$62.9 million. Table 4 is a summary of the additional resources identified by agencies to implement the first and subsequent years of the coordinated plan for southeast Arizona. A detailed estimate for each agency in southeast Arizona can be found in Appendix K.

NOTE: U.S. Border Patrol estimated needs are in the process of being submitted to Congress in House Report 106-680, Joint Plan to Protect Natural and Human Resources and Provide Increased Border Protection Throughout the Southwest, and therefore are not included here. This has been done to avoid confusion and duplication.

II. INTRODUCTION

A. Purpose

The purpose of this report is to identify resources and actions necessary to mitigate and prevent environmental damage caused by illegal immigration through Federal lands in southeast Arizona and restore safe public use and management of these lands through a multi-agency, coordinated effort.

B. Authority

This report is being prepared for the House Committee on Appropriations, in accordance with three Committee requests. First, House Report 106-646, dated June 1, 2000, on page 88 states “The Committee encourages the Forest Service and the Secretary of the Interior to work more closely with the Immigration and Naturalization Service and the EPA in southeastern Arizona to develop a plan to coordinate activities addressing illegal immigration crossing through Federal lands, and additionally, to provide the Committee by October 1, 2001, a plan coordinated with the EPA to mitigate environmental damage caused by illegal immigrant crossings through these Federal lands.”

Second, House Report 106-674, dated June 12, 2000, on page 54 states “The Committee encourages the Administrator of the Environmental Protection Agency to work more closely with the Immigration and Naturalization Service, the Department of the Interior, and the Forest Service to develop a plan to mitigate environment degradation caused by illegal immigrants crossing into southeastern Arizona. This mitigation plan must be provided to the Committee by October 1, 2001.”

Third, House Report 106-680, dated June 19, 2000, on page 33, states “The Committee is aware of continuing environmental issues due to direct and indirect impacts of illegal immigration traffic through Federal lands and parks. INS is directed to work more closely with the United States Forest Service and the Department of the Interior to develop a plan to coordinate activities to protect natural and human resources while providing increased border protection along the Southwest border, including Southeastern Arizona. INS is further directed to submit this joint plan to the Committee no later than October 1, 2001.”

C. Scope

For purposes of this report, southeast Arizona includes all of Cochise and Santa Cruz counties, Graham County south of the Gila River and south of the San Carlos Indian Reservation, Greenlee County south of the Gila River, and Pima County east of lands of the Tohono O’odham Nation. See map in Appendix A.

In response to Congress’ requests to address this area specifically, the report focuses on the impacts (both direct and indirect) caused by undocumented aliens crossing Federal lands in southeast Arizona.

This report does not address the social, economic or political factors that may be causing illegal immigration, the impacts on non-Federal jurisdictions (although most impacts are similar); and many other issues related to illegal immigration.

As the U.S. Border Patrol and other law enforcement officials apply pressure in one location on smugglers of undocumented aliens and controlled substances, entry points and transportation routes change, thereby causing impacts in other areas. Within the past couple of years, the borderlands in southwest Arizona have experienced substantial increases in smuggling operations and their associated impacts on people and natural and cultural resources.

Therefore, this report should be considered in concert with the report to Congress and the coordinated plan for the entire southwest border, as requested by the House Committee on Appropriations in House Report 106-680.

Southeast Arizona, as described in this report, encompasses an area of approximately 14,000 square miles (9 million acres). Approximately 3.4 million acres (37%) are administered by the Federal government and are the subject of this report. The following table shows the approximate area administered by Federal, State and county governments and land in private ownership.

Table 1. Southeast Arizona Land Ownership²

OWNERSHIP	ACRES
U.S. Forest Service–Coronado National Forest	1,731,900
Bureau of Land Management–San Pedro Riparian National Conservation Area (55,000 ac.), Gila Box Riparian National Conservation Area (20,900 ac.; portion), Ironwood Forest National Monument (129,000 ac.; portion), Las Cienegas National Conservation Area (42,000 ac.), other public lands.	1,218,000
National Park Service–Saguaro National Park (87,090 ac.), Coronado National Memorial (4,750 ac.), Chiricahua National Monument (11,985 ac.), Fort Bowie National Historic Site (1,000 ac.)	104,835
U.S. Fish and Wildlife Service–Buenos Aires National Wildlife Refuge (118,000 ac.), San Bernardino (2,309 ac.) and Leslie Canyon National Wildlife Refuges (2,768 ac.)	123,077
San Xavier del Bac Mission (71,095 ac.) & Pasqua Yaqui Tribe of Arizona (6,152 ac.)	77,247
Department of Defense–Fort Huachuca (73,272 ac.), Willcox Playa (27,397 ac. controlled by Fort Huachuca), Other lands controlled by Fort Huachuca (859 ac.), Davis Monthan AFB (1,280 ac.)	102,808

TOTAL FEDERAL	3,357,867
STATE	2,834,000
COUNTY	41,000
PRIVATE	2,783,000
TOTAL	9,015,867

² See Appendices F through J for a brief description of Federal lands. A brief description of the U.S. Border Patrol Mission and Strategy can be found in Appendix D. Selected Border Patrol statistics are in Appendix E.

D. General Background

The United States and Mexico have 1,952 miles of common border (IBWC 2001). The United States Federal government administers a very significant percentage of the land within its four border states; overall more than 25 percent. The enforcement operations along the border are cooperative efforts between federal, state and local agencies, however border security and resource damage mitigation on public lands is a federal responsibility. Table 2 provides a breakdown of Federal ownership in border states compared to the total land area by state.

Table 2. Federal Acreage³ in Border States (USDI 2001)

Location	Federal (Acres)	Other (Acres)	Total Acres (Acres)	% Federal
Arizona	32,388,815	40,299,185	72,688,000	44.6
California	43,713,267	56,493,453	100,206,720	43.6
New Mexico	26,625,968	51,140,432	77,766,400	34.2
Texas	2,568,392	165,649,208	168,217,600	1.5
TOTAL	105,296,442	313,582,278	418,878,720	25.1

³ Acreage does not include lands held in trust for Native Americans.

Southeast Arizona, as addressed in this report, represents 156 miles, or 8 percent, of the international border. The principal communities include Tucson, Sierra Vista, Nogales, Green Valley, Douglas, Safford, Bisbee, Benson, and Willcox. All or part of five counties are included.

Cochise County. Cochise County, located in the very southeast corner of the state, consists of a geographic area of 6,169 square miles. Approximately 84 miles of the county are adjacent to the international border with Mexico. The population of Cochise County, according to the U.S. 2000 Census, was 117,755 and the median household income was \$29,295. Construction, farming, ranching, tourism, military and local government are the largest employers. About 24% of lands within the county is Federally owned.

Graham County. Graham County, located north of Cochise County, consists of a geographic area of 4,629 square miles. Although none of its borders are adjacent to the international border with Mexico, it is impacted by illegal immigration. The population of Graham County, according to the U.S. 2000 Census, was 33,489 and the median household income was \$27,564. Major economic factors are farming, ranching, tourism, local government and sales-service. About 38% of the county is federally owned. (Only a portion of Graham County is within Southeast Arizona for purposes of this report).

Greenlee County. Greenlee County consists of a geographic area of 1,847 square miles. It is located north of Cochise County, east of Graham County and adjacent to New Mexico. The population of Greenlee County, according to the U.S. 2000 Census, was 8,547 and the median household income was \$43,696. Major economic factors are mining, construction, local government, sales-service, ranching, and tourism. About 79% of the county is federally owned. (Only a small southern portion of the county is within southeastern Arizona, as used in this report).

Pima County. Pima County consists of a geographic area of 9,186 square miles. Approximately 120 miles of the county are adjacent to the international border with Mexico; of which approximately 16 miles are in southeastern Arizona under the definition used in this report. The population of Pima County, according to the U.S. 2000 Census was 843,746 and the median household income was \$32,544. Mining, manufacturing, trade, technology, and tourism are major components of Pima County's economy. About 30% of the county is federally owned. (Only a portion of Pima County is within Southeast Arizona for purposes of this report).

Santa Cruz County. Santa Cruz County, located to the west of Cochise County and tucked below part of Pima County, has a geographic area of 1,238 square miles. Approximately 56 miles of Santa Cruz County are adjacent to the international border with Mexico. The population of Santa Cruz County, according to the U.S. 2000 Census, was 38,381 and the median household income was \$26,515. Major economic factors in Santa Cruz County are wholesale trade, transportation and warehousing. Nogales, the county seat, is the major port of entry for Mexican agricultural products into the United States.

E. Importance

Although southeast Arizona represents a small percentage of the border, the natural and cultural resources in this area are of regional, national and international importance.

Southeast Arizona includes four National Park Service units; three National Wildlife Refuges; 12 separate and uniquely distinct mountain ranges, "sky islands," in the Coronado National Forest; all or part of three National Conservation Areas, one National Monument, and other public lands administered by the BLM; two military installations; and land held in trust for the Tohono O'odham Nation (San Xavier del Bac Mission) and the Pasqua Yaqui Tribe of Arizona. Additionally, Southeast Arizona includes 19 areas (three in National Parks, eight in National Forests, and eight on lands administered by BLM) designated as wilderness by the United States Congress and four wilderness study areas.

Ecosystems. Southeast Arizona ecosystems vary from the Sonoran and Chihuahuan deserts to spruce-fir forests in the higher elevations and they include a number of vegetative types found nowhere else in the United States. Riparian areas are some of the most important and productive ecosystems. Many ecosystems in southeast Arizona are very sensitive to heavy use. Additionally, many are habitat for numerous threatened and endangered species, which also are very sensitive to heavy use.

Recreation/Tourism. The Federal lands have numerous recreation areas, lakes, developed campgrounds, picnic areas and dispersed use areas. Southeast Arizona is a major international tourist destination due largely to the region’s historical significance and because of the abundance and uniqueness of the region’s natural history, particularly the species richness of birds. Several local communities depend upon tourist dollars generated from such ecotourism.

Recreation has and continues to be the major human use of the Coronado National Forest since its establishment (USDA 2000). Recreation also is significant in National Parks, National Wildlife Refuges and on lands administered by BLM. Federal lands in southeast Arizona receive many millions of visitors each year.

Caves located on Federal land in southeast Arizona are some of the most magnificent in the world and many are “world-class” (USDA 2000).

Table 3. Visits and Visitor Days on Federal Lands in Southeast Arizona in FY 2000

Agency	Visits	Visitor Days
U.S. Forest Service	11,190,000	⁴
Bureau of Land Management	267,472	278,166
National Park Service	1,003,134	201,004
U.S. Fish and Wildlife Service	48,200	56,800
Total	12,508,806	535,970 ⁴

⁴ Visitor days are not recorded by the U.S. Forest Service

Birds and Birding. The Coronado National Forest, San Pedro Riparian National Conservation Area, Leslie Canyon National Wildlife Refuge, Gila Box Riparian National Conservation Area, Aravaipa Canyon Wilderness Area, Muleshoe Ranch Cooperative Management Area and other Federal lands in southeastern Arizona are nationally and internationally known for their bird watching opportunities.

Five forest areas are premier birding areas where the only opportunity to view certain species exists. The economic infusion to local economies is estimated to be over 200 million dollars (USDA 2000).

In the book *Great Birding Trips of the West*, the “Sky Islands” are characterized as being “one of the tops for bird finding, not only in the West but in all of North America.” This book goes on to describe southeastern Arizona’s “Sky Islands” being to bird watchers what St. Andrews in Scotland is to golfers or what Cooperstown is to baseball. Each winter tens of thousands of ardent bird watchers from around the world journey to the Cave Creek, Madera Canyon, Sabino Canyon, Guadalupe Canyon and Ramsey Canyon areas of the forest.

In 1991, the *Wild Bird Digest* did a survey which identified southeastern Arizona as the number one birding site in the United States. The Nature Conservancy declared the region of southeast Arizona and southwest New Mexico as one of 12 “Last Great Places” in the Western Hemisphere.

The San Pedro Riparian National Conservation Area and its surrounding watershed harbor the highest diversity of vertebrate fauna in the interior United States, and was identified by the American Bird Conservancy in 1996 as the first Globally Important Bird Area in the Western Hemisphere.

Over 400 species of birds are recorded for southeastern Arizona and a trip list for an avid birder to the area can approach 200 species. Every major publication on birding lists sites in southeastern Arizona as major stops for serious birders. For several small communities this business is vital and growing (USDA 2000).

Wildlife and Fish. Wildlife and fish resources on the Coronado National Forest are the most diverse of any forest in the region, if not the nation. Approximately 600 vertebrate species are found within the forest. This is a direct result of the unusual variety in vegetation, climate and geology.

As another example, the Upper San Pedro River Basin provides important habitat for 82 species of mammals, 43 reptiles and amphibians, and native fish.

Southeast Arizona provides habitat for a large number of animal and plant species designated as endangered or threatened under provisions of the Endangered Species Act. In addition, an extremely large number of species have been designated as sensitive (USDA 2000). The socio-economic importance of the area’s unique fauna and flora is critical to all of southeastern Arizona, especially the rural communities which increasingly rely on tourism and recreation (USDA 2000).

Cultural Resources. There are numerous prehistoric and historic sites and important cultural landscapes in southeastern Arizona. Some prehistoric sites have been dated as far back as 11,000 years when the San Diego Clovis Culture of the Paleoindian Period first occupied the area. Stone tools and weapons used by these people to butcher large animals, such as mammoths and bison, have been found in several sites along the San Pedro River (USDI undated). Prehistoric and historic sites range from campsites that are thousands of years old to 20th century homesteads; from large villages to small rock art sites; from historic mining complexes to 20th century water systems. They also include 19th and 20th century log and adobe structures and

ruins. More than 100 properties are listed on the National Register of Historic Places (USDA 2000). Historic cultures include the Hohokam, ancestors of the Tohono O'odham (formerly Papago); Apache; Spanish; Mexican and American periods.

The historic Kentucky Camp on the Nogales Ranger District of the Coronado National Forest is a good example of a restored early 20th century log and adobe mining camp.

Commodity Users of Federal Land. Farmers, ranchers and miners that are legitimate authorized users of Federal lands, many times earn their livelihoods on these lands by raising livestock, growing crops and mineral extraction.

The Coronado National Forest has a total of 196 active grazing allotments with a total of 33,835 head of permitted livestock in Fiscal Year 2001. BLM has 227 active grazing allotments in southeast Arizona with a total of 12,474 head of permitted livestock in Fiscal Year 2001.

III. ENVIRONMENTAL DAMAGE AND OTHER IMPACTS CAUSED BY UNDOCUMENTED ALIEN CROSSINGS

Because Federal lands in southeast Arizona are, for the most part, remote and isolated areas adjacent or in close proximity to the Mexican border, they have become major arteries for smuggling humans and controlled substances into the United States. These smuggling activities many times go hand-in-hand and cannot easily be addressed separately. As one example, on March 5, 2001, Sierra Vista Ranger District Law Enforcement Officers tracked a group of smugglers northbound from Mexico through Parker Canyon Lake Recreation Area. When contacted, 20 smugglers abandoned packs of marijuana and fled back to Mexico. Law Enforcement Officers seized 40 packs containing 912.85 pounds of marijuana (USDA 2001). Numerous similar incidents could be cited.

As reported in the Sierra Vista Herald on April 6, 2001, Cochise County is still a major entry point for undocumented aliens. From October 1, 2000 to March 31, 2001, 162,355 undocumented aliens were taken into custody by the Border Patrol in Cochise County (Hess 2001b). Although this number is less than this period last year, it still is a sizeable number.

As a result of the vast amount of smuggling of humans and controlled substances in southeast Arizona, the extremely valuable, and many times irreplaceable, natural and cultural resources mentioned in the previous section are in jeopardy.

Undocumented aliens crossing Federal land in southeast Arizona not only cause damage to natural and cultural resources; they impact Federal land visitors, public services, Federal employees working in the area, and residents and businesses located on Federal and reservation lands. Furthermore, undocumented aliens themselves are impacted as they cross Federal lands due to the remoteness of many of these lands and the unexpected harsh conditions that they encounter there. These impacts are representative of those types of impacts occurring on Federal lands within the remainder of the border lands in Arizona and the other border states.

A brief description of some of the environmental damage and other impacts associated with undocumented aliens in southeastern Arizona is provided below.

A. Impacts on Federal Land Visitors, Users, Employees and Residents

Visitor and Employee Safety. Certain Federal lands in southeast Arizona can no longer be used safely by the public or Federal employees due to the significance of smuggling undocumented aliens and controlled substances into the United States. The mere number of undocumented aliens traveling in the border area intimidates legitimate visitors and creates a reluctance by some of the public to use public lands. The volume of undocumented aliens also impacts Federal and other government employees' ability to feel safe while doing their job in the field. Staff exposure while conducting resource management activities in certain areas along the border is a serious safety concern. Smugglers traveling at high speeds cause a safety risk to the public, Federal resource personnel and law enforcement staff. Staff and visitors have been run off the road. Smugglers in vehicles have threatened law enforcement personnel with violent acts. Visitors' vehicles have been vandalized while unattended.

Established trails, such as the Arizona Trail, leave open the potential of physical conflict between legal and illegal users. Smugglers of controlled substances are also using hunting season as a cover to try to get drugs across the border. They outfit themselves to appear as hunters. It is not uncommon to find a load of marijuana in a group of individuals posing as hunters, hikers or recreationists.

Federal land managers now must send staff to the field in teams, rather than individually, in certain areas along the border to better ensure employee safety. There have been numerous times when Federal managers have decided to limit employee presence in an area due to the potential for unsafe encounters. This adds to the cost of land management and reduces workforce accomplishments. The undocumented alien problem in southeastern Arizona is known to Federal employees and other potential recruits elsewhere and it is causing problems in recruiting qualified applicants to fill necessary positions in some locations due to concerns for personal safety.

Commodity Users of Federal Land. Ranchers, farmers, miners and other legitimate users of Federal lands are heavily impacted financially by smuggling operations that cut fences, breakdown or leave gates open, damage water supplies, steal or damage equipment, disrupt grazing and irrigation schedules, etc.

Although the impacts on commodity users of Federal lands are not specifically quantified in this report, they are believed to compare in many respects to the impacts addressed herein. However, due to the more limited amount of resources available to commodity users than to Federal agencies, the degree of impacts on individual users can be much more severe.

Breaking and Entering and Burglaries. Breaking and entering and burglaries along the border are common and include historic and government structures, employee and private residences, and residences and businesses on reservation lands. Money, firearms and other personal

possessions have been taken from employee and private residences on Federal lands. This has cost the government thousands of dollars in tort claims. Also, government and employee vehicles have been vandalized and stolen.

On Buenos Aires National Wildlife Refuge, the addition of security bars on windows, use of safes for valuables and dogs in the yards, have not deterred the undocumented aliens from breaking into staff residences. The Refuge has had to add alarm systems in some of the homes.

Administrative sites owned by the Federal government on the Coronado National Forest are used as routes and way-points integral to undocumented alien and drug smuggling. Buildings have been vandalized and burglarized; government property and livestock have been stolen.

The concrete block and metal maintenance shop building on San Bernardino National Wildlife Refuge has been broken into so many times, with thousands of dollars worth of equipment stolen, that refuge personnel finally contracted the complete removal of the shop in 2001 in an effort to eliminate the attractive nuisance this building provided to undocumented aliens and smugglers passing through the refuge on their way north.

A government dump truck was stolen from San Bernardino National Wildlife Refuge and driven through a cut border fence into Mexico. Additional vehicles owned by both the refuge and the public have been forcibly entered and damaged in an attempt to start them and steal them.

Approximately 18 years ago, two undocumented aliens burglarized two homes in the Tubac area and used two of the rifles they stole to murder two employees of the Salerno Ranch. With the vast increase in smuggling operations present today, this type of incident is very likely to occur again.

Many people that live near the border do so in fear. Those that leave their homes to go to work often return to find their home ransacked for canned goods and water. Others are repeatedly harassed by undocumented aliens seeking water, medical assistance, shelter or food.

Law Enforcement Personnel. Law enforcement officers dedicated to Federal land management agencies and tribal police along the southwest border are few in number. Although these law enforcement officers coordinate and work closely with the U.S. Border Patrol, U.S. Customs and other Federal, State and local law enforcement personnel, emphasis by these other agencies concentrates in metropolitan areas. As a result of this emphasis, officers of Federal land management agencies and tribal police often encounter groups of undocumented aliens or drug smugglers.

As immigration authority and jurisdiction remain with the Department of Justice, officers can only briefly detain suspected undocumented aliens and request response from the Border Patrol. Border Patrol agents may or may not be able to respond, and if agents do respond, response times are many times lengthy in rural locations. Officers of Federal land management agencies and tribal police are often reduced to reporting direction of travel by suspected undocumented aliens to the Border Patrol. This significantly detracts from agency emphasis of enforcing public land laws, protecting the land and providing public safety.

Federal law enforcement officers assigned to land management agencies and tribal police often face situations where they are at personal risk and must deal with overwhelming odds. Due to the remoteness of many Federal lands, timely assistance from other law enforcement agencies is not always possible. This leaves Federal land management law enforcement officers in difficult situations for extended periods of time because no back-up law enforcement officers are available from other cooperating agencies.

Even when off the job and at home, Federal law enforcement officers and their families are at risk. As an example, drug smugglers crossed the border illegally and contacted a refuge officer during the middle of the night at the officer's home adjacent to San Bernardino National Wildlife Refuge in an attempt to negotiate the return of their load of marijuana seized earlier in the day. The Mexican nationals left empty-handed after intimidating and threatening harm to both the officer and his family.

Forest Service law enforcement officers have Title 21 USC controlled substance law enforcement and investigation authority; these officers routinely face large groups of undocumented aliens smuggling drugs across National Forest lands.

B. Damage to Natural and Cultural Resources

Trails. Literally hundreds, if not a thousand or more, new trails have been created on Federal lands in southeastern Arizona by undocumented alien crossings. And, more and more trails are being created by the hundreds of thousands that cross Federal lands in southeast Arizona each year. This proliferation of trails damages and destroys cactus and other sensitive vegetation, disrupts or prohibits revegetation, disturbs wildlife and their cover and travel routes, causes soil compaction and erosion, impacts stream bank stability, and often times confuses legitimate users of trails on Federal lands.



Photo 1. One of hundreds of new trails created across Federal lands by undocumented aliens in the past several years.

Breeding bird populations and recruitment are being negatively impacted by undocumented aliens. Public lands in southeast Arizona are important breeding areas for migratory birds and other wildlife. Yet, the profusion of trails and roads being created through public lands by undocumented aliens is causing ecological fragmentation of the landscape. The impacts of such fragmentation are perhaps most severe to breeding birds, many of which nest directly on the ground or in short shrubs and trees on or adjacent to the increasing network of undocumented alien routes. The continual disturbance to nesting birds during both day and night typically leads to direct nest failure or abandonment by breeding birds, leads to increased predation on active nests, and keeps birds from maintaining egg temperatures and adequately feeding any young that do hatch.

Undocumented aliens use riparian areas to rest, get water, and wait for transportation. The increase in illegal use at these sites is impacting native vegetation through trampling. Areas of dense Huachuca water umbel, a Federally-listed endangered wetland plant, have been trampled to death at Leslie Canyon National Wildlife Refuge from undocumented aliens waiting to be picked up.

Also, vegetation has been severely damaged or destroyed by undocumented aliens who uproot native plants such as ocotillo to build temporary shelters or to camouflage drug stashes. Such damage may take decades to heal.



Photo 2. Temporary huts built by undocumented aliens by cutting native vegetation.

Roads. Wheel tracks made by one undocumented alien vehicle across pristine Federal land is quickly turned into an unwanted dirt road by many others who spot it and use it. These “wildcat roads” also damage and destroy vegetation, disrupt or prohibit revegetation, disturb wildlife and their cover and travel routes, cause soil compaction and erosion, and impact stream bank stability. Impacts on threatened and endangered plants and animals can be severe. Road barriers and gates are often damaged. This allows unauthorized livestock and off-highway vehicle use. Roads receive even more damage when illegal vehicle traffic uses them during the monsoon season or other times when the roads are wet. Use of these roads by law enforcement agencies also contributes to additional damage in many areas.



Photo 3. This vehicle track could develop into an unwanted road as the abandoned vehicle is removed and the same route is tried by others.

Resource damage created by cross country use of motor vehicles in an effort to smuggle undocumented aliens or controlled substances or to apprehend them is a major problem on Federal lands. The protection of natural resources is of no interest to smugglers as they attempt to evade contact and drive vehicles cross country until they are unable to continue any further due to terrain or vegetation.

As an example, the endangered Pima Pineapple Cactus habitat on the Sierra Vista Ranger District has had an increasing amount of new “wildcat road” development and off road vehicle use which is contributing to the decline of the quality of the habitat for this species. While some of this can be attributed to recreation use in the area, much of the damage is due to undocumented aliens and other border related problems.

Even the use of existing roads by smugglers creates problems for Federal land managers. For example, a dump truck loaded with 24 hidden undocumented aliens, stalled and rolled backwards off the road on Leslie Canyon National Wildlife Refuge, almost turning over into critical habitat for endangered fish in Leslie Creek. When a Border Patrol helicopter flew by to investigate the truck, the driver panicked and jumped from the vehicle.

Abandoned Vehicles. Large numbers of vehicles are abandoned by smugglers and undocumented aliens. If a vehicle is abandoned or is involved in an arrest, impoundment is necessary. Many times vehicles are abandoned with broken axles, flat tires or other major problems. Some are set afire. Also, many are left in rugged terrain, normally considered unsuitable for motorized vehicles. Such vehicles are difficult and costly for agencies to remove and dispose of. Additional resource damage may be caused when these vehicles are removed

from remote areas. Agency staff must sacrifice many hours of their normal work to remove abandoned vehicles and other debris left by the undocumented aliens. Towing services are often needed and the cost of removal in most cases is passed on to the Federal land management agency.



Photo 4. Vehicle wrecked and abandoned by undocumented aliens.

Often it is not recognized that abandoned vehicles contain a number of pollutants, such as gasoline, oils, antifreeze and lead, that many times soak into the ground and could eventually reach water sources. Cleanup of such pollutants in remote areas becomes quite costly and difficult to do.

Wilderness Areas. The character of Congressionally designated wilderness areas has been reduced by the creation of unwanted trails and roads, damage to existing trails, and large amounts of trash. Encounters with large groups of undocumented aliens reduces the quality of the wilderness experience for many visitors. Law enforcement operations and enforcement related aircraft flights in wilderness areas reduce the quality of the wilderness experience.

Range, Wildlife and Other Improvements. Federal agencies in southeast Arizona have more than 70 miles of common border with Mexico. The international border fence is repeatedly cut or torn down in many locations forcing Federal agency staff and grazing permittees to constantly make repairs. Horses and cows from Mexico trespassing on Federal lands in the United States are a significant and reoccurring problem because the Federal workforce is unable to provide the constant vigilance and maintenance required to keep them out.



Photo 5. Hole cut through international border fence by undocumented aliens.

Interior fences also are cut and damaged which allows unauthorized cattle and off-highway vehicle use, and even cattle rustlers to steal cattle taking them back into Mexico. This also creates management problems for livestock operators. Livestock from Mexico many times are not vaccinated and therefore can bring diseases (such as hoof and mouth disease) to and create other biological problems for cattle permitted on Federal lands. Livestock are rustled across the border or killed. Those that cross into Mexico are often permanently lost.

Gates are left open or rammed, security locks are cut, signs are driven over and heavy damage or destruction of water developments and other improvements by undocumented aliens traveling through Federal lands and seeking drinking water in remote locations occur regularly. All of this adds significantly to the cost of maintaining Federal improvements.



Photo 6. International border gate left open permits unauthorized Mexican livestock use of Federal lands.

As an example, damage to a Sonoran Chub enclosure fence next to the border on the Coronado National Forest, Nogales Ranger District by undocumented aliens has been so extensive that the improvement has had to be completely rebuilt several times and has often been rendered ineffective in restricting livestock use in the area. This has allowed damage to endangered species habitat to continue and has resulted in very expensive repair costs.

Administrative Sites. Recreational, cultural and administrative sites are repeatedly vandalized and damaged. This increases maintenance requirements at these sites. These sites are often intermediate destinations for undocumented aliens and smugglers who use the legal visitors as a cover for their activities. Use of these facilities for illegal operations significantly increases the risks for employees and visitors as well.

Trash. Tons of trash in many popular recreation areas as well as many remote areas that are difficult to access are left by undocumented aliens. Trash includes things such as clothing, backpacks, other personal items, burlap bags, plastic for shelter, plastic water containers, food containers, disposable diapers, and other common trash. This impact's wildlife, vegetation and water quality in the uplands, in washes and along rivers and streams. This also detracts from scenic qualities and can effect human and animal health from spread of bacteria and disease.

Trash also is ingested by wildlife and livestock, sometimes causing illness and even death.



Photo 7. Accumulated trash left by undocumented aliens.



Photo 8. A pickup load of empty water bottles and other trash left by undocumented aliens represents a minuscule part of the impacts they cause.

Human Waste. There are high concentrations of human fecal material in heavily used undocumented alien pick up points, in and adjacent to washes, rivers and streams, and in other heavily traveled routes. This also impacts wildlife, vegetation and water quality in the uplands, in washes, and along rivers and streams. The human waste presents a health risk to all people.

Wildfires. Warming and cooking fires built and abandoned by undocumented aliens have caused wildfires that have destroyed valuable natural and cultural resources, such as the loss of a private residence and associated historic structures at Lewis Springs in the San Pedro Riparian National Conservation Area. The fires pose a threat to visitors, residents and Federal and local firefighters as well as to the undocumented aliens camping in or migrating through the area.

The Miller Peak fire in 1994, on the Sierra Vista Ranger District of the Coronado National Forest was possibly caused by one of these abandoned warming fires. That fire cost in excess of \$1 million to suppress.

Accurate statistics are available regarding the number of human-caused wildfires that occur each year on the Coronado National Forest. However, nationality and immigration status of those who start human-caused wildfires on the Forest are not available. Observations and trends concerning human-caused wildfires on the Forest are:

- Human-caused wildfires increased on the Forest in proportion to immigration enforcement efforts in metropolitan areas.
- Human-caused wildfires have increased in areas and along routes used by smugglers of undocumented aliens and controlled substances.

Between the years 1994 and 1999, fire personnel at Buenos Aires National Wildlife Refuge spent 592 personnel hours suppressing 20 wildland fires totaling 2,282 acres and costing \$34,731. However, during the 2000 wildfire season, the worst on record, Refuge fire personnel spent 46,040 personnel hours suppressing 11 wildland fires (approximately 16,000 acres), all of which were caused by undocumented aliens, as determined by our investigators. The cost of suppression was \$360,980. In addition, approximately \$210,000 were spent on support and logistical needs, such as equipment maintenance and repair of aircraft, engines, and water tenders. Suppression of these dangerous fires included air tankers, helicopters, numerous engines of all sizes, handcrews, overhead personnel, dispatchers, law enforcement officials, reconnaissance aircraft, computers, cellular telephones, radios, pickups, ATV's, food, water, personal protective equipment (PPE), ignition devices, and countless support staff.

Needless to say, fighting wildland fires is extremely dangerous. Hundreds of firefighters from several cooperating agencies assisted the Refuge staff in protecting the natural resources.

Cultural Resources. Damage to cultural resource sites continues to occur on Federal lands and lands of the Tohono O'odham Nation as a direct result of actions taken by both undocumented aliens and by the U.S. Border Patrol and the U.S. Customs Service in their efforts to stem the flow of undocumented aliens and smugglers of controlled substances.

Environmental Health. There is a high risk of diseases, such as Tuberculosis, AIDS, and venereal diseases, being carried across the border by undocumented aliens. The extent of these risks is not clear at this time.

Spread of Non-native Plants. Undocumented aliens in significant numbers may present an increased risk of transporting alien, invasive species from their home areas, and establishing them on Federal lands.

Various weed seeds are easily transported on clothing as undocumented aliens travel north. Salt cedar, Lehmann lovegrass, buffleggrass, cheatgrass, and other invasive species are likely spread in this manner. Water bottles, filled at various opportunistic wetland locations as undocumented aliens travel north, can infect otherwise protected Federal wetlands with invasive parasites and diseases which can doom native fish and wildlife. The spread of Asian tapeworm transported through copepods (tiny aquatic crustaceans) has eliminated or impacted some populations of Federally-listed threatened and endangered fish. The spread of chytrid fungus from South America into the United States was first documented at San Bernardino National Wildlife Refuge. This fungus is deadly to amphibians, and has helped lead to the elimination of Chiricahua leopard frogs from the refuge.

C. Impacts on Undocumented Aliens

Serious injury, illness and death are common occurrences among undocumented aliens as they cross the rugged terrain of the Sonoran and Chihuahuan deserts in southeast Arizona. Especially during the hot summer months, heat exhaustion, and lack of food and water become very serious problems. Many times, undocumented aliens are recruited in their home towns in Mexico, Latin America and elsewhere by “coyotes” who promise them a safe trip to the United States, take their money, bring them across the border and abandon them in remote desert areas.

Although not in southeast Arizona, a case in point is the worst incident of its kind in Arizona history that occurred on May 19-24, 2001, where 14 of at least 26 people died in the Sonoran desert near the Yuma and Pima County line and on the Cabeza Prieta National Wildlife Refuge and the Barry M. Goldwater Air Force Range. The remaining twelve were hospitalized (Flannery, et al 2001). The “coyote” allegedly left the group in one of the most inhospitable portions of the desert in temperatures that reached 115 degrees, promising to return with water, but never did.

Often, undocumented aliens are transported in grossly overloaded vehicles on unmaintained roads or cross-country. They are often robbed of their money and possessions, beat up, sexually assaulted, otherwise dehumanized and used as “mules” to transport controlled substances into the United States.



Photo 9. Backpacks and other personal belongings left behind by undocumented aliens as smugglers took them further north.

Motor vehicle accidents cause the death of many undocumented aliens each year. Even more undocumented aliens die on Federal lands in southeast Arizona as a result of illness, other types of accidents or exposure to the elements. There were 24 fatalities of undocumented aliens on DOI lands in 2001.

Federal land management agencies often perform prescribed fires in areas frequented by undocumented aliens. It is difficult to provide for their safety because they often hide from employees trying to make certain that the area is clear of people. Agents of the Border Patrol have been used to help in these efforts. Even so, the potential for causing the death of undocumented aliens during prescribed fires still remains a serious concern for Federal land managers.

D. Impacts Beyond Federal Boundaries

State, county and local governments and private property owners experience most of the same problems caused by undocumented aliens crossing their land as mentioned herein. Additionally, there is a significant increased workload on Federal and local court systems and increased costs to medical providers caring for the sick and injured. For example, Cochise County is reported to have spent nearly \$42 for every man, woman and child county resident on expenses related to undocumented aliens from Mexico during the 1999 Fiscal Year (Saunders 2001).

As an indication of the magnitude of the illegal immigration problem, on February 28, 2001, the Sierra Vista Herald reported on two incidents that occurred the same day. Such incidents occur

over and over throughout southeastern Arizona, and the remainder of Arizona and the international border. Following is a brief summary of that report:

Two truck loads of undocumented aliens were discovered—one in the Sierra Vista area and the other in the Whetstone region on February 28, 2001. A Sierra Vista police officer stopped a “U-Haul type truck” driving without its lights. The vehicle was pulled over. As the truck stopped the driver fled. In the back of the vehicle, 92 undocumented aliens from Mexico were discovered.

About three hours later that same day, another truck was spotted in the Whetstone area. A Border Patrol agent had followed the truck to a residential area in Whetstone, and when he stopped the vehicle, the driver and two passengers jumped out of the cab and fled. The agent found another passenger on the floor of the cab and when the rear of the large delivery-like truck was opened another 94 undocumented aliens from Mexico were discovered. All 187 undocumented aliens—the 92 in the Sierra Vista apprehension and the 95 in the Whetstone incident—were returned to Mexico. The two drivers and two other passengers were not located (Hess 2001a).

Healthcare Providers. Healthcare providers are heavily impacted by sick or injured undocumented aliens who get treatment but have no means of payment. For example, the University Medical Center in Tucson reported that its unreimbursed medical costs for undocumented aliens was approximately \$10 million. The Arizona Ambulance Association surveyed 17 of its 65 members and found more than \$3 million in unpaid costs due to foreign nationals, including undocumented aliens.

IV. COORDINATED PLAN TO MITIGATE ENVIRONMENTAL DAMAGE

A. Introduction

With the increasing law enforcement necessary to curtail the smuggling of undocumented aliens and controlled substances, Federal employees with law enforcement authority cannot accomplish other important management and resource protection activities. Yet if law enforcement is not accomplished, visitor and staff safety are severely compromised, and subsequent damage to natural and cultural resources occurs.

A number of actions have taken place within the past year that respond to the concerns expressed by Congress regarding the impacts caused by undocumented aliens crossing Federal lands in southeastern Arizona (and elsewhere along the border).

On March 20, 2001, the U.S. Border Patrol, the BLM, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and the Natural Resources Conservation Service signed a Memorandum of Understanding (MOU) to 1) “provide general procedures for the U.S. Border Patrol’s use of public land to conduct its routine operations of search and rescue, training, and apprehension of Undocumented aliens, while protecting the public’s right to use public land without undue disruption, 2) develop and implement a plan to mitigate environmental degradation caused by Undocumented aliens crossing Federal lands in Arizona and New Mexico, and 3) provide and encourage opportunities for all Parties to operate more effectively and achieve their missions.”

Subsequent to this initial signing, the Bureau of Indian Affairs has signed the MOU. The U.S. Environmental Protection Agency is expected to sign it in the near future. The MOU covers all of Arizona and New Mexico and was a product of the Southwest Strategy. Other government entities, including Native American Tribes, are welcome to become a party to this MOU at any time. See the MOU, which is attached as Appendix C.

As requested by the House Committee on Appropriations, a *Southeast Arizona Coordinated Plan to Mitigate and Prevent Environmental and Other Impacts Caused by Undocumented Aliens Crossing Federal Land* accompanies this report (Appendix B). Agencies participating in this plan include the U.S. Border Patrol, U.S. Forest Service, Department of the Interior bureaus and U.S. Environmental Protection Agency. The purpose of this Coordinated Plan is to “mitigate and prevent environmental damage and other impacts caused by undocumented aliens crossing through Federal lands in southeast Arizona and restore safe public use and management of these lands through a multi-agency, coordinated effort.”

The Department of the Interior has prepared a *draft Southwest Border Law Enforcement Strategy*, to help guide efforts to deal with the impacts of smuggling controlled substances and undocumented aliens through public lands within the entire United States-Mexico border area. Input by the U.S. Border Patrol, U.S. Forest Service, the U.S. Environmental Protection Agency, local law enforcement, and tribal governments is being sought.

A draft *Safford/Tucson Fire Management Zone Initial Attack Fire Operations Guidance for the San Pedro River Corridor and along the U.S.-Mexico Border* has been developed by BLM to help assure the safety of undocumented aliens and others that may be in areas where prescribed fires are to be initiated on lands administered by BLM. This may be used as a prototype by other agencies. A copy of this guidance can be made available upon request.

B. PURPOSE

The purpose of this coordinated plan is to provide the framework needed to mitigate and prevent environmental and other impacts caused by undocumented aliens crossing through Federal lands in southeast Arizona and restore safe public use and management of these lands through a multi-agency, coordinated effort.

C. AUTHORITY

This coordinated plan is prepared in accordance with three requests by the House Committee on Appropriations. First, House Report 106-646, dated June 1, 2000, on page 88 states “The Committee encourages the Forest Service and the Secretary of the Interior to work more closely with the Immigration and Naturalization Service and the EPA in southeastern Arizona to develop a plan to coordinate activities addressing illegal immigration crossing through Federal lands, and additionally, to provide the Committee by October 1, 2001, a plan coordinated with the EPA to mitigate environmental damage caused by illegal immigrant crossings through these Federal lands.”

Second, House Report 106-674, dated June 12, 2000, on page 54 states “The Committee encourages the Administrator of the Environmental Protection Agency to work more closely with the Immigration and Naturalization Service, the Department of the Interior, and the Forest

Service to develop a plan to mitigate environment degradation caused by illegal immigrants crossing into southeastern Arizona. This mitigation plan must be provided to the Committee by October 1, 2001.”

Third, House Report 106-680, dated June 19, 2000, on page 33, states “The Committee is aware of continuing environmental issues due to direct and indirect impacts of illegal immigration traffic through Federal lands and parks. INS is directed to work more closely with the United States Forest Service and the Department of the Interior to develop a plan to coordinate activities to protect natural and human resources while providing increased border protection along the Southwest border, including Southeastern Arizona. INS is further directed to submit this joint plan to the Committee no later than October 1, 2001.”

On March 20, 2001, the U.S. Border Patrol, U.S. Forest Service, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and the Natural Resources Conservation Service signed a Memorandum of Understanding (MOU) affecting public land in Arizona and New Mexico. The Bureau of Indian Affairs signed the MOU on April 11. The U.S. Environmental Protection Agency is expected to sign in the near future.

The purpose of the MOU is to “1) provide general procedures for the U.S. Border Patrol’s use of public land to conduct its routine operations of search and rescue, training, and apprehension of undocumented aliens, while protecting the public’s right to use public land without undue disruption, 2) develop and implement a plan to mitigate environmental degradation caused by undocumented aliens crossing Federal lands in Arizona and New Mexico, and 3) provide and encourage opportunities for all Parties to operate more effectively and achieve their missions.”

D. BACKGROUND

In the first months of 2000, the environmental and other impacts caused by waves of undocumented aliens crossing Federal lands in Arizona and New Mexico were being recognized by land management agencies as a very serious problem. In May 2000, the Southwest Strategy United States-Mexico Government Relations Work Group initiated efforts to better understand the problem and negotiate the MOU mentioned in the previous section. During this process, the language from the House Committee on Appropriations Reports was brought to the attention of the Work Group. As a result, a committee of Federal agency and Tohono O’odham Nation representatives was formed to develop a report to Congress and a coordinated plan for southeast Arizona, as requested by Congress in the Report language. The first meeting of the committee was held on March 8, 2001.

During the first and subsequent meetings of the committee, it became more and more apparent that the heavy impacts caused by undocumented aliens were not restricted to southeast Arizona. In fact, it is apparent that the areas being impacted fluctuate depending upon pressures brought to bear on smuggling operations by the U.S. Border Patrol and other law enforcement agencies.

Since several Federal agencies administering lands in southwest Arizona and the Tohono O’odham Nation were experiencing similar heavy impacts caused by undocumented aliens, their representatives were invited to share their experiences and thoughts and to participate in the discussion and development of this plan.

E. GOALS AND OBJECTIVES

Four goals have been identified as a means of accomplishing the purpose of this coordinated plan. Corresponding objectives help focus on how each goal will be reached. Specific actions have been developed for each objective. Some actions can and will be completed with existing resources. Many others require additional resources to accomplish.

Subject to the availability of funds and workforce, the undersigned have primary responsibility for implementing the actions identified in this plan and seeing that the goals and objectives are met.

Goal 1: Regain safety and confidence of visitors, employees and residents while on Federal land.

As a result of increased use of Federal lands for international smuggling of undocumented aliens and controlled substances, many visitors, employees and residents have encountered unsafe situations and/or experience a loss of confidence in their ability to remain safe while on Federal lands in southeast Arizona.

Accomplishment of the following objectives (and those under Goal 4) will reduce the number of unsafe encounters or situations occurring on Federal land. Increased visibility of Federal employees will improve the ability of visitors, employees and residents to feel confident about their safety while on Federal land.

Objective 1. Provide increased law enforcement officer presence to ensure effective enforcement and reduction of crime through violation prevention.

Violation prevention requires enforcement personnel to be visible, outfitted with proper equipment, and available during times when violations are likely to occur. Current staffing and supplies are not sufficient to provide effective violation prevention.

Actions Requiring Additional Resources

1. Hire additional law enforcement personnel, support equipment and vehicles (including aviation support).

Objective 2. Design and maintain facilities and improvements to discourage illegal activities while encouraging legal and permitted uses.

Illegal activity is increasingly conducted in full view of persons engaged in legal and permitted activities. By eliminating such items as hazardous facilities in need of repair, and poor lighting, illegal use is discouraged while legal use is encouraged. Strategic placement of emergency call boxes will encourage timely reporting of suspicious activity. Current facilities and new construction should be evaluated and, if appropriate, modified to include features that would discourage illegal activity while encouraging legal and permitted uses.

An example of an existing improvement that could be modified to discourage illegal use would be a long-linear north-south trail. Redesigning the trail as a loop-trail would be less likely to be used for smuggling undocumented aliens and controlled substances.

Another example might be clearing brush and understory out of campgrounds to improve visibility and reduce hiding places that could be used by undocumented aliens.

Actions Requiring Additional Resources

1. Modify existing and design and construct new facilities and improvements to discourage illegal activities while encouraging legal and permitted uses.
2. Purchase and install adequate lighting where determined necessary to reduce illegal activities.

Objective 3. Keep employees, visitors and residents informed of restrictions, hazards and risks on Federal lands and efforts to minimize impacts caused by undocumented aliens.

Many visitors, employees and residents have lost confidence and do not feel safe while on Federal lands, in part, from a lack of information. Improvement could be achieved by agency-initiated news releases to inform the public and employees of results, restrictions, hazards and risks on Federal lands. Effective placement of signs would discourage illegal activity while encouraging safe legal use. Employees would gain confidence through periodic “tailgate” safety briefings and information updates. Increased contact with field-going employees and volunteer personnel would reestablish confidence amongst visitors, employees and residents. Preparation and distribution of printed educational materials would make these and other contacts more effective.

Actions to be Taken Using Existing Resources

1. Develop news releases to inform employees and the public of results, restrictions, hazards and risks.
2. Provide “tailgate” safety briefings and information updates.
3. Increase visitor contacts with field personnel and volunteers.

Actions Requiring Additional Resources

1. Purchase and install signs that educate, notify, warn, and discourage illegal uses and encourage legal uses.

Objective 4. Expand interagency cooperation to assure effective and efficient law enforcement and to increase officer safety.

The safety and confidence of visitors, employees and residents while on Federal land will not be regained without intra-agency and interagency cooperation. Unilateral planning

by a single agency will not work. Reduction in smuggled undocumented aliens and controlled substances across Federal lands can be affected by multi-agency cooperative planning and site selection and execution of highway check points by the U.S. Border Patrol. A common radio frequency and cooperative radio frequency and encryption exchange would improve cooperation and officer safety.

Planned cooperative multi-agency projects and full informational briefings on unilateral agency projects are important. In multi-jurisdictional areas these would improve effectiveness and eliminate past events of compromised officer safety created by two law enforcement agencies working unaware of each others activities in the same geographical location.

Actions to be Taken Using Existing Resources

1. Establish a committee to identify opportunities and make recommendations on multi-agency planning, site selection and execution of highway check points, and the possibilities of establishing a common radio frequency and cooperative radio frequency and encryption.
2. Implement approved recommendations that can be done with existing resources.

Actions Requiring Additional Resources

1. Purchase communications equipment (e.g., radios, repeaters) to provide field employees with reliable communications equipment and capability.
2. Implement other approved recommendations of the above-mentioned committee.

Goal 2: Protect and restore improvements and natural and cultural resources on Federal land.

Objective 1. Increase the presence of law enforcement personnel to deter illegal immigration and to protect sensitive resources and administrative facilities.

An increased presence of agency employees in environmentally sensitive areas will provide a deterrent for additional damage of sensitive resources and administrative facilities. Increased presence also helps agencies to be proactive rather than reactive.

Actions to be Taken Using Existing Resources

1. Review workforce allocations to assure critical needs are met to the extent possible. Reallocate as appropriate.

Objective 2. Inventory, monitor and evaluate/assess environmentally sensitive areas to determine if the combined agency strategy is successful in reducing and mitigating impacts to resources and facilities.

Standardized interagency information gathered through monitoring and evaluation is very important to determine what environmental effects are caused to sensitive areas by undocumented aliens and to determine if the combined agencies' strategy is successful in reducing and mitigating environmental impacts and damage to cultural sites.

Actions to be Taken Using Existing Resources

1. Develop a standardized protocol to inventory, monitor, evaluate and assess sensitive areas that can be used by all agencies.

Actions Requiring Additional Resources

1. Hire additional personnel.
2. Inventory, monitor, assess and evaluate environmentally sensitive areas and the biological and cultural impacts caused by undocumented aliens.
3. Consolidate gathered information and distribute among appropriate agencies and other interested parties.
4. Evaluate effectiveness of combined agency strategy.

Objective 3. Remove existing and future debris, and repair and maintain facilities, trails, roads and fences.

Removal of existing debris and the rehabilitation of environmental damage is essential to achieve restoration of many of the Federal lands in southern Arizona.

Actions Requiring Additional Resources

1. Hire or contract for additional maintenance personnel and purchase or contract for support equipment and vehicles to increase capabilities beyond current levels to clean up trash left by undocumented aliens, repair damaged facilities, maintain roads and repair fences.
2. Clean up human waste and hazardous materials left by undocumented aliens.
3. Remove abandoned vehicles by towing or by helicopter.
4. Rehabilitate damaged trails, roads, vegetation, soils and habitats.
5. Upgrade all-weather roads along the border.
6. Purchase and install "wildlife friendly" vehicle barriers in strategic locations.

Objective 4. Complete the appropriate level of National Environmental Policy Act (NEPA) documentation along with required surveys and clearances (e.g., cultural and

threatened and endangered species) prior to restoration of natural and cultural resources and repair of facilities.

Enforcement and rehabilitation efforts on Federal lands must comply with existing environmental laws such as NEPA, the Endangered Species Act and many other laws and regulations. There is a significant cost of compliance that must be considered in all Federal actions.

Actions Requiring Additional Resources

1. Compliance with NEPA and required surveys and clearances (e.g., cultural and threatened and endangered species) on all appropriate actions taken as part of this coordinated plan.

Objective 5. Design, construct, reconstruct or remove improvements to minimize the use or damage by undocumented aliens.

Designs of existing improvements, including roads and trails, did not take into consideration the potential use and damage caused by undocumented aliens. Some existing improvements need to be redesigned and new improvements need to be designed so they do not encourage use or damage by undocumented aliens.

Actions Requiring Additional Resources

1. Design, construct, redesign or remove identified improvements.
2. Evaluate the success of the changes made and share this information with other appropriate agencies and other interests.

Objective 6. Implement actions that manipulate and reduce vegetation that will help improve law enforcement effectiveness.

Vegetation on Federal lands along the border in some locations has become increasingly dense due to the lack of fire. This high density and larger size contributes to the use of many areas by undocumented aliens because it makes border crossing more difficult to detect. Treatments to reduce vegetation density may serve to discourage use of some areas and also increase enforcement success.

Actions Requiring Additional Resources

1. Manipulate or treat vegetation in identified areas.
2. Evaluate results and share with other agencies.

Objective 7. Restore damaged natural and cultural resources, administrative sites and recreation sites.

Actions Requiring Additional Resources

1. Restore prehistoric and historic structures, administrative sites and recreation sites damaged by undocumented aliens.

Goal 3: Improve coordination and cooperation among Federal, Tribal, State, county and local governments.

Objective 1: Increase commitment to provide cross-agency training and information sharing to improve employee understanding of the diverse missions of cooperating agencies and to minimize environmental and other impacts on Federal land.

Actions to be Taken Using Existing Resources

1. Share information among agencies and tribes on a regular, continuous basis.

Actions Requiring Additional Resources

1. Provide cross-agency training to selected employees.

Objective 2: Organize, as needed, special interagency operations or task forces to deal with emerging local issues in an effort to solve problems quickly and efficiently and with minimal impacts.

Actions to be Taken Using Existing Resources

1. Identify circumstances where interagency operations or task forces would be most appropriate.
2. Establish guidelines for such interagency operations and task forces.

Actions Requiring Additional Resources

1. Organize special interagency operations or task forces.

Objective 3: Enter into interagency memorandums of understanding (MOU) and mutual aide agreements to address local, Tribal, State, regional and national issues.

Actions to be Taken Using Existing Resources

1. Identify needs, develop and implement new interagency MOUs and mutual aide agreements.

Objective 4: Share planning activities among agencies and tribes at regularly scheduled meetings and as otherwise needed to help assure cooperating parties are aware of plans.

Actions to be Taken Using Existing Resources

1. Include time on agendas at regularly scheduled meetings of the Southeast Arizona Managers and Tucson Basin Resource Managers to address planning activities.

Objective 5: Explore possibilities of obtaining common, compatible communications equipment for law enforcement officers in all appropriate Federal, Tribal, State, county and local government agencies.

Actions to be Taken Using Existing Resources

1. Establish an interagency committee to explore possibilities and make recommendations on existing and new equipment.
2. Approve and implement recommendations within existing capabilities.

Objective 6: Provide liaison representatives in each Federal, Tribal, State, county and local agency and make this information readily available to the appropriate people in those agencies and tribes.

Actions Requiring Additional Resources

1. Hire liaison representatives and consolidate and disseminate this information to all appropriate agencies and tribes.

Objective 7: Broadly share personnel (not just law enforcement) and other resources to accomplish tasks of mutual interest and to benefit each agency's missions.

Actions to be Taken Using Existing Resources

1. Identify tasks of mutual interest and opportunities to share personnel and resources.
2. Authorize sharing of personnel and resources.

Objective 8: Develop a law enforcement reporting system so that information collected and used is comparable in all Federal and Tribal government agencies.

Actions to be Taken Using Existing Resources

1. Establish a committee to make recommendations on the development of a common reporting system.
2. Review and approve appropriate recommendations.
3. Implement approved decisions which can be accomplished within existing capabilities.

Actions Requiring Additional Resources

1. Implement remaining approved decisions.

Goal 4: Increase government and public awareness of impacts caused by undocumented aliens crossing Federal land.

Objective 1. Involve all Agency Public Information Officers (PIO) in a coordinated manner to develop a consistent outreach strategy to present a common message.

Multi-agency outreach efforts would reduce and prevent illegal activities.

Consideration should be given to the following:

- Use of a variety of bilingual media in order to reach the greatest audience.
- A procedure for mailing out information and making presentations to groups.
- Use of standing exhibits as examples.
- Bilingual public service announcements on hazards, etc.
- CD-ROM presentations made available to the public at large, schools, libraries and government offices.
- Scheduling local agency managers presentations with service organizations, local legislative delegations and civic leaders.
- Public meetings to share results and concerns.
- Use of mass mailings, when appropriate, to reach specific groups.
- Use of on-site media events to educate broadcast and written journalism outlets.
- Quarterly media days that highlight impacts on a specific jurisdiction in rotation.
- Scheduling of regular tours of representative impact sites for staffers of local legislative delegations, civic groups and others.
- Establishment of a web-based information sharing system that will highlight the total impact to Federal lands.
- Providing a current summary of standard measure impacts to all participants in media events.
- Development of a “common story” to be used by all involved parties.
- Creation of information with generic language that is usable by all Federal agencies.
- Site-specific examples to be used as illustrations of a common problem.
- Compile aggregated impact reports to demonstrate the magnitude of the problem.
- Training managers to speak of the problem in an "across the board" manner.
- Having multiple agencies attend public forums as a means of added support.
- Soliciting State Department participation in crafting messages so we have

current information on any impacts that may come out of labor issues and migration negotiations with Mexico.

- Incorporate examples of impacts into environmental education materials that are used in outreach efforts in local schools.
- Modifying existing EPA materials to include border issue examples.
- Creating new interagency handout materials that are usable in schools.
- Use of local crime reporting hotlines with anonymous and reward incentives.
- Brief Southwest Strategy Regional Executive Committee periodically.

Actions to be Taken Using Existing Resources

1. Establish an interagency-tribal committee made up of Public Information Officers to develop a common outreach strategy to be used by all parties to this plan.

Objective 2. Increase the internal awareness of the magnitude of the problem in all agencies at all levels.

This effort has to be directed at all levels and should include both Federal and State legislators, especially those who do not have to deal directly with the problems.

Actions to be Taken Using Existing Resources

1. Respond to requests for information from Congressional delegations and State legislators.
2. Provide briefings at all levels of appropriate agencies.
3. Provide cross-agency briefings for all employees.

Objective 3. Increase the amount of coordinated training that takes place between local offices of all agencies to be most effective in mitigating impacts.

Actions Requiring Additional Resources

1. Develop a block of instruction at the Federal Law Enforcement Training Center (FLETC) that highlights environmental impacts of illegal immigration and associated deterrence actions.

V. ESTIMATED NEEDS TO IMPLEMENT THE COORDINATED MITIGATION PLAN

A firm commitment by local Federal land managers has been made to address the environmental damage and other impacts on Federal lands caused by undocumented aliens in southeast Arizona as indicated in the *Southeast Arizona Coordinated Plan to Mitigate and Prevent Environmental*

and Other Impacts Caused by Undocumented Aliens Crossing Federal Land (Appendix B). The additional resources needed to accomplish the goals set out in this Coordinated Plan are identified.

Funding and personnel are needed for the following: monitor biological impacts, remove vehicles, rebuild and repair fences and other damaged facilities, restore damaged habitats, protect water management improvements, public safety, security, vehicle barriers along the border, upgraded all-weather roads along the border with cattle guards, towers and cameras at key locations, signs to warn visitors of potential dangers, and signs to notify undocumented aliens of the risks and hazards they face.

Dense mesquite brush along the international border is considered a fairly recent ecological phenomenon, brought about primarily by poor land use and wildfire control. Brush removal should be done selectively during the winter months when nesting birds are not impacted and not during hunting seasons. Any re-seeding effort should incorporate only the use of native grass seed. Lehmann lovegrass and other exotic grasses should not ever be utilized as they create long-term ecological harm.

The estimated needs to mitigate the environmental and other impacts created by undocumented aliens crossing Federal lands in southeast Arizona have been organized in three categories: Maintenance, Resource Management and Law Enforcement and Safety.

Maintenance includes:

- Cleanup of litter (including personnel, vehicles, materials, supplies and land fill costs)
- Removal of abandoned vehicles by towing and helicopter
- Repair of damaged fences, water sources, etc.
- Replacement of gates with cattle guards to minimize livestock trespass
- Rehabilitation of damaged trails, roads, vegetation, soils and habitats
- Purchase and installation of “cattle-proof” and “wildlife friendly” vehicle barriers
- Upgrade, operation and maintenance of roads
- Purchase and installation of notification and warning signs
- Repair of damaged prehistoric and historic structures
- Repair of damaged administrative and recreation sites
- Cleanup of human waste and hazardous materials
- Additional maintenance personnel with support vehicles and equipment for increased trash cleanup, facility repair, road maintenance, fence repair, public and employee safety and security of facilities and equipment
- Interagency maintenance sharing assignments

Resource Management includes:

- Monitoring of natural and cultural resource sites by non-law enforcement personnel
- Repair of damaged prehistoric and historic structures
- National Environmental Policy Act compliance, cultural and threatened and

- endangered species clearances and administrative costs
- Outreach initiatives (including news releases, planning and printing)
- Cross-agency training of non-law enforcement personnel

Law Enforcement and Safety includes:

- Monitoring of natural and cultural resource sites by law enforcement personnel
- Purchase and installation of surveillance towers, cameras and lighting in key locations
- Assistance to other law enforcement agencies
- Additional law enforcement personnel, support vehicles and equipment for increased public and employee safety and security of facilities and equipment
- Communications support and equipment (including dispatchers, radios and repeaters)
- Cross-agency training of law enforcement personnel
- Interagency assignments for law enforcement personnel

The first year of the plan identifies 93.3 additional Full Time Equivalents (FTE) and \$23.5 million. To fully implement the five-year plan, an estimated increase of \$62.9 million would be needed. Table 4 is a summary of the additional resources identified by agency to implement the first and subsequent years of the coordinated plan for southeast Arizona, and to expand resources above current levels in an effort to restore safe public use and management of Federal lands through a multi-agency, coordinated effort. A detailed estimate for each agency in southeast Arizona can be found in Appendix K.

While the estimates in this plan represent the best available information about resource needs to address the impacts of illegal aliens in Southeast Arizona, it is important to recognize that these needs must be balanced with many other competing priorities, including resource needs to address illegal alien impacts in other areas of the Southwest.

To the extent that the needs identified in this plan merit funding in FY 2003, the Administration is open to considering reallocating, within totals, funds currently budgeted for other activities. The Administration will continue to evaluate these needs, along with comparable needs in other Southwestern states, as it develops the FY 2004 budget.

Table 4. Summary of Estimated Needs by Agency¹
SOUTHEAST ARIZONA

Category	USFS (\$000/FTE)	BLM (\$000/FTE)	NPS (\$000/FTE)	USFWS (\$000/FTE)	EPA (\$000/FTE)	TOTAL (\$000/FTE)
Maintenance						
Cleanup of litter (includes personnel, vehicles, materials, supplies & land fill costs)	378.0 /10	20.0	30.5	15.5	–	444.0 /10
Remove abandoned vehicles by towing	143.0	6.0	2.7	10.3	–	162.0
Remove abandoned vehicles by helicopter	–	10.0	–	–	–	10.0
Repair damaged fences	60.0	20.0	3.7	13.3	–	97.0
Replace gates with cattle guards	500.0	100.0	–	8.0	–	608.0
Repair damaged water sources	5.0	20.0	–	12.5	–	37.5
Rehabilitate damaged trails, roads, vegetation, soils & habitats	830.0	50.0	22.8	52.5	–	955.3
Purchase & install “Wildlife friendly” vehicle barriers	4,420.0	–	–	312.5	–	4,732.5
Upgrade all-weather roads along border	4,000.0	–	–	57.5	–	4,057.5
Operation & maintenance of roads	840.0	12.5	1.0	54.5	–	908.0
Purchase & installation of notification & warning signs	88.4	20.0	0.2	3.6	–	112.2
Repair damaged administrative & recreation sites	12.5	10.0	–	30.0	–	52.5
Cleanup of human waste & hazardous materials	48.0	105.0	–	23.5	200.0	376.5
Additional maintenance personnel for increased trash cleanup, facility repair, road maintenance, fence repair	120.0 /4	306.0 /6	107.0 /2.5	133.0 /3	–	666.0 /15.5
Support equipment & vehicles for above additional maintenance personnel	84.0	180.0	7.6	105.0	–	376.6
Interagency assignments (e.g., maintenance sharing)	–	–	1.6	2.5	50.0	54.1

Category	USFS (\$000/FTE)	BLM (\$000/FTE)	NPS (\$000/FTE)	USFWS (\$000/FTE)	EPA (\$000/FTE)	TOTAL (\$000/FTE)
Subtotal–Maintenance	11,528.9 /14	859.5 /6	177.1 /2.7	834.2 /3	250.0	13,649.7 /25.7
Resource Management						
Monitor natural & cultural resources sites by non-law enforcement personnel	244.0 /4	–	7.5	60.0	–	311.5 /4
Repair of damaged prehistoric & historic structures	7.5	100.0	1.5	–	–	109.0
Management of fires allegedly caused by undocumented aliens	–	300.0	1.3	587.0	–	888.3
NEPA compliance, cultural & T&E clearances, & other administrative costs	524.0 /6	160.0 /4	77.6 /1.9	44.0 /1	–	805.6 /12.9
Outreach initiatives (news releases, planning, printing)	41.0 /1	80.0	2.8	4.0	20.0	147.8 /1
Cross-agency training (non-law enforcement personnel)	–	8.0	–	–	20.0	28.0
Subtotal–Resource Management	816.5 /11	648.0 /4	90.7 /1.9	695.0 /1	40.0	2,290.2 /17.9
Law Enforcement & Safety						
Monitor natural & cultural resources sites by law enforcement personnel	–	–	–	40.0 /1	–	40.0 /1
Purchase & installation of surveillance towers, cameras & lighting in key locations	200.0	50.0	21.0	–	–	271.0
Assistance to other law enforcement agencies	94.0 /1	–	25.3	54.5	–	173.8 /1
Additional law enforcement personnel for increased public and employee safety and security of facilities & equipment	1,520.0 /19	650.0 /10	300.0 /1.7	1,168.5 /12	–	3,638.5 /42.7
Support equipment & vehicles (including aviation support) for above additional law enforcement personnel	645.0	650.0	64.8	426.3	–	1,786.1

Category	USFS (\$000/FTE)	BLM (\$000/FTE)	NPS (\$000/FTE)	USFWS (\$000/FTE)	EPA (\$000/FTE)	TOTAL (\$000/FTE)
Communications support & equipment (e.g., dispatchers, radios, repeaters)	150.0	900.0 /4	398.0 /1	76.3	–	1,524.3 /5
Cross-agency training (law enforcement personnel)	–	–	15.4	19.4	–	34.8
Interagency assignments (e.g., law enforcement)	–	56.3	19.2	16.5	–	92.0
Subtotal–Law Enforcement & Safety	2,609.0 /20	2,306.3 /14	843.7 /2.7	1,801.5 /13	–	7,560.5 /49.7
TOTAL FOR FIRST YEAR	14,954.4 /45	3,813.8 /24	1,111.5 /7.3	3,330.7 /17	290.0	23,500.4 /93.3
TOTAL FOR YEARS 2-5	16,288.0	9,554.0	3,334.0	9,256.8	968.0	39,400.8
TOTAL FOR FIVE-YEAR COORDINATED PLAN	31,242.4	13,367.8	4,445.5	12,587.5	1,258.0	62,901.2

¹ The funds shown in this table have not been included in the Administration's FY 2003 budget request. It is important to recognize that these needs must be balanced with many other competing priorities, including fire preparedness and suppression spending. The Administration is open to considering reallocating, within FY 2003 totals, funds currently budgeted for other activities and will continue to evaluate these needs, along with comparable needs in other Southwest states, as it develops the FY 2004 budget. These numbers are dependent upon future budget submissions and annual appropriations.

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VII. GLOSSARY

“Abandoned Vehicle” is a vehicle that has been left unattended on public land for a period of time, without permission of the Federal agency administering the lands. Such vehicle is subject to disposition under the Federal Property and Administrative Services Act of 1949, as amended (40 USC 484(m)).

“Birding” is a recognized recreational activity involving the observation and identification of birds in their natural surroundings.

“Chihuahuan Desert” is the largest of the four North American deserts and is approximately 200,000 square miles in size. It is located in southern New Mexico, Texas, North Central Mexico and portions of southeastern Arizona. Yuccas, agaves, grasses and creosote bush growing together provide a characteristic appearance for this desert.

“Commodity Uses” are commercial uses such as livestock operations, agriculture and mining.

“Controlled substance” means a drug or other substance, or immediate precursor, included in schedule I-V of part B, Title 21 U.S.C.A. 800. The term does not include distilled spirits, wine, malt beverages, or tobacco, as those terms are defined or used in subtitle E of the Internal Revenue Code of 1986.

“Coyotes” are persons that recruit and smuggle undocumented aliens into the United States.

“Cultural resource” or “cultural property” is a definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups.

“Ecosystem” is an ecological community with its physical environment, regarded as a unit.

“Illegal immigrant,” in legal terms, means a person that has been apprehended, arrested and determined to be an illegal entrant into the United States. Along the Southwest border, the term, however, also is used interchangeably with the term “undocumented alien,” which has a broader meaning. For purposes of this report, the term “illegal immigrant” is used in its broadest, most generic sense and includes those persons considered “undocumented aliens.”

“Improvement” is a man-made structure such as a fence, road or building.

“National Conservation Area” is an area administered by BLM that has been designated by Congress. The Congressional Act which authorizes designation of each National Conservation Area identifies the unique values to be protected and any other specific management guidelines to be followed.

“National Environmental Policy Act (NEPA)” is The National Environmental Policy Act of 1969, as amended by Public Law 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Public Law 94-52, July 3, 1975, Public Law 94-83, August 9, 1975, and Public Law 97-258, §

4(b), Sept. 13, 1982. It is an Act to establish a national policy for the environment, to provide for the establishment of a Council on Environmental Quality, and for other purposes.

“Natural Resources” are features of the natural environment that are of value in serving human needs.

“Prescribed Fire” is any fire ignited by management actions to meet specific objectives and it is conducted in accordance with prescribed fire plans.

“Sky Islands” are isolated mountain ranges separated by desert valleys.

“Sonoran Desert” is one of four deserts in the United States. It is approximately 120,000 square miles in size and is located in the southeastern tip of California and southern Arizona, and extends south into Baja California and Sonora, Mexico. It is considered to have the most complex animal-plant community of any desert. Paloverde, ironwood, creosote bush, mesquite, ocotillo and saguaro are common.

“Southwest Strategy” is a community development and natural resources conservation and management effort by Federal, State, Tribal and local governments. Through this effort the partners work in collaboration with each other and the public to restore and maintain the cultural, economic and environmental quality of life in the States of Arizona and New Mexico.

“Undocumented alien” means a person without documents who has not been apprehended, arrested or determined to be in the United States illegally. (8 U.S.C.A. 1357; *cF.*, *International Molders’ and Allied Workers’ Local Union No. 164 v. Nelson*, N.D. Cal. 1986, 643 F. Supp. 884, remanded on grounds 799 F.2nd 547.)

“Urban Interface” is the line, area or zone where structures and other human development meet or intermingle with undeveloped lands.

“Visit” is the entry of any person onto public lands or related waters for any time period. A same day reentry, negligible transit, and entry to another recreation site, or detached portion of the management area on the same day are considered a single “visit.”

“Visitor day” is equivalent to twelve visitor hours. This is the basic unit of measure between Federal agencies.

“Wilderness” is an area designated by Congress, in accordance with the Wilderness Act of 1964, as amended, as a unit of the National Wilderness Preservation System.

“Wilderness Study Area” is a designation made through a land use planning process of a roadless area found to have wilderness characteristics, as described in Section 2(c) of the Wilderness act of 1964.

Appendix A

Map of Southeast Arizona
(To be provided separately)

Appendix C

U.S. Border Patrol-Southwest Strategy Memorandum of Understanding

(Separate APPENDIX C file-8 pages)

Appendix D

U.S. Border Patrol Mission and Strategy

The Border Patrol is the uniformed branch of the Immigration and Naturalization Service. Since 1924, the Border Patrol's mission has been to secure and protect the external boundary of the United States, preventing illegal entry by detecting, interdicting and apprehending illegal immigrants, smugglers, contraband and violators of other laws.

The Border Patrol has maintained a continuous uniformed presence on the border since 1924. The Border Patrol is the only uniformed Federal Agency with a significant patrol function between the Ports-of-Entry and is recognized as the premier drug interdiction agency along the United States-Mexico border. Although the duties performed by Border Patrol Agents have expanded and evolved over the past 75 years, the basic concepts of deterring, detecting and apprehending illegal entrants continues to be the basis of the Border Patrol's mission.

In 1994, the Border Patrol developed and implemented a strategy of "prevention through deterrence." This strategy included the deployment of a decisive level of resources to areas of greatest illegal activity, which, in 1994, were the San Diego and El Paso Sectors. These resources included an increase in Agents, infrastructure and technology. The key objectives are to close off routes most frequently used by smugglers and illegal immigrants and also to gain, maintain and expand control of the border. The deployment strategy is based upon a multi-year, four-phased approach in strengthening control of the border.

The first phase began in San Diego and El Paso. During strategy planning it was recognized that as apprehensions decreased in those areas they would increase in other areas. Phase II of the plan includes the Tucson Sector and Operation Safeguard. While significant progress has been observed in preliminary, strategically targeted areas, a level of total deterrence has not yet been attained throughout the Tucson Sector area of operations.

The Tucson, Arizona Sector of the Border Patrol is responsible for 281 miles of the International Boundary, from the New Mexico State line, west to the Yuma County line. This represents 14% of the Southwest border. There are eight stations within the Tucson Sector: Ajo, Casa Grande, Douglas, Naco, Nogales, Sonoita, Tucson and Willcox. In FY 2000, there were 1,655,773 apprehensions nationwide, Tucson Sector led the Southwest border apprehensions with 617,716 which is 37% of the total apprehensions. Approximately 99% of the Sector total apprehensions were Mexican Nationals. The Tucson Sector also had 18% of all Border Patrol Marijuana seizures in FY 2000 and 37% of the vehicles seized by the Border Patrol.

The Tucson Sector operates within two broad settings, urban and rural, each presenting its own set of unique challenges. The urban areas are associated with the border towns of Nogales, Douglas, Naco, Sasabe and Lukeville, Arizona. The Mexican towns of Nogales, Naco and Agua Prieta across from Nogales, Naco and Douglas, Arizona have large urban populations. The rural area of operations is made up of rugged mountains and vast stretches of remote desert. Mountain land use in the Tucson Sector is a dominant and common landscape feature. Mountain ranges are interspersed between the desert area across much of the Sector, specifically between

Nogales and Douglas where elevations can reach above 9,000 feet. The mountains act as a natural funnel for transboundary activity. Desert land use occurs in the remaining flat sections of the border region. The deserts in the Sector often reach an extremely high temperature which, when combined with hostile natural features, create a very inhospitable environment. These terrain types represent but a few geographical obstacles to enforcement initiatives and each introduces an operational constraint. Enforcement of the border is a challenging, formidable and arduous task.

The Tucson Sector is also unique in that the extensive and well-defined transportation networks in Mexico easily facilitate aliens and contraband arriving in its border area. There also are exceptionally good highways and secondary roads in the United States by which undocumented aliens and contraband can be expeditiously moved to the interior of the United States.

The area with the highest rate of apprehensions and entries continues to be the Douglas-Naco Corridor. This corridor continues west from the New Mexico State line to the crest of the Huachuca Mountains, all within Cochise County. The highest number of entries and apprehensions, 438,489 or 71% of the Sector's total apprehensions, occurred in this corridor during FY 2000. There are presently 740 Agents assigned to patrol this area. The Sonoita and Nogales Stations patrol the corridor west of the crest of the Huachuca Mountains, including all of Santa Cruz County and there are currently 536 assigned Agents. The Tucson, Casa Grande and Ajo Stations patrol the West Desert Corridor that continues west from the Santa Cruz County line and across all of Pima County to the Yuma County line. There currently are 312 Agents assigned to these Stations.

Prior to 1994, the majority of the Tucson Sector apprehensions occurred in the urban areas of Nogales, Douglas and Naco. The Nogales area had the highest rate of illegal entries. As control was being attained in San Diego and El Paso existing smuggling organizations were expanded and other smugglers began to move their operations to the Tucson Sector area of operations.

Tucson Sector identified the Nogales corridor as being the area of greatest risk for illegal entries. Operation Safeguard was initiated and additional Agents and resources such as fences, cameras, lights and critical assignment areas began to deprive smugglers of their comfort level. Operational goals and objectives were met and a level of control was brought to Nogales.

However, smugglers were able to effectively and efficiently move their operations to other areas. A dramatic increase in apprehensions in the Douglas and Naco corridor was soon observed. Enforcement and resources were shifted to these areas. The numerous routes that lead away from the border in these areas have made control efforts more difficult. A measurable amount of success has been attained within the immediate areas of Douglas and Naco. Smugglers are resilient and thus far refuse to relinquish their foothold within the Tucson Sector area and have now moved their operations to the flanks of current operational focus. Smugglers disregarding the safety of their "human cargo" are transporting them through evermore remote and treacherous areas. Illegal immigrants are forced to walk further north into the country where they then can be picked up. Smugglers also use these remote areas of the border to "drive-through" the border fence. These vehicle "drive-throughs" are often overloaded and driven by inexperienced drivers. There have been numerous accidents resulting in injuries and deaths due to these conditions.

In 1998, an agreement between the United States and Mexico created the Border Safety Initiative, a comprehensive strategy to make the border region safer for agents, migrants and border residents. Tucson Sector established search and rescue teams and members receive extensive training in search and rescue and emergency medical procedures.

Proactive enforcement initiatives are not only a fundamental change in traditional operational strategy and deployment but they further demonstrate the need for supportive infrastructure systems if their potential is to be realized. A dedicated system of infrastructure that closely parallels the border not only enhances control efforts but also increases flexibility in personnel deployment and maximizes the Border Patrol's deterrent, proactive enforcement capability. The international boundary is the first line of defense, or law enforcement focus, with most resources directed to the immediate border area. Resources and operations decrease as the area of operations proceeds further away from the border. Secondary lines of defense are operational initiatives designed to disrupt smuggling routes and checkpoints located at strategic locations on major highways leading away from the border. A successful deterrence of illegal entries, or at least relegating them to the immediate border, is conducive to a lesser presence, both legal and illegal, beyond the established boundaries. This also contributes to an overall reduction of the enforcement "footprint" on the environment.

The following components or "force multipliers" of the border infrastructure system are designed to alter the dynamics of various enforcement efforts throughout the border while promoting the efficiency and effectiveness of personnel.

- Agent deployment
- Roads
- Vehicle barriers
- Fencing
- Surveillance Cameras (Daylight, Low-light, Thermal Imaging)
- Sensors
- Mobile Night Optical Surveillance Systems (Scope Units)
- Air support

Agent deployment and mobility along the immediate border is imperative to the success of this enforcement strategy. A secured all-weather border road communicates a strong likelihood of apprehension and is a strong visual reminder to illegal entrants that once inside the United States, agents have quick and direct access to anyone conducting illegal activity along the border. All-weather roads also allow agents to access the various components of the infrastructure system. Any infrastructure constructed proximate to the United States-Mexico border, regardless of its perceived durability, will fail if Border Patrol agents are not afforded adequate access to protect these force multiplying infrastructure items. Vehicle barriers intensify the degree of difficulty in illegally crossing the border by vehicle. Their function is twofold: 1) they provide a visual deterrent and 2) function as a formidable physical barrier that

significantly delay illegal entries while tremendously increasing the Border Patrol's time to effectively respond. Remotely monitored cameras and sensors strategically placed along the immediate border allow agents to patrol a larger area. Singlewing airplanes and helicopters provide valuable aerial vantage points from which undocumented alien traffic and associated illegal activity can be located and apprehended.

The Tucson Sector has gained control of the urban areas of Nogales, Douglas and Naco. A better quality of living has been restored to these populous areas. However, maintaining this level of control is resource intensive. Any premature move of resources to other areas will result in a return of illegal activity to these areas. An infrastructure system will provide immediate relief from trafficking of undocumented aliens and narcotics in targeted areas, but relief throughout the entire Southwest border can not be expected until all urban and rural systems are in place and functioning as one border-wide system.

In summation, it cannot be emphasized enough that, given the appropriate infrastructure items and mobility, significant levels of deterrence and control of border areas can be attained in targeted areas by the Tucson Border Patrol Sector.

Appendix E

Southwest Border Comparison (Border Patrol Statistics)

(Separate APPENDIX E-1a, E-1b, and E-2-8 files. The latter is a large PowerPoint file.)

Appendix F

U.S. Forest Service

The U.S. Forest Service administers the Coronado National Forest, of which 1.7 million acres are in southeastern Arizona. Approximately 60 miles of border are shared with Mexico. Following is a brief description of the forest and a summary of the incidents that have occurred on these lands in the past five years related to undocumented alien crossings.

The Coronado National Forest is comprised of 12 separate and uniquely distinct mountain ranges covering the entire southeastern quarter of Arizona and the boot heel of New Mexico. These isolated blocks of National Forest that make up the Coronado are known worldwide as “Sky Islands.” The extreme elevation and ecological zone variation in 8 of the 12 mountain ranges make them unique among National Forests in North America. This unique situation results in a greater diversity of plants and animals by a factor of 9 times more than any other Forest in the Southwestern Region, and more than all other Forests in the nation. It is the most biologically and culturally diverse Forest in the National Forest System.

The low elevations of the Forest and adjacent lands are a major attraction for winter visitors, both short- and long-term, and the higher elevations are a major source of recreation and summer climatic relief for the local populations of both the United States and Mexico. Through its tourism attractions and natural resource base activities, the Forest is a major economic factor in the State and region.

Coronado National Forest resources and projects are very important contributors to the economic well-being of communities and counties. Along the interface with metropolitan Tucson the presence and condition of the Forest is a driving factor in property values and a major social attribute of the city. The predominate businesses within and adjacent to the Forest are tourism, ranching, wildlife-related industries and mining. In the rural counties outside major population areas, ranching is the critical economic activity maintaining the lifestyle of the citizens.

The larger population centers count on year-long tourism for a significant part of their economic base. In Tucson alone, tourism injected the local economy with \$1.8 billion. This year-round impact includes a huge influx of winter visitors from October to April and heavy use of the Forest by local residents and these visitors from throughout the world. World-wide interest and year-long visitation is created by the unique bird watching opportunities on the Forest. Five Forest areas are premier birding areas where the only opportunity to view certain species exists. The economic infusion to local economies is estimated to be over 200 million dollars.

Wilderness

The Coronado National Forest has 8 wilderness areas (18% of the Forest) and three wilderness study areas. More than half of the 1,100 miles of trail on the Forest occur in these areas. Coronado National Forest employees and volunteers make approximately 16,000 wilderness/Leave No Trace public education contacts each year.

Wildlife and Fish

Wildlife and fish resources on the Coronado National Forest are the most diverse of any Forest in the Region, if not the Nation. Approximately 600 vertebrate species are found within the Forest. This is a direct result of the unusual variety in vegetation, climate and geology. The mountain ranges of the Coronado, referred to as “sky islands,” are located at the confluence of the Rocky Mountains, the Sierra Madres, the Sonoran Desert and the Chihuahuan Desert. As a result, this area features some of the greatest diversity of plant and animal life in the United States. Some of the birds, reptiles, fish and insects are found nowhere else in the United States or on any other National Forest. Many species within the highly complex communities of plants and animals are well known and receive a high level of public recognition and attention. Many of the species are rare and considered sensitive, threatened or endangered. The socioeconomic importance of the Coronado’s unique fauna and flora is critical to all of Southeastern Arizona especially the rural communities which rely more and more on tourism and recreation.

The Coronado National Forest provides the major land base for hunting and fishing opportunities for sportsmen in southern Arizona. Big game species include 2 species of deer, bighorn sheep, mountain lion, javelina, turkey, bear and antelope. Many small game species are present with the exceptional world-renowned attraction of 2 species of dove and 3 species of quail. For example, the Mearns (Montezuma) quail occurs in significant numbers only on the Coronado. This species draws significant interest from quail hunters and sport organizations nationwide as a key link in the quest to complete a "grand slam" of quail hunting. The sensitive habitat of this bird is dependent on forage and cover, often in the same prime areas traditionally utilized by cattle and impacted by border related problems such as undocumented aliens, smugglers and high densities of wildcat roads.

Big game hunting for 2 species of deer, javelina, bear and turkey accounts for approximately 70,000 wildlife user visits; small game hunting use is 50,000 visits. The potential exists to increase the hunting contribution of habitats on the Coronado and reduce conflicts with other resource management activities through resource coordination and habitat improvement. Cooperative habitat improvement dollars are used each year from hunting license fee collections under the Sykes Act in the New Mexico portion of the Forest.

Threatened, Endangered & Sensitive Species

The Coronado National Forest provides habitat for the largest number of animal and plant species designated as endangered or threatened under provisions of the Endangered Species Act (30 species). This is by far the most of any Forest in Region 3 and most likely the National Forest System. In addition, an extremely large number (171) of species inhabiting the Forest have been designated as sensitive. These species include 90 plants, 3 amphibians, 8 birds, 1 crustacean, 2 fish, 42 insects, 8 mammals, 9 reptiles, and 8 snails.

The Forest also has a number of extirpated or extremely endangered populations of animals that are currently being reintroduced or considered for reintroduction including the Thick-billed parrot, Tarahumara frog, Goulds turkey, desert bighorn sheep, Sonoran pronghorn antelope, Gila topminnow, Aplomado falcon, jaguar, ocelot, black-tailed prairie dog, and the Mexican wolf.

Rangelands

Based on the number of allotments, permittees, ecological complexity, number of threatened and endangered species and the degree of public interest and conflict, the Coronado National Forest's livestock grazing program is without doubt the most complex and potentially controversial program in the Region, and possibly the National Forest System. Nevertheless, the Coronado's program is also the most innovative and successful in the Region at balancing grazing levels with other multiple use objectives.

The Coronado currently has 197 livestock grazing permits, varying from small family operations to giant multinational corporations. Permitted numbers vary from a handful to more than 1,000 cattle. In 1999, the Coronado had 46 percent of the National Forest grazing permittees in Arizona and produced 37 percent of the animal months. About half of the Coronado's grazing permits are year-long, thus adding to the complexity of the range workload because of the high degree of permittee dependence on National Forest rangelands. This requires innovative long- and short-range solutions to range management problems, because there is often no other place than the National Forest for cattle to graze during deferment periods.

Soil, Water, and Air

The mountains of the Coronado National Forest in southeastern Arizona, an area of very limited water, provide a remarkable contrast to the valleys. As much as four times more precipitation occurs in the mountains compared to the valleys. While no large impoundments are found in or near the Forest, thousands of small developments such as stock ponds, springs, recreation lakes and wells serve the Forest. In addition, much of the scarce, naturally occurring surface water found in southeastern Arizona is found in streams on the Forest.

Most of the Forest is within the Gila River watershed, which provides for the existence of the Gila Valley Irrigation System as well as the Federally-funded San Carlos Irrigation Project and San Carlos Irrigation and Drainage District. The San Simon and San Pedro rivers, which head up in the Chiricahua, Huachuca, Santa Catalina and Pinaleno mountains, are tributary to these projects. The Santa Cruz River has its headwaters in the Huachuca Mountains and Canelo Hills and is fed by the Santa Rita and Santa Catalina mountains and numerous other small mountain ranges. It provides recharge to aquifers that are used for agriculture in Green Valley and Marana areas as well as cities like Tucson and Nogales, Arizona and Nogales, Sonora.

Forestry

The mountains of Southeastern Arizona, which make up the Coronado National Forest, support a variety of timber resources ranging from oak woodlands, pine woodlands, Ponderosa pine, mixed conifer and spruce-fir stands. Eight species of oak have been identified. Oak woodlands on the Coronado are unique in the National Forest System. Woodlands throughout the remainder of the West are generally pinyon-juniper, whereas the Coronado's woodlands are liveoak-juniper. The Coronado National Forest's pine woodlands include several unique and localized species, including Apache pine and Chiricahua pine, found in no other National Forest. Even Ponderosa pine stands are different, as they include the 5-needled variety. Historically, these resources were used to build towns and provide fuel for mines, cooking, and heating of residences.

The current challenge is complicated by decades of fire control, minimal harvest, new wilderness designations and limited access. Wildfires, insects and disease threaten all the Coronado's timber stands. Understanding the ecosystem dynamics and managing those ecosystems is far more complex in these circumstances than it ever was when designing timber sales was emphasized.

The absence of a viable timber market and industry has presented the Forest with an extremely complicated and controversial dilemma – how to address increasing fuel loads in balance with other multiple uses, especially recreation, threatened and endangered species, special uses, and air quality.

Heritage Resources

The Coronado's heritage resources are diverse and first class. Prehistoric and historic sites range from 8,000-year-old campsites to 20th century homesteads; from large villages to small rock art sites; from historic mining complexes to 20th century water systems; to 19th and 20th century log and adobe structures and ruins. Over 100 properties are listed on the National Register of Historic Places.

Law Enforcement

The Coronado National Forest has the most active law enforcement program in the Southwestern Region and is one of the top 5 most active programs in the nation each year. Only 7 Law Enforcement Officers are assigned to the 1.7 million acre Coronado National Forest: 1 Patrol Captain, 3 District Law enforcement Officers, and 3 Patrol Law Enforcement Officers. The Patrol Captain is responsible for program management, supervision, planning and coordination; investigations are the responsibility of a Criminal Investigator assigned to the Forest. Cooperative law enforcement agreements are in place and funded in Cochise, Graham, Pima and Santa Cruz Counties and with the University Of Arizona Police Department. Pinal County has elected to refrain from executing a formal agreement due to the amount of funding available. Cooperation and coordination occurs with over 20 other Federal, State and local law enforcement agencies.

Major areas of activity on the Forest that require enforcement and investigation action include: international smuggling, cannabis cultivation, occupancy and use violations, dumping, substance abuse, accidents, human caused wildfires, theft of Forest products, wilderness violations, cultural resource violations, and threatened, endangered and sensitive species violations.

Potentially hazardous contacts or situations on the Forest include: international narcotics traffickers, marijuana growers, emotionally disturbed persons, persons with arrest warrants, gangs, career criminals, and home-rule and strict Constitutionalist advocates.

The Coronado National Forest has the highest documented workload each year in the Southwestern Region. In Fiscal Year 2000, officers responded to 14,249 separate incidents of documented criminal activity on the Coronado National Forest.

The Coronado National Forest leads the nation in international smuggling controlled substance seizures. Law Enforcement officers seize thousands of pounds of marijuana each year, the value of contraband seized topped 109 million dollars one year when over 2,000 pounds of cocaine was seized.

Table F-1.
Incidents Related to Undocumented Aliens
on the Coronado National Forest in Southeast Arizona,
1996-2001

Type of Incident	Number
Abandoned motor vehicles	298
Significant damage to natural resources caused by off-road vehicle use	300 miles
Human-caused wildfires	112
Breaking & entering/burglary	18
Assistance to other law enforcement agencies	1,695 hours

Source: LEMARS & Professional estimates.

Appendix G

Bureau of Land Management

The BLM administers approximately 1.2 million acres in southeastern Arizona. This includes the San Pedro Riparian National Conservation Area, Gila Box Riparian National Conservation Area (portion), Las Cienegas National Conservation Area, Ironwood Forest National Monument, all or part of eight designated wilderness areas and other public lands. Following is a brief description of each of these designated areas and a summary of the incidents that have occurred on these lands in the past five years related to undocumented alien crossings.

San Pedro Riparian National Conservation Area

The San Pedro Riparian National Conservation Area is located approximately 70 miles east of Tucson and lies adjacent to the communities of Sierra Vista, Tombstone, Benson and Bisbee. It contains approximately 55,000 acres of public lands and extends 40 miles north from the international border. Approximately 4 miles of border are shared with Mexico. The area was designated by Congress in 1988 as the Nation's first Riparian National Conservation Area. It was established because of its unique riparian, wildlife, natural and cultural resource values.

The National Conservation Area includes a variety of unique and rare vegetative communities including five of the rarest habitat types in the American Southwest: cienegas (marshlands), cottonwood-willow riparian forests, sacaton grasslands, mesquite bosques, and semidesert grasslands. The San Pedro watershed harbors the highest diversity of vertebrate fauna in the interior United States, and has been identified by the American Bird Conservancy as the first Globally Important Bird Area in the Western Hemisphere. More than 400 species of birds use the watershed for breeding, wintering or migratory habitat. The Upper San Pedro River Basin, which includes the National Conservation Area, also provides important habitat for 82 species of mammals, 43 reptiles and amphibians, and native fish. Included in this list are species which are Federally listed as threatened or endangered, identified as species of special concern by the State of Arizona, or designated as sensitive species by BLM.

The natural ecosystem values and cultural diversity in the National Conservation Area provide unique recreational and educational opportunities. The evidence of continuous human occupation within the Basin for approximately 11,000 years is reflected in two mammoth kill sites, the Presidio Santa Cruz de Terrenate, and numerous historic sites such as Fairbank and Charleston town sites. Recreational and interpretive opportunities are unique and challenging due to the number and quality of the Basin's natural resource values.

Dispersed and permitted recreation opportunities on the National Conservation Area include hiking, camping, mountain biking, picnicking, horseback riding, birding, back-country road touring, hunting, and photography.

Gila Box Riparian National Conservation Area

The Gila Box Riparian National Conservation Area, totalling approximately 20,900 acres, was designated by Congress on November 28, 1990 to conserve, protect, and enhance the riparian, aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values in the area.

This area includes two rivers, the Gila and San Francisco, and two creeks Bonita and Eagle. Bonita Creek (a 15 mile stretch) and the Gila River (a 23 mile stretch) within the National Conservation Area are eligible for designation as wild and scenic rivers and have been nominated for inclusion in the Wild and Scenic Rivers Act system. The Gila River is perennial to the head of Safford Valley, but it is not perennial as it leaves Safford Valley. The Gila River and tributaries have distinct winter discharges from melting snow, storms and groundwater outflows. Local rainfall produces major summer discharges. The Gila River has highly variable discharge.

The Gila River within the National Conservation Area is one of the few remaining segments of desert river left in a largely natural state. Steep walled canyons, colorful terrain and diverse rock exposures offer a highly scenic experience. Opportunities for solitude and primitive non-motorized recreation are plentiful within the canyon.

Water quality standards are exceeded for turbidity, high Ph, and low dissolved oxygen. Gillard Hot Springs produces water high in dissolved solids, including salts. The San Francisco River contributes mineralized water to the Gila due to inflows from Clifton Hot Springs. Eagle Creek and Bonita Creek are sources of low turbidity and low salinity water. Depending upon annual flows they can reduce the concentration of dissolved salt load in the Gila River.

Wildlife habitats include cliff, riparian, and aquatic. These areas support neotropical migratory birds; many other birds, including bald eagles; big game animals, such as mule deer, wild turkey, and javelina; waterfowl; reptiles; squirrel; beaver; native fish, including razorback sucker; and eight non-native fish species. The river, creek and springs are the water sources for most wildlife in this vicinity.

Bonita Creek Canyon contains properties that display Anasazi characteristics. These include cliff dwellings, elaborate rock art paintings, and ceremonial caves. Various recreational activities include river rafting, picnicking, car camping, backpacking, bird watching, hunting, fishing, mountain biking, recreational and sight seeing driving.

Las Cienegas National Conservation Area

President Clinton signed a bill creating the Las Cienegas National Conservation Area in southeastern Arizona on December 6, 2000. The National Conservation Area contains 42,000 acres of Federal public lands. These lands are located about 50 miles southeast of Tucson. They form a scenic landscape of vast native grasslands, riparian corridors and rolling oak woodlands connecting several "sky island" mountain ranges. Two State-designated scenic highways

traverse the area. Exceptional night sky views beckon stargazers. The area is home to a great diversity of plant and animal life, including several threatened or endangered species.

The National Conservation Area contains numerous streams and perennial springs, including portions of Cienega Creek, where water flows year round. Cienega Creek, with its perennial flow and lush riparian corridor, forms the lifeblood of the National Conservation Area. Significant portions of the Creek's watershed also provide important regional groundwater recharge and flood prevention measures for the community of Tucson. The National Conservation Area, like the San Pedro Riparian National Conservation Area, includes a variety of unique and rare vegetative communities including five of the rarest habitat types in the American Southwest: cienegas (marshlands), cottonwood-willow riparian forests, sacaton grasslands, mesquite bosques, and semidesert grasslands. These vegetative communities on the National Conservation Area support a diverse assemblage of plants and animals. Species include 60 mammals, 230 birds, 43 reptiles and amphibians, and three native fish. Included in this list are species which are Federally listed as threatened or endangered, identified as species of special concern by the State of Arizona, or designated as sensitive species by BLM.

Rare prehistoric sites, historic travel routes, mines, and mining towns are all present in the National Conservation Area. The Empire Ranch House, listed on the National Register of Historic Places, is being restored with the help of the Empire Ranch Foundation in partnership with BLM. Contributions are being matched by a White House Save America's Treasures Millennium Grant.

Dispersed and permitted recreation opportunities on the National Conservation Area include hiking, camping mountain biking, picnicking, horseback riding, birding, back-country road touring, hunting, and photography.

Ironwood Forest National Monument

The Ironwood Forest National Monument is located approximately 15 miles west of Tucson and 40 miles south of the Phoenix Metropolitan area. It also lays adjacent to Marana, Eloy, Casa Grande, Avra Valley, Arizona City, and several other smaller communities. The Monument contains approximately 129,000 acres of Federal public lands and extends 42 miles northeast to southwest adjacent to Interstate 10. The National Monument was established by proclamation June 9, 2000 by the President of the United States to protect the historic, prehistoric and scientific values associated with the Sonoran desert ironwood communities in southern Arizona.

The National Monument has rich, drought-adapted vegetation that harbors more than 67 species of animals. In addition, this area supports the highest density of ironwood trees recorded in the Sonoran desert. Ironwood trees live in excess of 800 years and are critical to the establishment and sustenance of associated under story plants within the region. The National Monument also supports a variety of Federally listed plant and animal species including cactus ferruginous pygmy owl, pima pineapple cactus, and Nichol's Turk's head cactus. The natural ecosystem values and cultural diversity provide unique recreational and educational opportunities in the National Monument. The area holds evidence of continuous human

occupation for more than 5,000 years as reflected by the more than 200 known prehistoric sites, Santa Ana de Chiquiburitac mission, Los Robles Archaeological District, and the historic Silver Bell Mining District. Recreational and interpretive opportunities are unique and challenging due to current uses and the number and quality of the area's natural resource values.

Wilderness Areas Administered by BLM

Eight wilderness areas administered by BLM and designated by Congress on November 28, 1990 are entirely or partially within southeastern Arizona, as described in this report. They include Aravaipa Canyon (portion; total 19,381 acres), North Santa Teresa (6,590 acres), Fishhooks (10,883 acres), Peloncillo Mountains (portion; total 19,650 acres), Dos Cabezas Mountains (11,998 acres), Redfield Canyon (6,600 acres), Coyote Mountains (5,080 acres), and Baboquivari Peak (2,065 acres) Wilderness Areas.

These wilderness areas are part of the National Wilderness Preservation System, and are set aside to preserve and protect their wilderness character. Management provides for their use and enjoyment in a manner that will leave them unimpaired for future use and enjoyment as wilderness.

Dos Cabezas Mountains Wilderness has two special features that enhance values--numerous (about 23) springs and small patches of riparian vegetation important to wildlife values and a jumble of highly scenic granite boulders, balanced rocks, and outcrops. The Indian Bread rocks picnic site is adjacent to the wilderness along the Happy Camp Canyon Road, about 6 miles south of the town of Bowie, Arizona.

Peloncillo Mountains Wilderness is about 6 miles north of the town of San Simon, Arizona in the rugged part of the Peloncillo Mountains. There are steep mountains, cliffs, and numerous oak-lined canyons. The area provides outstanding opportunities for primitive recreation, hiking, backpacking, rock scrambling, hunting, and sightseeing.

Aravaipa Canyon Wilderness is north of the Galiuro Mountains in western Graham County and eastern Pinal County, about 40 miles west of Safford, Arizona. Aravaipa Canyon has significant ecological features, including towering cliffs that rise almost 1,000 feet above the riparian belt along the creek, and perennial flows supporting lush riparian vegetation in stark contrast to the cactus and shrubs of the Sonoran Desert on the canyon walls. This high quality habitat supports over 200 bird species ranging from permanent residents to rare migrant species, 46 mammals, 46 reptiles, 7 native fish and 8 amphibian species. Nine major canyons enter the 11-mile stretch of the Canyon. Adjacent to the area, Turkey Creek flows along the eastern boundary. Recreational uses include hiking, bird watching, bighorn sheep watching, and enjoying solitude. Visitor use of the main and side canyons is controlled by a permit system limited to 50 people per day. Two rangers, one stationed near each end of the canyon, monitor visitor use, provide information and maintenance and assist in emergencies.

Redfield Canyon Wilderness is located in the Muleshoe Ranch Cooperative Management Area located in the Galiuro Mountains in southeastern Arizona. The area is remote and very rugged.

The area is rich in wildlife, and high in scenic values. No group larger than 15 persons is allowed within the wilderness to maintain solitude for visitors.

Fishhooks Wilderness Area contain large stands of ash trees. The cliffs provide habitat for raptors. This area is ideal for those seeking primitive recreation and solitude.

North Santa Teresa Wilderness includes several outstanding topographic features, including Black Rock (which is a large volcanic plug), several canyons, and a mesa. These provide excellent habitat for raptors, and opportunities for primitive recreation and rock climbing.

Other Public Lands Administered by BLM

BLM administers approximately 1 million acres of other public lands in southeastern Arizona, including the Baker Canyon Wilderness Study Area (4,812 acres). The Wilderness Study Area is unusually rich in wildlife. It is part of a wildlife corridor connecting ecosystems in Arizona, New Mexico, and Mexico. Bird life is extraordinary with unusual species of hummingbirds, trogons, and turkey, among others. The Wilderness Study Area is also home to a variety of animal species including bats, coatimundi, Coues' white-tailed deer, bobcat, and mountain lion.

BLM in southeast Arizona currently has 227 livestock grazing allotments, varying from small family operations to corporations. Permitted numbers vary from a handful to more than 2,000 head cattle. Each grazing unit includes public lands, and in most cases, State and private lands. In many cases, the construction of range improvements such as fences and water facilities are required to meet objectives for land management. Intensive grazing management is implemented for allotments having parcels of public lands considered large enough or sufficient resource values to warrant increased management efforts. Five different grazing systems are available including rest rotation, 3-pasture rotation, deferred rotation, seasonal use, and year-long use. Each system has different requirements and may involve range improvements, livestock management and movement.

The natural and cultural resources in these areas are being heavily impacted by undocumented alien crossings. Cut fences, drained livestock water sources, broken pipelines, etc., lead to livestock trespass, lack of available water and subsequent death of livestock, in addition to other resource damage on public lands.

Following is a table listing recorded incidents on lands administered by the BLM in southeast Arizona over the past five years, i.e., between 1996 and 2001.

Table G-1
Incidents Related to Undocumented Aliens on BLM Land in Southeast Arizona,
1996-2001

Type of Incident	Number
Abandoned motor vehicles	181
Impounded motor vehicles	138
Vandalism damage to government property	122
Significant damage to natural resources caused by off-road vehicle use	318
Human-caused wildfires	16
Breaking & entering/burglary	36
Fatalities: motor vehicle accidents	8
Fatalities: accidental death	33
Assaults on employees & Federal & State law enforcement officers	5
Assistance to other law enforcement agencies	243

Source: LAWNET incident reporting system, personal records and incident reports.

Appendix H National Park Service

The National Park Service administers approximately 105,000 acres in southeastern Arizona. This includes Saguaro National Park, Coronado National Memorial, Chiricahua National Monument, and Fort Bowie National Historic Site. Following is a brief description of each of these designated areas and a summary of the incidents that have occurred on these lands in the past five years related to undocumented alien crossings.

Saguaro National Park

Saguaro National Park is one of only three National Parks in Arizona with Concurrent Legislative Criminal Jurisdiction and as such, the burden of Federal investigations, arrests, and prosecutions is with National Park Service for all incidents within park jurisdiction. Unlike State and local officers (which do not have the authority to enforce Federal Immigration laws), National Park Service Rangers at Saguaro National Park are not free to release undocumented aliens or alien smuggling suspects. Many of these violations are felonies including alien smuggling and the endangerment of human lives.

The surge of undocumented alien trafficking activity continues to rise despite consistent patrol efforts on Sandario Road and other areas of the park. Too frequently, Rangers encounter undocumented alien trafficking leading to a variety of dangerous and volatile situations including high speed pursuits, vehicle bailouts, resisting arrest, and suspect confrontations that escalate officer safety concerns. A number of these cases are multiple suspects versus a single Ranger until backup can arrive.

Although the U.S. Border Patrol is the lead agency for the enforcement of immigration law, there is no deployment or presence of Border Patrol Agents in the area due to other deployment or checkpoint areas along the border (60 miles south of Saguaro National Park). In fact, there are only 2-3 Border Patrol Agents responsible for the entire metropolitan Tucson area to assist other law enforcement agencies with the processing of undocumented aliens. When undocumented aliens and alien smugglers (predominately United States Citizens) are detained and are in custody of National Park Service, Border Patrol is notified immediately to respond to the area for transfer. Depending on other situations throughout the city of Tucson, a Border Patrol response ranges anywhere from a minimum of 45 minutes to 2 hours to arrive at Saguaro National Park.

A significant burden is placed on National Park Service Rangers to continue and maintain custody of undocumented aliens and alien smugglers until the arrival of Border Patrol. This is in addition to search of persons for weapons or other contraband, seizure of vehicles, and providing water or EMS care. Due to already limited National Park Service patrol staff, this reduces the effectiveness of our lead responsibility of park operations in providing visitor and resource protection services.

**Table H-1. Undocumented Alien Statistics*
Saguaro National Park**

Year	No. of Incidents	No. of Arrests
2001 (Jan. through June 1 only)	14	84
2000	17	57
1999	10	50
1998	1	5
1997	1	4
1996 (Partial year only)	2	10

* Note –The actual number of incidents occurring at Saguaro National Park is known to be substantially higher but patrol staff limitations prohibited detection.

Drug Trafficking Overview

The entire southern half of the State of Arizona is identified by the U.S. Department of Justice as a High Intensity Drug Trafficking Area (HIDTA) which includes Saguaro National Park. Organized drug cartels routinely smuggle narcotics into the United States through numerous routes including Highway 86 onto Sandario Road through National Park Service jurisdiction by motor vehicles with intent to sell and distribute to urban areas including Tucson, Phoenix, and Los Angeles.

Unprecedented record amounts of marijuana and cocaine continue to be seized in this area by various agencies including Federal Bureau of Investigation (FBI), Drug Enforcement Administration (DEA), U.S. Border Patrol, U.S. Customs, Arizona Department of Public Safety, Pima County Sheriff’s Department, as well as the National Park Service.

Sandario Road has long been referred to as a major drug trafficking and alien smuggling route by multiple law enforcement agencies. The utilization by drug traffickers of secondary north-south Sandario Road (6,000+ vehicles daily) within Saguaro National Park is designed to bypass metropolitan Tucson for stash houses and distribution points located nearby.

Numerous major incidents within Saguaro National Park include the ramming of a National Park Service patrol vehicle in an attempt to elude a vehicle pursuit. The suspect’s vehicle was located in another section of the park but the driver had escaped on foot. Two homicide victims discovered in the back of the vehicle were found to have been tortured, beaten, and shot. The incident is confirmed as drug retribution related and remains under investigation. The following year, in a separate incident, a young adult woman was discovered by a National Park Service Ranger shot to death in a pull-off area near the Ranger Station. This incident was also drug related. Two suspects were later arrested and convicted of 1st Degree Murder.

In another incident, two National Park Service Ranger's and a Pima County Sheriff's Deputy were assaulted after arresting two individuals for drug smuggling on Sandario Road after a search of the vehicle led to the discovery and seizure of packaged marijuana that was being transported to a stash house for later distribution.

Additionally, in yet another confirmed drug trafficking association of Sandario Road, a four year investigation of a drug cartel concluded with the indictment and prosecution by the U.S. Attorney's Office (Tucson) of over 45 suspects in which over 20 were convicted of Federal narcotics and conspiracy charges. The others fled the United States and remain at large. One of the stash houses that was identified and used by numerous suspects during this investigation was under 24 hour surveillance by FBI and DEA and was located adjacent to Saguaro National Park boundary. Subsequent arrest of individuals connected with this stash house resulted in the seizure of over one million dollars in cash and over a ton of Cocaine.

Coronado National Memorial

Coronado National Memorial is a unit of the National Park System located on the border with Mexico in southeastern Arizona. It consists of 4,750 acres of oak woodlands and grasslands at the southern end of the Huachuca Mountains, and shares 3.5 miles of border with Mexico. The location is conducive to drug smuggling and the entry of undocumented immigrants, which has occurred here for many years. The park is also bisected by a road used to transport drugs smuggled into the United States on the Coronado National Forest west of the park. The five-mile portion of the road in the Memorial is paved for two miles and leads to Arizona Highway 92, an easy route north to Sierra Vista and Interstate 10, which connects to Tucson and Phoenix.

Increased enforcement on the part of U.S. Customs and U.S. Border Patrol personnel in the vicinity of traditional crossing areas near border towns has resulted in pushing a considerable percentage of border crime onto public lands. These locations present a much lower threat of apprehension to the smugglers since they are remote and relatively lightly patrolled by land management agencies. The smuggling organizations are taking advantage of the low numbers of law enforcement staff available in these areas. Coronado National Memorial has become a principle gateway for these organizations due to all of the above mentioned criteria. Since the early 1990's, the Memorial has had a permanent staff of 7 to 8 employees including two law enforcement commissioned rangers. In 2001, the staff will increase to 12 permanent employees and four of them will be commissioned rangers.

Park rangers work closely with Border Patrol, Customs, DEA and other agencies to curb the smuggling of drugs and movement of undocumented aliens through the Memorial. Park rangers seize 3,000-5,000 pounds of marijuana per year and the number of undocumented aliens apprehended by park rangers has increased over 300% per year in the past two years. Border Patrol officers apprehend many others in the Memorial. The majority of undocumented aliens that enter the park are not apprehended due to the sheer number of entrants and the workload of park rangers and Border Patrol officers. Park rangers have observed groups of 150 people at a time walking through the park. The table below shows annual statistics for the past 5 years.

This activity has significantly impacted park resources. The park maintains seven miles of trails and has at least another five miles of illegal trails made by smugglers. Several of these trails are as wide as one-lane roads, while many narrower trails cover some parts of the park like spider webs. This network of trails crosses the park from the southern boundary with Mexico to the northern boundary where the trails converge and enter the Coronado National Forest. This concentrates most of the illegal foot traffic in a steep riparian canyon with a natural spring, one of the few sources of water in the park available to wildlife. Vegetation has been destroyed, bare ground exposed, and steep hillsides eroded. Litter, human feces and toilet paper cover the ground in many places.

Park visitors and residents of neighboring communities have expressed concern about encountering undocumented aliens or drug smugglers, who often mix in with groups of undocumented aliens. Some park neighbors will not hike in the park, or even visit it, due to this fear. There have been few encounters and the vast majority of visitors never see any illegal activity, but the potential for serious encounters is high. The greater safety problem is for park staff and their families.

The steep ridges overlooking the headquarters building and park residences are used by the smuggling organizations on a regular basis for surveillance of staff activities. Most of these key observation locations are easily accessed directly from Mexico. They also provide excellent radio reception and unrestricted access to Mexican cellular telephone repeaters that are heavily used by the drug and alien smuggling organizations. Intelligence information also indicates that drug scouts have operated within 50 yards or less of the ranger residences under cover of darkness while utilizing sophisticated, military-style camouflage techniques.

This region of southeast Arizona is widely recognized as possessing some of the greatest potential for border and narcotics related violence on the entire United States - Mexico border. Intelligence information indicates that the drug smuggling organizations will target any interfering law enforcement officer with death. Some smugglers are escorted by heavily armed scouts who are equipped with automatic assault weapons, encrypted radios, night vision optics, and possibly thermal imaging devices. The National Park Service is the only law enforcement agency in the vicinity that has not been involved, to date, in a gunfight near the Memorial with drug smugglers.

This border related illegal activity impacts the ability of the park staff to effectively manage the park. It is necessary for us to take into account the presence of large numbers of undocumented aliens in planning for any visitor use. Park rangers spend a significant amount of time apprehending undocumented aliens, providing them with emergency medical services, and disposing of abandoned vehicles. Park employees are compelled to plan their work in a way that minimizes their chances of encountering those involved in illegal activities. This disrupts optimal scheduling for many work activities such as resource management and science projects, and in some cases has resulted in certain projects not being carried out. Park employees also devote time to picking up litter and repairing damaged fences.

**Table H-2. Five Year Drug-Border Incident Statistical Breakdown
Coronado National Memorial**

Action	CY 1996	CY 1997	CY 1998	CY 1999	CY 2000
Drug/border related cases	47	34	43	75	87
Arrests (including undocumented aliens apprehended or referred to Border Patrol)	289	63	401	852	2551
Pounds of marijuana seized	2320	3437	2158	5089	3730

Chiricahua National Monument

Chiricahua National Monument was established by Presidential Proclamation on April 18, 1924 as part of the Coronado National Forest for the purpose of protecting the area’s scenic and geologic resources. Responsibility for management transferred from the U.S. Forest Service to the National Park Service on August 10, 1933. The Monument contains 11,985 acres, of which 10,290 acres are designated wilderness. The monument preserves natural rock formations known as "The Pinnacles" in perpetuity and makes this valuable part of America’s heritage available to approximately 100,000 visitors annually for their enjoyment, understanding, education, and appreciation. The 440-acre Faraway Ranch Historic District, listed on the National Register of Historic Places, was added in 1978. The Chiricahua Mountains comprise a unique island-type biotic community separated from similar islands by grasslands and deserts. Cultural resources are richly diverse, including evidence of occupation by prehistoric people of the Cochise and Athabascan cultures. The area was part of the homeland of the Chiricahua Apache people and a refuge in their struggle against the United States military and the legendary “Buffalo Soldiers.” In the 1930s, the Civilian Conservation Corps built a museum, employee housing, fire control lookout, campground, and a system of hiking and horse riding trails.

The Monument contains tremendous biological diversity with over 1,000 vascular plant, 71 mammal, 171 bird, and 46 reptile species recorded. One hundred years of fire suppression have altered the landscape and over 70 non-native plants have been identified. The Monument is a designated Class I airshed and has one of the earliest air quality monitoring programs in the National Park Service system. The 18-mile trail system, 22 historic structures and two identified cultural landscapes, 25 site campground, visitor center and bookstore, picnic areas, and nine miles of paved road are managed by a staff of 20 employees. The Monument contains 13 employee residences, 22 miles of boundary with four private landowners and the U.S. Forest Service as neighbors, nine miles of paved access road, and has an active prescribed fire program.

Fort Bowie National Historic Site

Fort Bowie National Historic Site includes most of Apache Pass which separates the Dos Cabezas Mountains from the Chiricahua Mountains. This area was the home and stronghold of the Chiricahua Apaches. For more than 32 years, Apache Spring was a major focus of the struggle between this group of Apache people and the United States military. Its rich natural

setting attracted a procession of inhabitants and passersby; Indians, Mexicans, and Americans. With the American acquisition of the Gadsden Purchase from Mexico in 1853, Apache Pass began to serve as a crossroads for emigrants, miners, surveyors, and soldiers. In 1858, the Butterfield Overland Mail established a station at Apache Pass. In 1862, a small fort was established atop a hill near the spring. From 1861 to 1872, the "Cochise Wars" raged between the Apaches and the United States troops. A larger fort was built nearby in 1870, the Apache were subdued by 1886, and the fort abandoned in 1894. Following abandonment, the fort buildings were stripped of any roof and other usable materials. The area was transferred from BLM to the National Park Service in 1972 with a portion being acquired from private landowners. Legislation limited the Historic Site size to 1,000 acres. The BLM has designated a buffer area around the Historic Site to protect scenic values. Part of the Site is still under an active grazing permit.

The Historic Site received National Historic Landmark status and today is visited by 10,000 people annually. Like Chiricahua National Monument the area is rich in biological diversity. The 1,000 acres and six miles of boundary contain 96 historic structures which are on the List of Classified Structures, seven miles of hiking trail, two employee residences and four authorized employees. Monument staff perform annual stabilization to keep the ruins from further deteriorating.

Undocumented Alien Activity and Environmental Impacts

Rangers frequently conduct patrols throughout Chiricahua National Monument and Fort Bowie National Historic Site with special emphasis on detection, apprehension and deterrence of undocumented aliens. Chiricahua and Fort Bowie are in the Douglas Station area of operations for the U.S. Border Patrol. This sector saw some of the heaviest illegal border crossings on the entire United States-Mexico border in calendar year 2000. The Douglas Station alone apprehended over 30,000 undocumented aliens in March 2000. As Chiricahua and Fort Bowie are situated some 40 miles north of Douglas, both Parks experienced impacts from the estimated 90,000 that successfully eluded apprehension that month as well as other months. During the 1st half of 2000 only one permanent and one seasonal Ranger were available for patrol at both Parks. Rangers responded to 44 incidents of undocumented alien activities resulting in the apprehension of 435. Due to staffing limitations, Rangers worked only daylight hours and discovered and documented evidence of many more incidents of nightly movements through the Parks. Based on this information and Border Patrol analysis, it was estimated that up to 500 undocumented aliens per week passed in and around Chiricahua and Fort Bowie during calendar year 2000. A total of 874 apprehensions were made of undocumented aliens at Chiricahua National Monument and Fort Bowie National Historic Site for the years 1997 to present (2001).

Many visitor complaints in calendar year 2000 emanated from undocumented aliens approaching and asking for food, water and rides. These contacts create a feeling of apprehension and fear for the visitors that are approached. Rangers were unable to respond to all complaints due to limited staffing. Resource impacts continue to be a main concern as undocumented aliens leave quantities of trash, trample fragile plants and soils and create unsanitary conditions. Numerous illegal trails now exist at Fort Bowie and fences have been broken, fire rings created and vehicles

off road travel is increasing. Even more dangerous, vehicles hauling undocumented aliens are often overloaded and driven at reckless speeds creating a serious safety hazard to visitors on the narrow roads throughout Fort Bowie.

Rangers are asked repeatedly to assist with undocumented alien problems on neighboring lands adjacent to the Park. Often, Rangers respond even though they have no jurisdiction or authority. Rangers coordinate with Border Patrol units when available and provide backup and detention of undocumented aliens on area highways and ranches. In several instances, Rangers received complaints from area ranchers concerning undocumented aliens that are known as Other Than Mexicans (OTMs). These particular undocumented aliens have been determined to be of Middle Eastern descent and have been reported as being very confrontational and unwillingly to vacate rancher's premises when ordered to do so. One incident in January 2001 involved persons of Middle Eastern descent attempting to enter a house after being told to leave by the owner. The owner eventually resorted to discharging a weapon in the air to scare off the apparent undocumented aliens. This occurred just south of Chiricahua National Monument within the Coronado National Forest.

The trend of undocumented aliens traveling north has gone on for many years, the difference now is that Border Patrol strategies in the past several years are forcing undocumented aliens into areas that have never seen this kind of activity. Many undocumented aliens have resorted to walking to avoid highway checkpoints. The undocumented aliens at Fort Bowie walk for four days from the border to meet their rides in Bowie, Arizona. Border Patrol analysts expect this trend to continue and perhaps increase based on future economics of Mexico and the world.

Tumacacori National Historical Park

Tumacacori National Historical Park is a unit of the National Park System located 19 miles north of Nogales, Arizona along Interstate 19 and the international border with Mexico. Located in the upper Santa Cruz River Valley of southern Arizona, the park is comprised of the abandoned ruins of three ancient Spanish colonial missions. The Park is located on 45 acres in three separate units. San José de Tumacácori and Los Santos Ángeles de Guevavi, established in 1691, are the two oldest missions in Arizona. The third unit, San Cayetano de Calabazas, was established in 1756.

Illegal activities impact primarily the parks headquarters unit which lies along the Santa Cruz River, which is heavily utilized by smugglers and undocumented aliens who are making their way north out of Mexico along a well established and well known route. Their increasing presence has resulted in significantly increased litter along the park's eastern boundary along the river. Additionally, some vandalism has occurred as groups of individuals search for shelter and water on park lands and in the significant culturally sensitive structures of the mission and adjacent buildings.

Park residents and neighbors in the local community have expressed concern about encountering undocumented aliens and drug smugglers as there have appeared to be more a "desperate" nature about these individuals in recent months. While there have been few encounters and visitors,

generally, are unaware of the illegal activities, the potential for serious encounters is rising. The greater safety problem is for park staff and families.

There is presently no law enforcement staffing within the park. Responses to undocumented aliens and other law enforcement needs are made by the Border Patrol and Santa Cruz Sheriff's Department and response times vary depending upon other ongoing or pending needs.

Table H-3. Visits and Visitor Days by National Park Service Field Office in FY 2000

Field Office	Visitors	Visitor Days
Chiricahua National Monument	93,458	36,594
Coronado National Memorial	87,327	9,783
Fort Bowie National Historic Site	9,252	1,542
Saguaro National Park	757,417	149,992
Tumacacori National Historic Park	55,680	3,093
Total	1,003,134	201,004

Appendix I

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service administers approximately 123,000 acres in southeastern Arizona. This includes the Buenos Aires, San Bernardino and Leslie Canyon National Wildlife Refuges. Following is a brief description of each of these designated areas and a summary of the incidents that have occurred on these lands in the past five years related to undocumented alien crossings.

Buenos Aires National Wildlife Refuge

The Buenos Aires National Wildlife Refuge was established on August 1, 1985 “...to conserve (A) fish or wildlife which are listed as endangered species or threatened species or (B) plants” 16 U.S.C. 1534 (Endangered Species Act of 1973) and for the “...development, advancement, management, conservation, and protection of fish and wildlife resources....” 16 U.S.C. 742 f(a)(4) (Fish and Wildlife Act of 1956).

The 118,000-acre Refuge is located in the southeastern quadrant of the State of Arizona, bordered on the south by Mexico. Approximately 7 miles of border are shared with Mexico. It is within the Altar Valley of south-central Pima County. The northern boundary of the Refuge is about 45 miles southwest of Tucson, Arizona, and the headquarters is about 60 miles from Tucson. The width varies from 8 miles at the northern boundary and expands to a maximum of 12 miles wide. Land acquisitions along Arivaca Creek and Brown Canyon have expanded the eastern boundary for an additional 8 miles, and the northwestern boundary now reaches into the Baboquivari Mountains to the west. The nearest town, Sasabe, is at the southern boundary of the Refuge. The town of Arivaca is approximately 18 miles east of the Refuge headquarters.

An important objective of the Refuge is to restore and protect the flora and fauna of the rare grasslands. The reintroduction of the masked bobwhite quail remains a vital element of the objective. Active protection and enhancement of the grasslands has been instrumental in the return of indigenous grassland bird species, such as the Baird’s sparrow (*Ammodramus bairdii*), grasshopper sparrow (*A. savannarum*), white-tailed kite (*Elanus caeruleus*), and loggerhead shrike (*Lanius ludovicianus*).

The Refuge’s habitat management activities are designed and implemented not only to improve quail populations, but also to benefit over 300 bird species, 58 species of mammals, 600 species of plants, 42 species of reptiles and 11 species of amphibians. While reintroduction efforts have centered primarily on the masked bobwhite quail, the Refuge provides habitat for other endangered species. Examples include Kearney’s bluestar (*Amsonia kearneyana*), a plant found in the Baboquivari Mountains; Pima pineapple cactus (*Coryphantha sherri robustispina*); the cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*) and the lesser long-nosed bat (*Leptonycteris curasoae verbabuenae*). The Refuge provides habitat for eight endangered species. Several others on the Refuge are being considered for inclusion as Federally endangered, including three species of bats, the Chiricahua leopard frog (*Rana chiricahuensis*), and the yellow-billed cuckoo (*Coccyzus americanus*).

In 2000, there were two homicides on the Refuge. Both incidents involved undocumented aliens. No suspect has been arrested. The U.S. Border Patrol averaged 400 illegal alien apprehensions a month for calendar year 2000 on or adjacent to Refuge land. Narcotic seizures are on the increase for calendar year 2001. Refuge law enforcement officers seized over 2,000 pounds of marijuana and arrested six people related to smuggling.

Refuge personnel have been involved in numerous search and rescue operations. Numerous undocumented aliens come to the Refuge and inform staff of lost companions requiring medical assistance due to dehydration and/or hypothermia.

Since the Buenos Aires National Wildlife Refuge is situated immediately north of the International border with Mexico, countless immigrants pass through by vehicle. The Refuge consists mainly of annual and perennial grasses which become extremely dry once cured/dead. Extremely dry grass is very flammable and carries fire with great rates of spread and very high temperatures.

Needless to say, suppression of grass fires is very dangerous and extremely difficult. Each year, numerous Refuge staff and firefighters from other Federal agencies, under-staffed and under-funded volunteer fire departments, and private citizens assist with wildfire suppression in a seemingly futile attempt to protect the Refuge's endangered natural resources which are enjoyed by visitors from all over the world. A growing concern for the Refuge is the suppression of wildfires in "urban interface" settings. Arivaca, Sasabe, and several buildings (including staff residences) within the Refuge boundary are under serious threat of wildfires caused by undocumented aliens and nature alike. Urban interface fires are even more difficult to suppress than raging grass fires. Interface fires pose a great threat of injury and death to firefighters and public alike. Firefighter training, firefighting equipment, and public education are desperately needed.

The Buenos Aires National Wildlife Refuge has a progressive and influential prescribed fire program. Prescribed fire has proven to be the most cost-effective and efficient tool available to land managers. Numerous species of birds, reptiles, plants, and mammals associated with the Refuge, depend on the prescribed fire program. However, immigrants pose a serious threat to prescribed fire operations throughout the Refuge due to the fact that unknown numbers of immigrants may be located within burn unit boundaries. Immigrants have little, if any, warning of a fast approaching flame front if Refuge personnel are not used to warn the immigrants of the potential hazard.

**Table I-1. Incidents Related to Undocumented Aliens
on Buenos Aires National Wildlife Refuge
1996-2001**

Type of Incident	Number
Abandoned motor vehicles	42
Impounded motor vehicles	37
Vandalism damage to government property	171
Significant damage to natural resources caused by off-road vehicle use	17
Human-caused wildfires	31*
Breaking & entering/burglary	17
Fatalities: motor vehicle accidents	3
Fatalities: accidental death	2
Assistance to other enforcement agencies	2000

* 20 fires from 1994-1999; 11 in 2000.

Source: Uniform Crime Reports prepared each calendar year and submitted to the FWS Regional Office.

Leslie Canyon and San Bernardino National Wildlife Refuges

Leslie Canyon National Wildlife Refuge (2,768 acres) and San Bernardino National Wildlife Refuge (2,309 acres) were established under authority of the Endangered Species Act of 1983 and the Fish and Wildlife Act of 1956 in order to “conserve fish or wildlife which are listed as endangered species or threatened species...or plants.” Sustainability and recovery of native fish in the Rio Yaqui Basin are high management priorities. Recovery actions on the refuges include stabilization of existing populations, establishment of self-sustaining populations, and extensive upland and wetland habitat restoration. The refuges are nationally significant in that they play a critical role in maintaining a sanctuary for at least 34 plant and animal species of special concern (Federal and/or State listed). Three fish species, the Yaqui chub, beautiful shiner, and Yaqui catfish have critical habitat identified on the San Bernardino Refuge. This additional protection requires that Endangered Species Act Section-7 consultation with the U.S. Fish & Wildlife Service occurs when there is a proposed action on the refuge by any Federal agency. Less than 2% of the entire Yaqui River Basin is geographically located within the United States, and the two refuges are regionally significant in that they historically supported one fourth of the total number of fish species native to Arizona.

The refuges are also historically significant, because permanent water in this desert region has supported more than native fish and wildlife. A large number of cultural resource sites are encompassed by the two refuges. Populations of Native Americans occupied numerous pit house village sites here between the 1200's and 1400's, only a small portion of which have been investigated and cataloged. Spanish exploration and early cattle ranching were active in the San Bernardino Valley during the 1500's, until Apache depredations shut these activities down beginning in the early 1600's. Jesuit priests established a mission at San Bernardino during the 1700's and a Spanish presidio was established during 1774 adjacent to what is now the refuge. John Slaughter, rancher and sheriff of Tombstone, Arizona established the San Bernardino Ranch in 1884. The 120-year old Slaughter Ranch Headquarters has been restored as part of the

Johnson Historical Museum of the Southwest, which works cooperatively with the Service to manage native fish and wildlife. The Mexican Revolution reached this border area in 1915 when Pancho Villa and his army fought in nearby Agua Prieta. A rock fort and breastworks, built by American troops to defend the border and protect settlers, are still in place on the refuge.

During the past five calendar years (1996-2000), refuge officers have been involved with at least 54 drug related cases on or adjacent to San Bernardino National Wildlife Refuge and Leslie Canyon National Wildlife Refuge in which a total of 119 people were arrested, 16 vehicles were seized, and a total of 16,092 pounds of marijuana, having a street value exceeding \$16 million, was seized and turned over to U.S. Customs officials. About 3,400 undocumented aliens are apprehended by the U.S. Border Patrol each month within the Douglas District which includes Leslie Canyon and San Bernardino National Wildlife Refuges. The number of undocumented aliens which use the two refuges as routes into the United States is conservatively estimated to be about 100 per day. Though undocumented aliens are not typically detained by refuge officers, a small percentage of these people are apprehended each year. During the year 2000, for example, refuge officers assisted in the detection and apprehension of 1,950 undocumented aliens trespassing through the two refuges.

**Table I-2.
Incidents Related to Undocumented Aliens
on San Bernardino/Leslie Canyon National Wildlife Refuges,
1996-2001**

Type of Incident	Number
Abandoned motor vehicles	5
Impounded motor vehicles	16
Vandalism damage to government property	2,468
Significant damage to natural resources caused by off-road vehicle use	8
Human-caused wildfires	37
Breaking & entering/burglary	6
Fatalities: motor vehicle accidents	0
Fatalities: accidental death	0
Assistance to other law enforcement agencies	900

Source: Annual FWS Law Enforcement Program Report

Law Enforcement

The U.S. Fish and Wildlife Service has been challenged with the mission of enhancing fish and wildlife and their habitats for the American people. The Service accomplishes this task by drawing on the expertise of several divisions, two of which have officers with law enforcement

authority; the Division of Law Enforcement and the National Wildlife Refuge System. The primary responsibility for law enforcement officers with the Fish and Wildlife Service is to enforce laws that protect natural resources. As illegal activities such as undocumented alien and drug smuggling increase on Fish and Wildlife Service lands, there is an increased risk to agency employees, visitors, and delicate wildlife habitats. As a result, law enforcement officers must further stretch their time and efforts to respond to these issues.

The law enforcement programs within the Fish and Wildlife Service require significant increases in resources to effectively address these additional enforcement concerns. Only three law enforcement FTE positions are assigned to the 123,077 acres of Fish and Wildlife Service lands in southeast Arizona; one full-time officer stationed at Buenos Aires National Wildlife Refuge, one refuge manager who has collateral law enforcement authority that covers Leslie Canyon and San Bernardino National Wildlife Refuges, and one vacant special agent position.

Together, these three officers must address threats to wildlife resources and maintain routine public safety while trying to grapple with illegal immigration and drug smuggling activities that have increased significantly over the last three years.

Appendix J

Department of Defense

Lands administered by the Department of Defense in southeast Arizona total nearly 103,000 acres. Davis Monthon Air Force Base administers 1,280 acres near Tucson. The remaining acreage is administered by Fort Huachuca.

Fort Huachuca

Fort Huachuca is located in the San Pedro River Valley in Cochise County, Arizona, 75 miles southeast of Tucson and eight miles north of the Mexican border. The Fort is located on 73,272 acres, divided by Arizona Highway 90. The Fort also controls an additional 28, 256 acres, including 27,397 acres at the Willcox Playa, which is about 65 miles northeast of Fort Huachuca.

Fort Huachuca is bordered by the Coronado National Forest, State Trust lands, private lands and BLM administered lands. The City of Sierra Vista is adjacent to the installation and serves as a regional residential and commercial center.

Fort Huachuca consists of a cantonment area, open/operational areas and live-fire ranges. Libby Army Airfield is located in the northernmost corner of the cantonment area. This airfield consists of a 12,000-foot, Class “B” main runway; a 5,365-foot secondary runway; and a 4,300-foot tertiary runway. Maintenance facilities and the City of Sierra Vista air terminal are on the northern side of the airfield.

The Fort has 334 miles of paved roads, 136 miles of improved gravel roads, and 167 miles of firebreak roads and trails. Despite the extensive network of roads, vehicle access is difficult for many areas of the installation, particularly during wet weather.

The U.S. Army Intelligence Center at Fort Huachuca is the Headquarters for the U.S. Army Intelligence Center and the U.S. Army Signal Command. Activities of major tenants assigned to the installation include:

- Research, develop, test, and evaluate concepts, doctrine, materials, and equipment in the areas of intelligence, electronic warfare and information systems;
- Develop, conduct, and evaluate training in intelligence, electronic warfare, and information systems;
- Provide trained operational forces in the areas of intelligence and communications;
- Perform aviation operations; and
- Provide training opportunities for active duty, Reserve, and National Guard forces.

Ongoing missions and activities of military tenants at Fort Huachuca constitute the operational baseline at the installation, which is comprised almost entirely of intelligence and communications systems testing and training. Other supported activities on Fort Huachuca

include field training exercises, aviation activities, live-fire qualifications and training, vehicle maneuver training, and administrative and support activities.

Two measures of Fort Huachuca's population are the employee population and the "noonday" population. The employee population includes military, civilian, and contractor personnel employed on the installation. The employee population in September 1997 was 10,116. The noonday population includes assigned military personnel, their family members living on post, and all civilians employed on post. The total population, which includes civilian employees, contractors, military personnel and military dependents living on or off the installation, is estimated to be 25,206.

The San Pedro River is a major regional stream, extending almost 200 miles from its headwaters in Sonora, Mexico to its confluence with the Gila River. Some perennial stream reaches, and numerous springs occur across Fort Huachuca, primarily in mountain canyons. Most surface water features on the Fort are ephemeral streams, consisting of dry washes, arroyos, or continuous and discontinuous gullies that only flow in response to significant precipitation events.

Fort Huachuca vegetation ranges from scrublands, scrub-grasslands and open grasslands of the lowlands through oak-grass savannas and oak woodlands of the foothills, to oak and pinyon-juniper woodlands or conifer forests of the upper elevations, along with various riparian forests.

The Fort supports a very high density of breeding populations of plant and animal species in its diverse habitat types. Both migratory and year-round resident populations use the fort, and the greatest wildlife diversity and abundance occur in riparian habitats, along the bottom of canyons and into the grasslands. Extensive and highly popular nature-based recreation on and around Fort Huachuca is focused on birding, butterfly and wildflower viewing, hiking and caving.

Fort Huachuca has a large number of archaeological and historical sites and districts. Twenty-eight sites possess both prehistoric and historic components. Three prehistoric sites in Garden Canyon and the old post area have been entered into the National Register of Historic Places. Of the remaining known archaeological sites, seven have been evaluated as eligible for listing on the National Register, 227 are classified as potentially eligible for listing, 29 are ineligible for listing and the significance of 75 sites has not been determined.

Potential impacts of undocumented alien traffic upon Fort Huachuca resources and activities

Undocumented aliens crossing through Fort Huachuca have been observed mostly in the grasslands, although individuals have also been found in canyons. By the time they reach the northern end of the Huachucas where the Fort lays, undocumented aliens, if still on foot, have broken and scattered into smaller groups compared with the large groups reported nearer the border. No overnight camp areas, repeatedly used staging stations or heavily used foot routes are known on post. Therefore, the litter and sanitation problems from concentrated trash and human waste, encountered further south or out in the valley along the San Pedro river are not a

significant impact on the Fort. No confrontations between undocumented aliens and the public have been reported on post. Therefore, current, direct impacts to Fort Huachuca lands, military mission, natural or cultural resources, and outdoor recreation activities have not been significant. No damage, theft, vandalism, changes in land use or other activities, or degradation of resources has been identified on post as a result of undocumented alien traffic.

Therefore, significant impacts on Fort Huachuca lands from undocumented aliens remain in the potential category. These risks include:

- Wildfire risk from warming or cooking fires,
- Cutting, trampling or other damage in riparian habitat corridors,
- Damage to sensitive plant species around water sources, and contamination of springs from human refuse,
- Increased erosion rates in areas of concentrated and repeated use, in both mountain slope and grassland areas,
- Use of significant caves for shelter and hiding, resulting in take of sensitive wildlife such as bat roosts, or damage to archaeological resources and cave features.

To some degree, these risks could be potential impacts to both cultural and natural resources. Theoretically, undocumented aliens in significant numbers could also present an increased risk to transport of alien, invasive species from their home areas, and establishment on Army training lands. However, no known species or pathogens have been specifically identified to date.

The wildfire risk issue likely is the greatest risk in terms of probability, degree of damage, and cost of suppression and restoration. Especially in the canyons, the risk of fire is both to Fort Huachuca training lands and to undocumented aliens and other human safety in these narrow, heavily vegetated areas.

From October 2000 through April 2001, a total of 140 undocumented aliens were detained on Fort Huachuca. In February and March 2001, three vehicles used by undocumented aliens had to be towed off of the Fort. No towing costs were incurred by the Fort.

Appendix K
Southeast Arizona Estimated Needs

[Separate APPENDIX K file–61 pages]

Appendix L

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