



ON THE LINE

The Impacts of Immigration Policy
on Wildlife and Habitat in the Arizona Borderlands



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ABOUT DEFENDERS OF WILDLIFE

Defenders of Wildlife is a leading conservation organization recognized as one of the nation's most progressive advocates for wildlife and its habitat. Defenders uses education, litigation, research and promotion of conservation policies to protect wild animals and plants in their natural communities. Founded in 1947, Defenders is a 501(c)(3) organization with 490,000 members and supporters nationwide and headquarters in Washington, D.C.

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EXECUTIVE SUMMARY

Spanning 350 miles of the southern U.S. border with Mexico, the Arizona borderlands region is predominantly comprised of protected federal lands, including Organ Pipe Cactus National Monument, Cabeza Prieta National Wildlife Refuge and Coronado National Forest. These public lands provide essential habitat for hundreds of wildlife species, including rare, threatened and endangered species such as Sonoran pronghorn and jaguar. Many of these species occur nowhere else in the United States.

Beginning in the early 1990s, the U.S. Border Patrol dramatically increased its immigration enforcement efforts in heavily populated border areas such as San Diego, California, and El Paso, Texas, essentially shifting undocumented immigration, drug trafficking and other illegal activities from urban areas to more remote and less populated areas—especially the borderlands of Arizona. This has resulted in significant environmental degradation in some of the most pristine and valuable wildlife habitats in the nation.

This degradation has only been compounded by Border Patrol enforcement actions, including road and wall construction, lighting projects and patrols by off-road vehicles and low-level helicopters. In addition, the Border Patrol has often failed to consider or to mitigate these environmental effects, and its compliance with environmental laws such as the Endangered Species Act, National Environmental Policy Act and Wilderness Act has been insufficient, untimely and sometimes completely lacking.

Despite more than a decade of intensified Border Patrol efforts, undocumented immigration levels across the southern U.S. border have risen sharply. Decreased levels in localized, urban areas have been more than offset by increased levels in less patrolled and more remote areas parts of the border. This vicious cycle has had serious impacts on vast areas of the borderlands region and will continue to do so unless environmental concerns and issues are prominently considered and integrated into immigration reform measures federal lawmakers have included in several recently introduced bills. In the meantime, short-term measures such as federal legislation to increase funding for environmental protection, better environmental training for Border Patrol agents, and greater commitment to existing environmental laws are critical to prevent further environmental damage as quickly as possible. Protection of the irreplaceable parks, refuges, forests and wilderness areas of the Arizona borderlands region—and the intricate web of life that depends on them—must become a central and fundamental consideration of border security.



The ocelot is one endangered species not likely to make a comeback in Arizona given present conditions along the border. | ©CATHY & GORDON ILLG (CAPTIVE)

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I. INTRODUCTION

The Arizona borderlands encompass some of our nation's most compelling and unique landscapes—and some of its most threatened. Distributed generously along the 350-mile border stretching from the banks of the Colorado River to the remote Peloncillo Mountains on the New Mexico state-line, is an extensive network of national parks, monuments, wildlife refuges, forests and wilderness areas. These federal lands protect a rich and diverse array of natural habitats including vast desert valleys crowded with saguaro cactus and ancient ironwood trees, high

mountain peaks cloaked in pine and fir, and free-flowing rivers bordered by graceful cottonwood and willow forests. The isolation of the Arizona border region, its generally sparse human population and its high concentration of public lands make the area a haven for a surprising abundance of wildlife and plants, many found nowhere else in the United States.

During the last 10 years, however, many formerly pristine areas along the Arizona borderlands have been extensively degraded by unprecedented levels of undocumented immigration and the increasingly intensive



Illegal trails like this footpath in Buenos Aires National Wildlife Refuge crisscross the remote borderlands of Arizona. | U.S. FISH AND WILDLIFE SERVICE

enforcement efforts of the U.S. Border Patrol. This degradation began when the Border Patrol started to focus its operations on major border cities, such as San Diego, California, and El Paso, Texas, purposefully shifting undocumented immigration and other illegal activities to less patrolled and more remote areas—especially lands along the Arizona border. As a result, the once negligible levels of immigration across Arizona’s formidable deserts and mountains rapidly increased. By 2003, agents in the Border Patrol’s Tucson Sector alone had apprehended more than 365,000 migrants attempting to illegally enter the United States.

This high level of human traffic has taken a heavy

immigration within Arizona by applying the same tactics used in the major border cities: adding thousands of additional agents; bolstering off-road vehicle and air patrols; and constructing an extensive infrastructure of fences, walls, lighting systems and roads. These actions have only resulted in further degradation to the already stressed natural environment.

While the effects of this immigration crisis on Arizona’s local communities and governments is increasingly receiving national attention, the ongoing and alarming destruction of the state’s borderland environment is largely unknown to the public at large, even many Arizonans. This lack of public awareness is prob-

lematic, as the scope and extent of environmental damage occurring throughout the borderlands—especially on protected parks and wilderness areas—is unprecedented and worsening.

The purpose of this report is to highlight the serious and complex environmental challenges facing the state of Arizona as a result of immigration issues. In these pages, we build a case from an environmental perspective for the broader need to reform our nation’s immigration policies. By consolidating and presenting this information, we seek to contribute to public understanding of this important issue and to widen the circle of elected officials, decision-makers, advocates and experts committed to providing a central role for environmental protection in

their collective efforts to craft solutions to the problems caused by current immigration policies.

We begin with an overview of the borderland ecosystems, a discussion of U.S. immigration policy and how it has shifted undocumented migration to Arizona, and a description of recent Border Patrol operations in the



Illegal traffic and the Border Patrol operations that pursue it carve out new roads and cause significant damage on Cabeza Prieta National Wildlife Refuge and other federal lands on the Arizona border. | ©NOAH MATSON/DEFENDERS OF WILDLIFE

toll throughout the Arizona borderlands, especially in the easily scarred western deserts, where migrant and drug smugglers have created miles of illegal roads, abandoned scores of vehicles, damaged rare desert springs and wetlands and left behind huge amounts of trash.

The Border Patrol has attempted to deter illegal

state. We cover the devastating effects of immigration and law enforcement strategies and actions on specific public lands, habitats and species in the borderlands, effects that are certain to worsen in the absence of meaningful immigration reform. We then look at how the U.S. Border Patrol and its parent agency, the Department of Homeland Security, have regularly failed to live up to the mandates of the laws that protect our natural resources by not communicating and coordinating with federal land managers, affected communities and the general public, and not following through on promises to mitigate and minimize environmental impacts. We also examine how these shortcomings have been amplified by Congress's failure to adequately fund or prioritize laws and mechanisms for the Border Patrol to improve its environmental record and how new regulations are ignoring the desperate need for environmental oversight in the efforts to secure our southern border.

This report is not meant to denigrate the dangerous and important work done by the Border Patrol in its

efforts to curtail undocumented immigration, drug trafficking and other illegal activities. Nor is its intent to deny the incredible complexities of the immigration issue. It is offered because we believe it is important to acknowledge that U.S. immigration policy and the manner in which the Border Patrol has executed its enforcement strategy have directly contributed to environmental damage. By strengthening its commitment to environmental protection and improving overall transparency and accountability to affected communities and other stakeholders, the Border Patrol and Department of Homeland Security can play a vital role in avoiding unnecessary environmental degradation and helping to restore lands which have already been damaged.

Toward this goal, we conclude with a call for reform and offer recommendations for better integrating environmental considerations into the Border Patrol's immigration enforcement efforts to improve the safety of borderland communities and strengthen border and national security.

II. ECOSYSTEMS WITHOUT BORDERS

Like most political boundaries, the U.S.-Mexico border is largely an arbitrary division in relation to the natural world. Writer Charles Bowden vividly describes the southern border as “a great biological unity, with a meat cleaver of laws shredding it and cutting it in half.”¹ Indeed, the Sonoran Desert and Sky Island ecosystems that dominate the Arizona borderlands region extend well south of the border into the northern Mexican states of Sonora and Northern Baja.

A great concentration of species found throughout Mexico, and even southward into Central and South America, reach the northern extent of their ranges in southern Arizona—the jaguar, cactus-ferruginous pygmy owl, thick-billed parrot and Mexican vine snake, to name a few. Southern Arizona's major river, the San Pedro, originates in the mountains of northern Sonora,

while the arid west's largest river, the Colorado, rolls languidly past the Arizona border town of Yuma to its terminus at the Colorado River Delta in Mexico's Gulf of California.

The shared environments of the United States and Mexico require effective and coordinated cross-border management of wildlife and other natural resources. Such cooperation is necessary to protect wide-ranging species such as the jaguar and the Mexican gray wolf recently reintroduced in the southwestern United States, to provide intact wildlife travel corridors between the two countries, and to facilitate the management of disjunct populations of rare plant species.² Destructive activities along the border region make international efforts to safeguard wildlife and habitat much more difficult; some—the construction of impermeable walls or

major roads, for example—may preclude them. An appreciation of shared borderland ecosystems is thus central to any consideration of immigration policy and its impact.

Heart of the Sonoran Desert

The western Arizona border region boasts some of the most healthy and intact desert habitats in the United States. This is Sonoran Desert country, a disarmingly lush and biologically diverse ecosystem fed by two distinct rainy seasons. At the core of this vast and beautiful desert habitat are three large parcels of protected public land totaling 3 million acres: Cabeza Prieta National Wildlife Refuge, Organ Pipe Cactus National Monument and Barry M. Goldwater Range.³ Combined with protected lands just south of the border in Mexico, including the sublime El Pinacate Biosphere Reserve, these borderland areas are the focus of globally important efforts to preserve Sonoran desert habitats.

Despite as little as three inches of rain per year in the western reaches of the Sonoran desert, the area teems with wildlife, including the endangered Sonoran pronghorn, desert bighorn sheep, coatimundi, javelina, Gila monster, flat-tailed horned lizard, cactus ferruginous pygmy owl, tropical kingbird, crested caracara and desert tortoise. Vegetation is equally varied, including not only the iconic saguaro cactus and splendid organ pipe cactus, but rare elephant trees, ancient ironwood trees and more than 600 other plant species.



Organ pipe cacti reach the northernmost part of their range in the arid wilderness set aside to protect them, Organ Pipe Cactus National Monument. | ©RANDY PRENTICE/PRENTICEPHOTO.COM

Dying in the Desert

The primary emphasis of the Southwest Border Strategy when the Border Patrol first implemented it in the early 1990s was to shift undocumented immigration from urban areas to more remote and rugged terrain. Officials believed this would give law enforcement a tactical advantage and deter would-be migrants, thus drastically lowering immigration levels. Instead, migrants have come to the United States in record numbers despite the risks. The result is often tragic; an estimated 3,600 people have died trying to illegally cross the border since 1995. A third of them have never been identified.⁴

The Border Patrol recently has intensified its enforcement and search-and-rescue efforts, but the death toll continues to climb. The agency recorded 2,569 rescues during fiscal year 2005 and a record 415 deaths of people trying to cross the border, far surpassing the previous high of 383 people in fiscal year 2000.⁵ More than half of the deaths occurred in Arizona with record temperatures soaring throughout the southwest desert in 2005. July 12, 2005, has the mournful distinction of having the single most deaths recorded all year; the temperature hit 121 degrees and nine migrants died along the Arizona border.⁶

According to former Immigration and Naturalization Service commissioner Doris Meissner, who headed the agency when it first implemented the Southwest Border Strategy and is now a senior associate and director of the Immigration Policy Project at the Carnegie Endowment for International Peace in Washington, D.C., “the huge paradox now is that the unintended consequences [of the Southwest Strategy] far overshadow the positive.”⁷

Recognizing the commonalities of the humanitarian and environmental crises fanned by current immigration policies, Defenders of Wildlife is part of a broad coalition of communities and organizations working to reform immigration policy in a manner that protects human rights, indigenous peoples and the environment.



“Caution: Do not expose your life to the elements. It is not worth the trouble!” warns this sign on the U.S.-Mexico border in Arizona. Hundreds of undocumented migrants die in the Arizona desert every year. | ©ALAN STAATS/GETTY IMAGES

The Sky Islands

The world renowned Sky Islands Ecosystem—so named because it consists of “islands” of forested habitat rising out of a “sea” of surrounding desert and grasslands—is the defining natural habitat of Arizona’s eastern borderlands.

With more annual rainfall, and larger and higher mountains, the Sky Islands are a marked contrast to the extreme aridity, open vistas, broad desert valleys and relatively low mountain ranges that dominate the Sonoran

Desert region to the west. Situated at the confluence of four major ecosystems—the Rocky Mountains, Sierra Madre Mountains, Sonoran Desert and Chihuahuan Desert—the Sky Islands support a concentration of plants and wildlife unique to the area.

A dozen mountain ranges with names evocative of the region’s deep Spanish roots—such as Chiricahua, Huachuca, Santa Rita, Santa Catalina, Rincon and Pinaleno—form the core of sky island habitat in southern Arizona. This core area is administered by the Coronado National Forest and offers people and wildlife

alike respite from the searing desert lowlands. South of the border, there are 15 additional sky island mountain ranges within the Mexican state of Sonora.

The forest sanctuaries of the sky island mountain ranges contain remnant old-growth forests and significant expanses of common species such as Douglas fir and ponderosa pine interspersed with species found pre-

dominantly in Mexico's Sierra Madre Range and points south, such as Apache and Chihuahua pines. Black bears, spotted owls and deer are common in most sky island ranges, while more exotic and rare species such as jaguars, thick-billed parrots and Mount Graham red squirrels are also found in some areas.

III. SQUEEZING A BALLOON: LAW ENFORCEMENT IN THE ARIZONA BORDERLANDS

The U.S.-Mexico border has historically been a highly porous, often unmarked boundary with little security presence on most of its long length. That began to change dramatically in 1994, when the U.S. attorney general directed the U.S. Border Patrol, then part of the Immigration and Naturalization Service, to undertake a new, more aggressive strategy to thwart the undocumented immigration into the United States that started skyrocketing in the 1980s.

Under this so-called Southwest Border Strategy,⁸ the Border Patrol's first objective was to close off traditional immigration and smuggling routes through heavily urbanized and easily accessible areas. The Border Patrol believed that by taking a "prevention through deterrence" approach—involving significantly increased agent numbers, technological aids such as ground sensors and surveillance cameras and additional infrastructure such as walls, fences and roads—it could eventually control and prevent undocumented immigration. The agency realized that migrants would still attempt to cross the border in more remote and dangerous areas, but believed its agents would have a tactical advantage in rugged terrain and that most migrants would simply be deterred from trying at all.⁹

First implemented in San Diego, California, and El Paso, Texas, the Southwest Border Strategy's overriding

goal was to "make it so difficult and so costly to enter this country illegally that fewer individuals would try."¹⁰ Instead, it has, at tremendous cost, greatly reduced immigration traffic through some major population centers and shifted it to more remote areas. This purposeful shift of immigration traffic, however, has not been accompanied by the anticipated reduction in overall immigration levels. According to one recent estimate, approximately 260,000 undocumented migrants per year were entering the United States from Mexico when the Border Patrol first initiated its southwest strategy in the early 1990s. By the late 1990s, that figure had risen to 400,000 per year, and today it is believed that approximately 485,000 undocumented migrants, from Mexico alone, are successfully crossing the border each year.¹¹ Further, as border policies have pushed undocumented migration into more remote areas, the probability of apprehension along the border has plummeted, from an average of around 33 percent in the early 1980s to an all-time low of only 5 percent in 2002.¹²

A recent report on border security by the U.S. House of Representatives Select Committee on Homeland Security aptly describes the situation: "Like squeezing a balloon, the policy has moved the illegal immigration from one sector to another without decreasing the overall volume of illegal crossings."¹³

Federal Lands Under Pressure

The effect of this shift in undocumented immigration has been particularly pronounced in Arizona. According to the Department of Interior—which administers Organ Pipe Cactus National Monument, Cabeza Prieta National Wildlife Refuge, Buenos Aires National Wildlife Refuge and many other federal lands along the Arizona border—the number of undocumented migrants apprehended on its lands increased exponentially between 1997 and 2000, from 512 to more

than 113,000.¹⁴ The National Park Service estimates that 200,000 undocumented migrants entered the Organ Pipe Cactus National Monument alone in 2001. These migrants have confounded Border Patrol strategy by demonstrating a willingness to literally risk everything for the promise of work in the United States. Such risk has often resulted in tragedy—it is estimated that at least 3,500 border crossers have died since southwest strategy was introduced in 1994.

Unlike the borderlands of California, New Mexico and Texas, the borderlands of Arizona are mostly federal

Native Americans on the Frontlines

Located approximately 30 miles west of Tucson and including more than 75 linear miles of the U.S. southern border, the Tohono O’odham Nation sprawls across more than 2.9 million acres of Sonoran desert. Squeezed between intensifying Border Patrol enforcement operations in the searing desert to the west of the reservation and rugged mountains to the east, the Tohono O’odham Nation is experiencing an explosion of undocumented immigration, drug smuggling and other illegal activities and an increasing Border Patrol presence. Sparsely populated and remote, Tohono O’odham land is especially vulnerable. Tribal officials estimate that approximately 1,500 undocumented migrants—fully 10 percent of the tribe’s population of 15,000 people—cross the reservation per day in peak seasons.¹⁵

Tribal officials estimate that the Tohono O’odham’s 70-officer police force spends at least half its time on border issues, and that the tribe spends \$3 million annually on security issues, on top of the \$2 million the Indian Health Service spends on medical care for undocumented migrants each year.¹⁶ Despite the obvious need, the Tohono O’odham Nation has received only \$35,000 to improve communications between tribal and federal law enforcement officials, even though the Bush administration’s 2005 budget set aside \$1.4 million specifically for the tribe.

In addition to the Tohono O’odham, the Cocopah, Pachu Yaqui and other tribes that have maintained villages on both sides of the U.S.-Mexico border for centuries are having trouble crossing the border. As enforcement efforts have intensified, reports of abuse and discrimination by the Border Patrol against tribe members have become increasingly common.¹⁷



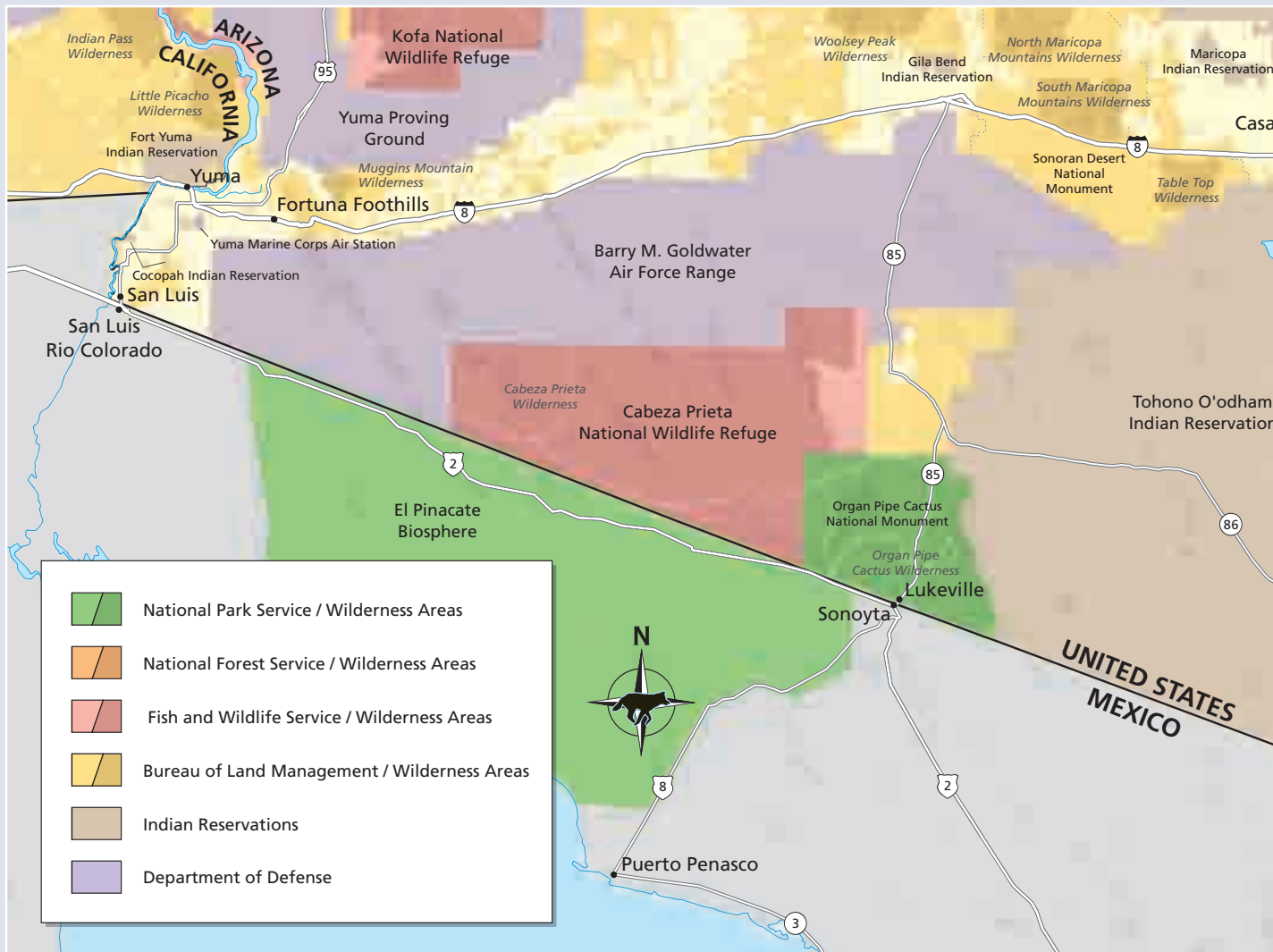
A Tohono O’odham police officer and an expert tracker look for signs of drug smugglers. The tribal police force spends at least half its time on border-related issues. | ©SCOTT WARREN/AURORA

land—more than 85 percent of the lands directly along the border and 62 percent of all the land area within 100 miles of the border.¹⁸ These federal lands include national monuments, national wildlife refuges, national forests, wilderness areas and lands held in trust by the Department of Interior for the Tohono O’Odham

Nation, Pascua Yaqui, Cocopah and other Native American tribes. All have been dramatically impacted by the explosion in illegal activity. Consider these excerpts from a report by the nonpartisan Government Accountability Office:

PUBLIC LANDS UNDER PRESSURE IN THE ARIZONA BORDERLANDS

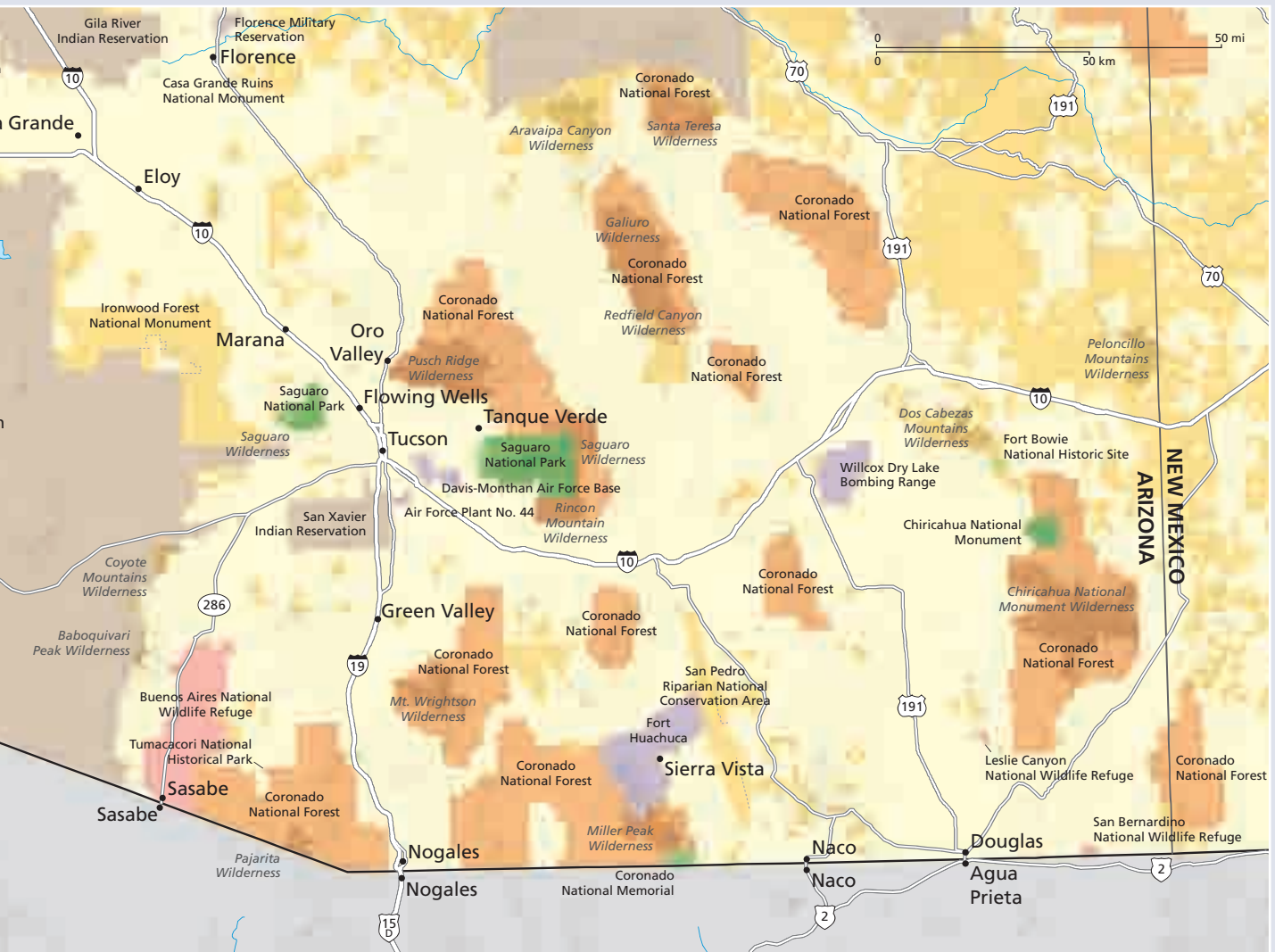
The borderlands of Arizona, unlike those of California, New Mexico and Texas, are mostly federal land—more than 85 percent of the land directly along the border and 62 percent of the land area within 100 miles of it. These federal lands include national monuments, national wildlife refuges, national forests,



“Illegal border activity on federal lands not only threatens people, but endangered species and the land itself. Illegal aliens and smugglers have created hundreds of new trails and roads while crossing borderlands, and in doing so have destroyed cactus and other sensitive vegetation that can take decades to

recover, including habitat for endangered species. These roads and trails can disturb wildlife, cause soil compaction and erosion, and can impact bank stability...vehicles abandoned by smugglers are routinely found on federal lands and are not only expensive to remove, but towing them from remote

wilderness areas and lands held in trust by the Department of Interior for the Tohono O’Odham Nation, Pascua Yaqui, Cocopah and other Native American tribes. All have been dramatically impacted by the explosion in illegal border activities and Border Patrol enforcement efforts.





The rough terrain of Cabeza Prieta National Wildlife Refuge does not stop illegal migrants determined to make a new life in the United States. | ©RANDY PRENTICE/PRENTICEPHOTO.COM

areas can result in additional resource damage. Tons of trash and human waste are left behind each year, affecting wildlife, vegetation, and water quality ...One land management official described another federal property on Arizona's border as so unsafe and with resources so destroyed that it is now primarily used for illegal activities and no longer visited by the general public."¹⁹

Although few studies have systematically gauged the environmental impacts of illegal activities, managers at Organ Pipe Cactus National Monument surveyed the park's 516-square mile area in an effort to quantify some of the damage. Their conclusion: "if one was to pick a

random point and walk three miles in any direction, they would likely see four vehicle tracks, seven pieces of trash, nine water bottles, and four examples of 'major damage,' such as carvings in saguaro cactus or graffiti-stained rocks."²⁰

These effects, unfortunately, are not limited to areas directly along the border. In the recently created Ironwood Forest National Monument—50 miles north of the border—more than 50 illegal roads (some from recreational off-road vehicle activity rather than immigrant or drug smuggling traffic) have been blazed since its creation in 2000, and more than 600 vehicles are abandoned each year.²¹

IV. THE SOUTHWEST BORDER STRATEGY COMES TO ARIZONA

In the mid to late 1990s, the Border Patrol brought its Southwest Border Strategy to Arizona, rapidly increasing law enforcement staff and infrastructure to address the high level of undocumented migration that had shifted to the state. The number of Border Patrol agents assigned to the Tucson Sector alone grew sixfold—from approximately 280 to 1,770—between fiscal years 1993 and 2004.²²

Significant infrastructure projects were also undertaken, including the construction of nearly 15 miles of border fence, 33 miles of vehicle barriers, 167 miles of stadium-style and portable lighting, and significant road construction.²³ Recent proposals would dramatically add to this existing infrastructure.

For example, one proposal approved in November 2003, to address problems near the southeast Arizona border towns of Naco and Douglas, called for 18 miles of fence construction, more than 75 miles of road construction and maintenance and 13 miles of permanent lighting, much of it on important areas of public lands, including the San Pedro River National Riparian Conservation Area and the Coronado National Forest. The Border Patrol estimated these projects would result in the destruction of more than 400 acres of previously undisturbed wildlife habitat, including endangered species habitat along the San Pedro River.²⁴

Like previous Southwest Border Strategy initiatives in California and Texas, enforcement efforts in Arizona first focused on the state's larger urban areas along the border, including Douglas, Yuma and Nogales. As a result, traffic simply shifted once again to areas with fewer Border Patrol resources—including many of Arizona's remote areas of protected federal lands.²⁵

The Border Patrol recently has initiated or proposed a number of particularly aggressive tactics to address illegal activities in the remote reaches of Arizona.

Operation Desert Grip

In May 2002, the Border Patrol initiated its most extensive effort in Arizona's critical federal lands to date—Operation Desert Grip.²⁶ Described as a “special operation” undertaken “on an as-needed basis to address circumstances out of the ordinary,” Operation Desert Grip included the establishment of two temporary “camp details” in Organ Pipe Cactus National Monument and Cabeza Prieta National Wildlife Refuge, large increases in agent numbers and intensified patrols by off-road vehicle and low-flying aircraft. These efforts were expanded in 2004 to include a permanent camp and helipad in Cabeza Prieta, creating the Border Patrol's first 24-hour presence in the most remote area of the Arizona borderlands.

The Great Wall of Arizona

In 2003, the Border Patrol and the Department of Homeland Security, the newly created agency that assumed responsibility for the Border Patrol, raised the ante with the release of a plan calling for a 249-mile-long, 10- to 15-foot wall along the entire Arizona border.²⁸ The plan also proposed extensive road construction and more than 700 acres of “vegetation clearing.” By the Border Patrol's own admission, this effort would have directly resulted in extensive habitat destruction and significant wildlife mortality. Secretary of the Interior Gale Norton said she was “troubled” by the plan,²⁸ and the agency has withdrawn it, at least for now.

Arizona Border Control Initiative

In March 2004, the Department of Homeland Security announced a dramatic intensification of special

operations in Arizona’s western deserts—the Arizona Border Control Initiative (ABC Initiative). The ABC Initiative added a number of permanent and temporary agents, bringing the total number of Border Patrol personnel in the Tucson Sector to more than 2,000 employees, and five more camps to accommodate agents in Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument. The initiative also sanctioned the unlimited use of all-terrain vehicles, motorcycles and four-wheel drive Humvees in all public lands along Arizona’s border—including wildlife refuges, national monuments and wilderness areas—and the acquisition of new helicopters and construction of helipads in wilderness areas on national forest lands.²⁹ Advocates for protection of Arizona’s Sonoran desert habitats reacted strongly:

Not only are smugglers of humans and drugs trashing the place, but our Border Patrol, under direction from the Department of Homeland Security, now wants permission to drive anywhere. Its Pyrrhic proposal to slice new roads in Organ Pipe

and Cabeza Prieta as well as routinely blaze cross-country in Humvees and ATVs goes too far. It compounds the problem...Damage to the land—our land, yours, mine—will last far beyond our lifetimes. We need to come up with a better plan in Organ Pipe and Cabeza Prieta, one that secures the nation, saves lives of lawmen and migrants, yet still respects the landscape, wildlife and legitimate tourists. We shouldn’t clobber the homeland while we’re securing it.³⁰

On March 31, 2005, the Department of Homeland Security announced the beginning of the ABC Initiative Phase II, calling for even more agents, 20 new helicopters and three additional fixed-winged aircraft. Plans for future developments and law enforcement actions on federal lands continue to develop.³¹

V. WILDLIFE AND HABITAT ON THE BRINK

The unprecedented levels of undocumented immigration traffic and increasingly intensive Border Patrol enforcement actions are seriously damaging the natural resources of the Arizona borderlands and disrupting and endangering the everyday lives of the people who live there.

As the examples that follow indicate, the environmental damage that has occurred is already overwhelming. If short-term preventive measures and long-term comprehensive policy reform are not enacted soon, the damage may be irreversible for some species and wilderness habitats.

Sonoran Pronghorn: Teetering on the Edge

The Sonoran pronghorn is the second-fastest land mammal in the world, able to reach running speeds up to 60 miles per hour. The smallest of five pronghorn subspecies, the Sonoran pronghorn was previously found throughout the Sonoran Desert in southern Arizona and the northern Mexican state of Sonora. Today, the species is reduced to three small and isolated populations, only one of which is in the United States where it is restricted to remote desert lands in Cabeza Prieta National Wildlife



The Sonoran pronghorn is truly a species on the brink. A small population that has dipped to as few as 21 animals is all that remains in the United States. | ©TOM BEAN (CAPTIVE)

Refuge, Organ Pipe Cactus National Monument and Barry M. Goldwater Air Force Range.

A confluence of factors contributed to the pronghorn's precipitous decline, including highway construction, livestock grazing, agricultural development and military exercises in the desert. Fences and paved roads are particularly problematic for Sonoran pronghorn. Built for speed to elude predators in the open desert, the pronghorn's ability to jump is extremely limited. As one biologist put it, for a pronghorn "jumping a six-foot fence is like jumping the Great Wall of China." Additionally, pronghorns rarely cross paved roads. Thus, the proliferation of fences, roads and other obstacles has resulted in devastating and widespread habitat fragmentation for the Sonoran pronghorn, an animal believed to

have once been highly nomadic, traveling great distances to find scarce water and forage in the desert.

In 2002, the remnant U.S. population of pronghorn crashed. At the time, the Arizona Game and Fish Department estimated that only 21 animals remained—a precipitous 79 percent decline from 2000.³² While researchers believed the crash was exacerbated by intensive drought, similar declines did not occur in the two pronghorn populations in Mexico, and no other notable differences in demographics, predation rates or other factors between the U.S. and Mexican populations were detected. Based on this information, the U.S. Fish and Wildlife Service concluded that the border crisis was likely a primary contributor:

The high level of human activity and disturbance on the U.S. side, particularly in regard to undocumented [migrant] traffic, smugglers, and law enforcement response, as compared to what occurs in [Mexico], is a likely contributing factor in the difference in rate of decline observed north and south of the border. The Sonoran pronghorn's previously poor status, combined with dramatic declines in both recruitment and adult survival during 2002, has resulted in serious imperilment of the U.S. sub-population. Actions taken by Federal and state agencies in the immediate future will determine whether the Sonoran pronghorn will continue to survive in the United States.³³

Unfortunately, the border situation in western Arizona has further deteriorated since 2002. Much of the intensified enforcement called for in the Arizona Border Control Initiative announced in the spring of 2004—more agents, off-road vehicle and helicopter patrols and road construction—is being carried out in Sonoran pronghorn habitat.

In response to the stepped-up enforcement, managers at Cabeza Prieta National Wildlife Refuge predicted that Sonoran pronghorn recovery would be “compromised,” and that the species “could potentially abandon 40 percent of their known summer range.”³⁴ The U.S. Fish and Wildlife Service's Ecological Services office, which is responsible for administering the Endangered Species Act, reached a similar opinion, concluding that implementation of the Arizona Border Control Initiative as proposed without conservation measures would jeopardize the continued existence of the Sonoran pronghorn.³⁵

The plight of the Sonoran pronghorn reflects the overall challenges brought to the Sonoran desert by the

immigration crisis currently centered in Arizona. With no place left to hide, the Sonoran pronghorn teeters at the edge of extinction—a desert ghost in what should be its inviolate sanctuary.

Jaguar: Comeback on the Line

In contrast to the deteriorating status of the Sonoran pronghorn, the jaguar represents an inspiring story of renewal. Sightings of this exquisite and mysterious creature have historically occurred on a consistent but infrequent basis within Arizona's borderlands.³⁶ However, a concentrated effort by the livestock industry to eradicate

this great cat made such sightings more and more infrequent. By the 1970s, it appeared that the species had been eliminated from the state.

This all changed in 1996 when two separate jaguars were photographed in remote areas of the Arizona border region.³⁷ These sightings generated enormous

excitement throughout the state, prompting wildlife experts and biologists to initiate an intensive search. Remote cameras captured four photographs of at least two different jaguars in the fall of 2004, and one male was photographed at least three different times over the course of a year.³⁸ These consistent sightings have led researchers to speculate that at least one breeding pair of jaguars is living in Arizona's borderlands.

The jaguar sightings have been made in an area of Arizona's border not yet completely inundated by undocumented migration and associated enforcement efforts. But predictably, illegal activity in the area is increasing as the Border Patrol increases its efforts in other parts of Arizona—the same pattern of shifting activity that has been repeating since the Southwest Border Strategy was adopted in 1994. In addition, fenc-

*The plight of the Sonoran pronghorn
reflects the overall challenges
brought to the Sonoran desert
by the immigration crisis currently
centered in Arizona.*

ing and road projects recently proposed by the Border Patrol for several areas of the Coronado National Forest threaten to cut off the migratory corridors between the United States and Mexico that are used by jaguars.³⁹

Desert Wilderness Under Siege: Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument

The Wilderness Act of 1964 is one of the most significant environmental laws ever enacted by any nation—a bold and visionary decision by the American people to set aside some of our nation’s last vestiges of undeveloped land by designating them as wilderness areas—the highest level of protection afforded to public lands. Indeed, a recent survey of historians and political science scholars ranked passage of the Wilderness Act 25th among the 50 greatest accomplishments of the federal government in the latter half of the 20th century.⁴⁰

In the 40 years since the act’s passage, wilderness areas have been increasingly recognized for providing inspiring places for human reflection and renewal, as well as playing a vital role in maintaining clean air, clean water and healthy populations of wildlife. Defining wilderness as “an area where the earth and community of life are untrammelled by man,” and which “generally appear to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable,” the Wilderness Act prohibits the construction of both permanent and temporary roads in designated wilderness areas, as well as the use of motor vehicles, the landing of aircraft and the construction of structures or other installations.⁴¹

Arizona’s two largest wilderness areas are found in the Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument, both now heavily



High-speed, off-road chases between smugglers and the U.S. Border Patrol cut wide paths of destruction in the fragile wilderness of Cabeza Prieta National Wildlife Refuge. | ©JENNY NEELEY/DEFENDERS OF WILDLIFE

impacted by undocumented immigration and Border Patrol enforcement actions. Collectively encompassing approximately 1.2 million acres and 85 linear miles of border in the heart of the Sonoran desert, more than 90 percent of the land within these two preserves has been permanently designated by Congress as wilderness.

These magnificent parcels of public lands were set aside in the 1930s—Cabeza Prieta in 1939 as a refuge for desert bighorn sheep, Sonoran pronghorn and other

desert wildlife; Organ Pipe in 1937 for the protection of an incredible diversity of desert life, including more than 550 species of plants, 50 species of mammals, 40 species of reptiles and nearly 300 species of birds. The sweeping wilderness designations within both Cabeza Prieta and Organ Pipe offer essential protections for the rich but delicate webs of life and the noble purposes for which these lands were designated.

Until very recently, Organ Pipe and Cabeza Prieta

sand dunes, lava flows, and dry lake beds. This is one of the few desert areas encompassing a series of ranges with roadless valleys between them.⁴²

Today, due to the effects of undocumented immigration, rampant drug trafficking and intensive law enforcement actions, the overall health and integrity of Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument are compromised, as this description from Cabeza Prieta manager Roger DiRosa attests:

At any given time one can find 20 to 25 broken down or abandoned vehicles left by smugglers in the wilderness portion of the Cabeza. Staff efforts to remove the vehicles cannot keep up with their accumulation, and the method of their removal further damages refuge resources. Approximately 180 miles of illegal roads have been created on the Cabeza in the last four years. The impacts of these roads are compounded by the needs of law enforcement personnel who must engage in the interdiction of drug-and-people smugglers and conduct search-and-rescue operations by both ground and air. Efforts are made to keep off-road travel to a minimum and maintain wilderness character, but too often there is no other alternative than cutting across wilderness lands, especially when lives are at stake. Sadly, this is often the case in these remote desert areas where summer temperatures reach 115 degrees and higher.⁴³



The yellow-billed cuckoo and many other species of birds use Arizona's San Pedro River as a migration corridor; so do people entering the U.S. illegally from Mexico. | ©R. & S. DAY/VIREO

were largely regarded as some of the most untrammelled, wild areas in the United States. As one observer described the wilderness of the Cabeza Prieta National Wildlife Refuge in the late 1980s:

This peerless example of the Sonoran desert is the most pristine large area in the lower forty-eight states. No native plant or animal has been extirpated; the two non-native birds and six introduced plants are rare...Six small, rugged, fault-block mountain ranges...are separated by wide alluvial valleys with

The incursions into designated wilderness within Cabeza Prieta and Organ Pipe are unprecedented in the 40-year history of the Wilderness Act. The high incidence of illegal vehicle activity, the proliferation of roads and the overwhelming human presence within these wilderness areas run counter to the letter and spirit of the act and have profoundly transformed many previously pristine

areas. And, as has been the pattern in Arizona borderlands, law enforcement efforts have compounded the environmental damage. Consider these unprecedented measures taken under the 2004 Arizona Border Control Initiative: two new roads in Cabeza Prieta National Wildlife Refuge and four new roads in Organ Pipe Cactus National Monument; unlimited vehicle access to all illegally created roads in both wilderness areas; unlimited cross-country access for motorcycles and all-terrain vehicles throughout both areas; and permanent Border Patrol encampments.⁴⁴

The damage to these wilderness areas from the combined and cumulative effects of undocumented migration, drug running and enforcement actions is an overwhelming problem for federal land managers. Addressing it presents management complexities and legal conundrums for which there are few signposts and fewer precedents. Cabeza Prieta refuge manager DiRosa sums up the problem:

It is a Catch-22 situation. While Border Patrol operations can substantially impact wilderness resources their presence is essential to its protection. The budgets and staffs of the border natural resource agencies are too inadequate to address the border problems. Further, their operational missions are very different from that of the Border Patrol. While allowing increasingly damaging activities to occur may ultimately save some wilderness resources, it is equally possible that they may not...A lot of what has been done on the border would not be acceptable in other wilderness areas, but the Arizona border is embattled like no other area in the nation. It is a highly unique and problematic situation requiring difficult and unique solutions.⁴⁵

Disappearing Desert Wetlands: Leslie Canyon and San Bernardino National Wildlife Refuges

Tucked along the remote borderlands region of southeastern Arizona, the little-known Leslie Canyon

and San Bernardino National Wildlife Refuges were created in the 1980s to protect habitat for several species of native fishes. The majority of these fishes are found nowhere else in the United States, including the Yaqui chub, Yaqui topminnow, Yaqui catfish and beautiful shiner. Relatively small by western standards—together protecting approximately 5,000 acres—Leslie Canyon and San Bernardino Canyon harbor rare perennial desert water sources that provide not only a stronghold for these unique native fishes, but also an oasis for many rare birds, mammals, reptiles and amphibians.⁴⁶

Collectively the waters of the Leslie Canyon and San Bernardino national wildlife refuges form the headwaters of the Rio Yaqui, a major binational river system draining large portions of the Mexican states of Sonora and Chihuahua and eventually flowing into the Gulf of California. Tropical southern habitats and northern temperate ecosystems converge along the Yaqui, supporting an extraordinary amount of wildlife, including the southernmost wintering population of bald eagles west of the Continental Divide.

In part due to their rugged topography, the Leslie Canyon and San Bernardino refuges have not been subjected to the same level of environmental damage from undocumented migration and Border Patrol law enforcement actions as many other areas along Arizona's border. Even so, significant habitat degradation has occurred. For example, a Congressional study noted that a site in the Leslie Canyon refuge where the Huachuca water umbel, an endangered plant, is found has been "trampled to death" by migrants waiting to be picked up at a staging area. Further, refuge manager Bill Radke estimates that approximately 1,000 migrants a month enter a wetland area on the refuge closed to the public to protect the Yaqui chub and other endangered species. According to Radke, "the border crossers drink, bathe, urinate and defecate in the rare riparian habitat."⁴⁷

An additional threat looms in the form of a recent Border Patrol proposal to build a road along the border through San Bernardino National Wildlife Refuge, a plan yet to be disclosed to the public at large. The Fish

and Wildlife Service’s response to the plan illustrates once again the vicious cycle of degradation caused by reactionary U.S. border enforcement policies that do not stop undocumented migration, but merely shift it to other locations:

A road exists along 0.75 miles of the U.S.-Mexico border at San Bernardino Refuge. No road currently exists along the other 2.25 miles of border within the refuge; however, Border Patrol proposes to develop an all-weather border road in this roadless



The San Pedro River corridor, a “ribbon of life” through the Arizona desert, is increasingly showing signs of damage from surging levels of illegal activity. | ©RANDY PRENTICE

section. The only place in the refuge where the border fence has been cut and vehicles have come across from Sonora is in the 0.75-mile section where there is a road. Elsewhere, arroyos, vegetation, wetlands, and other natural barriers prevent vehicle access. Developing an all-weather road across San Bernardino Refuge would facilitate, not deter, illegal crossings...Development of a border

road and any associated drag roads would also impact critical habitat for several fishes, and cause erosion and sedimentation in these systems.⁴⁸

High-Traffic Corridor: San Pedro River National Riparian Conservation Area

The San Pedro River, in the heart of southeast Arizona’s Sky Island region, is perhaps the region’s most treasured and celebrated natural resource. The San Pedro deserves this recognition for many reasons—it was listed as the first “Globally Important Bird Area” by the American Bird Conservancy, designated one of the world’s eight “Last Great Places” by the Nature Conservancy, and named one of the world’s best birding areas by *Birding Magazine*. More than 400 bird species have been documented in the area.

The San Pedro River corridor, administered largely by the Bureau of Land Management (BLM), was designated the agency’s first National Riparian Conservation Area, part of the BLM’s new National Landscape Conservation System. Created in 2000, this system organizes BLM protected areas—including national monuments, wild and scenic rivers, wilderness areas and national conservation areas—under a unified banner intended to raise public awareness of the areas’ environmental, scientific, cultural and educational values. This is BLM’s most significant and high-profile effort to date to evolve from an agency dominated by extractive industries into one that better values and more rigorously protects the many incredible natural resources under its care.⁴⁹

The San Pedro River, which originates in the mountains of the Mexican state of Sonora, is also widely recognized as the Southwest’s last free-flowing river. Undammed throughout its length, the San Pedro provides a poignant and important reminder of all that has already been lost, contrasting sharply with the other “rivers” in southern Arizona—such as the Santa Cruz River through Tucson—that are now mostly dry washes, dewatered by agriculture, mining and urbanization. The

San Pedro is a “ribbon of life” through the desert, one of the most biologically important areas not only in Arizona, but in all of North America, and its destruction would be an incalculable loss for humans and wildlife alike.

The San Pedro meanders through gentle topography in a wide valley, providing an inviting and easily accessible corridor for undocumented immigration and other illegal activity. As in so many other public lands along the Arizona border, surging levels of illegal activity are increasingly taking a toll on the health of the river ecosystem. Recent damage caused by this spike in activity includes habitat burnt by out-of-control fires started by migrants trying to keep warm, trampled vegetation, illegal roads, soil damage that increases erosion and sedimentation, and huge amounts of trash.

Border Patrol enforcement actions threaten to compound the environmental damage. The agency has

requested essentially unrestricted access to the San Pedro River National Riparian Conservation Area similar to what it has requested for Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument. As discussed previously, in 2003 the Border Patrol approved extensive work in the Naco-Douglas area surrounding the San Pedro River.⁵⁰

Like the Sonoran pronghorn, jaguar and other unique and irreplaceable species of wildlife and plants found along Arizona’s borderlands, the region’s most important and special natural areas stand little chance of enduring without a transformation in immigration and border policies. In the meantime, with each passing day, the vital network of precious lands set aside along the Arizona border becomes more like a militarized war zone than the safe haven for wildlife and habitat it was intended to be.

VI. ENFORCEMENT’S BLIND EYE TO THE ENVIRONMENT

The U.S. Border Patrol, with its mission to oversee and protect our nation’s borders, is entrusted with one of the most dangerous and important mandates of any federal agency. From its inception in 1924 as a small border guard of 450 officers, the Border Patrol has grown into a formidable force of more than 10,000 agents responsible for patrolling more than 6,000 miles of land borders with Mexico and Canada and 2,000 miles of coastal waters. The agency is aided in its work by a broad array of technology, vehicles, aircraft and infrastructure, such

as the roads, walls, fences and other barriers it has built along the southern border.

Like all branches of our federal government, the Border Patrol is also responsible for conducting its operations in a lawful and transparent fashion. Ensuring accountability and lawful action by our federal agencies is a central principle of our constitutional system of checks and balances.

Among the laws that govern Border Patrol operations are those intended to keep citizens informed of plans and actions that affect the environment and give

Among the laws that govern Border Patrol operations are those intended to keep citizens informed of plans and actions that affect the environment and give them an opportunity to voice their opinions.

them an opportunity to voice their opinions. Border Patrol commitment to the requirements of these environmental laws—including the Endangered Species Act (ESA), National Environmental Policy Act (NEPA), Wilderness Act, National Wildlife Refuge Administration Act, National Park Service Organic Act, and Clean Water Act—is critical because we have seen many of its operations take place on some of our nation’s most spectacular and fragile lands, often in areas inhabited by rare and imperiled wildlife. While achieving border and national security is unquestionably of paramount interest, adherence to these environmental laws ensures that our nation’s irreplaceable natural resources are not sacrificed in the process.

The importance of integrating border security and environmental protection is especially evident in Arizona, where more than 85 percent of the border consists of federal lands, much of it set aside to protect wilderness and wildlife. All of these protected areas are currently being impacted to varying degrees by undocumented migration and Border Patrol enforcement actions.

Safeguarding the substantial natural resources of the borderlands region in this time of crisis requires a commitment from all levels of government, but especially from the Border Patrol and the Department of Homeland Security, the entities responsible for the day-to-day enforcement operations. Without a sustained, institutional effort by the Border Patrol to avoid, minimize and mitigate damage from its operations, federal land managers along the border are largely powerless to protect the lands under their jurisdiction.

Regrettably, since the Border Patrol adopted the Southwest Border Strategy in 1994, the agency’s commitment to upholding environmental laws has been overwhelmingly lacking. Instead, its overall approach to environmental issues has commonly been characterized by poor communication and coordination with federal land managers and other agencies, inconsistent compliance with environmental laws, and a lack of meaningful effort to involve affected communities and other inter-

ested parties in its decision-making processes. Agency promises to avoid or mitigate environmental impacts also have often gone unfulfilled. The consequences of these shortcomings have been consistently worsened by chronic deficits in funding, staffing and other resources.

Communications Failure

A central facet of the Border Patrol’s Southwest Border Strategy was the conscious decision to shift undocumented immigration and other illegal traffic to remote areas of the border by greatly increasing enforcement efforts in traditional crossing areas near urban centers. Prior to implementation of the strategy, smuggling of humans and drugs through Arizona was much more sporadic and relatively uncommon, and many areas of Arizona’s borderlands were considered to be among the most pristine and ecologically intact areas in the nation.

Even though this shifting of immigration traffic was a central part of the strategy, the Border Patrol never discussed the potential effects of the Southwest Border Strategy on human communities and natural resources with federal land managers and Arizona state officials. Consequently, these land and resource managers were left completely unprepared for what is perhaps the greatest management challenge they have ever faced.

The June 2004 Government Accountability Office report *Border Security: Agencies Need to Better Coordinate Their Strategies and Operations on Federal Lands* quotes Arizona public-land managers as saying that the Border Patrol “did not coordinate with them when it began implementing its strategy in Arizona,” and “did not share its deployment plans nor alert land management agencies that these increased enforcement efforts in populated areas might have the effect of shifting illegal activity onto federal lands.” As a result of this lack of coordination, both land management and Border Patrol personnel believe that “threats may not be fully assessed, limited funds may not be efficiently used, and deployment of personnel and other resources may be inefficient or negatively affect other agencies.”⁵¹

This lack of preparation has resulted in intensive resource damage. For example, in 2000, “in response to concerns over the noticeable deterioration of natural resources from increased illegal border traffic at Organ Pipe Cactus National Monument,” the National Park Service conducted a review of border issues and concluded that both increased staffing and a vehicle barrier along the monument’s (and United States’) southern boundary were needed.⁵² The Park Service, however, was unable to move quickly on these needs because the vehicle barrier had not been included in the agency’s official five-year construction plan. Full funding for the project was not secured until fiscal year 2005.⁵³ Had the Border Patrol communicated its enforcement plans to the Park Service, the agency would have been able to include border-related needs in its planning processes to secure needed funds and more effectively avoid or mitigate environmental damage.

Recognizing this fact, the Government Accountability Office’s June 2004 report recommended that the secretaries of homeland security, interior and agriculture “require their respective law enforcement components to consult with each other when developing their strategic plans” and to establish mutual goals regarding law enforcement changes that would affect federal lands.

Encouragingly, some important progress has been achieved, most notably the October 2003 creation of the Borderlands Management Task Force, a cooperative effort of federal and state agencies to collaborate on border-related issues. Significant work remains to be done, however, and sustained commitment by the Border Patrol to prioritizing environmental protection continues to be elusive. For example, in a May 2, 2005, letter to Arizona Senator John McCain, the task force acknowledges that “although coordination has occurred, other priorities have hampered more effective efforts.” The task force also concedes that increasing efforts to

protect conservation areas through shared funding by agencies “has been limited because of other high priority work.” Finally, the task force concludes that incorporating detailed environmental awareness into the basic training routine for Border Patrol agents has also been precluded by “other high priority work.”⁵⁴



The Costa’s hummingbird is found in the desert scrub habitat of Cabeza Prieta National Wildlife Refuge, an area dramatically impacted by illegal activity and law enforcement operations. | ©RICHARD WAGNER/WILDNATUREPHOTOS.COM

The ABC Initiative: Lawless Law Enforcement

The Arizona Border Control Initiative, the intensified strategy put into effect by the Department of Homeland Security in 2004, allows the Border Patrol unrestricted off-road vehicle access across protected public lands and calls for road construction across wilderness areas, national monuments and wildlife refuges, and for the establishment of permanent and massive backcountry enforcement “camps” in prime endangered species habitat. Despite the unprecedented scope of this initiative, the Border Patrol has been implementing it



The cactus ferruginous pygmy owl, an endangered species, nests and roosts in the cavities found in borderland scrub thickets and large cacti. | ©TOM VEZO/TOMVEZO.COM

Ignoring the ESA, Failing Endangered Species

Enacted in 1973, the ESA is the most comprehensive and important wildlife protection law ever enacted. The ESA established a detailed process for listing imperiled species of animals and plants as either threatened or endangered, triggering a series of protections intended not only to prevent the species' extinction, but to ensure its eventual recovery so that the ESA protection is no longer necessary.⁵⁵

At least 39 federally endangered, threatened, proposed and candidate species are found within Arizona's four border counties.⁵⁶ Many of these species, such as the Acuña cactus, Yaqui catfish, Canelo Hills ladies' tresses and desert pupfish, are endemic, i.e., they exist only in a limited geographic range. Others, including the Mexican spotted owl, Chiricahua leopard frog and Southwestern willow flycatcher, range more widely but are nonetheless imperiled across all or a significant portion of their range. Most, if not all, of these species depend on Arizona borderlands habitat affected by undocumented migration and Border Patrol enforcement efforts. The manner in which the Border Patrol conducts its enforcement activities and the emphasis it places on environmental protection and concern for natural resources are likely to play significant roles in determining the fate of many of these species.

One of the ESA's most central protections is the requirement that federal

for nearly two years without completing the environmental analysis and notification and involvement of the public required under the Endangered Species Act and National Environmental Policy Act.

agencies "consult" with the U.S. Fish and Wildlife Service when they undertake, approve or fund any action that may affect a listed species or its critical habitat. On completion of this consultation process, the Fish

and Wildlife Service prepares a biological opinion analyzing the effects of the action on the species and its habitat and suggesting measures that help avoid or mitigate such effects. Throughout this process, the agencies must draw on the best available science concerning the biological needs of the species and the potential effects of the proposed action. Thus, the ESA consultation process is essential in accurately predicting potential impacts to endangered species and in ensuring that agencies such as the Border Patrol work cooperatively with Fish and Wildlife Service to further the conservation of listed species as best as possible.

Unfortunately, despite the importance of the consultation process, the extremely high concentration of listed species affected by its actions and its recent dramatic escalation of enforcement efforts within Arizona, the Border Patrol has systematically failed to meet its consultation requirements under the ESA.

In fact, since the inception of the Southwest Strategy in 1994, the Border Patrol's Tucson Sector has never completed a consultation analyzing the overall effects of its actions. Moreover, neither the Tucson nor the Yuma sectors completed consultation before implementing the ABC Initiative even though it authorized essentially unlimited off-road vehicle travel within habitat occupied by many different endangered species and construction of camps and roads within prime habitat for the endangered Sonoran pronghorn.

The Arizona Ecological Services office of the U.S. Fish and Wildlife Service, the office responsible for protecting and recovering threatened and endangered species in the state, has expressed consistent misgivings about the Border Patrol's failure to take its duties under the ESA seriously. Specific to the ABC Initiative, the Border Patrol has not only failed to complete a consultation process, but has rebuffed or ignored suggestions for mitigation proposed by the Fish and Wildlife Service, despite the service's efforts to recommend alternatives that would not affect tactical considerations. In an e-mail sent on May 26, 2004—two months after the ABC Initiative was announced—a Fish and Wildlife Service

field supervisor expressed grave concerns about its potential effect on Sonoran pronghorn, as well as frustration at the Border Patrol's consistent disregard for the suggestions intended to prevent the extinction of one of the nation's most imperiled species:

We have been in consultation with the Border Patrol on the ABC Initiative, and right now we're in emergency consultation mode (that's an issue in itself). Awhile back we provided [Border Patrol] a list of possible conservation measures to minimize effects to pronghorn and which we believe would have minimal tactical effects for them. They recently responded, saying essentially that they're not interested. They've also added a couple of extra activities that further exacerbate the risk of their programs to pronghorn. Bottom line—we really are at the point that, if the [ABC Initiative] is implemented as currently proposed and without any of the conservation measures, we're in a jeopardy situation. As you all know there have been over \$2 [million] spent to try and rescue this critically endangered species.⁵⁷

Similarly, another Fish and Wildlife Service biologist stated, "I am horrified by this proposal and its effects on Sonoran pronghorn,"⁵⁸ while a biologist on the Cabeza Prieta National Wildlife Refuge said that the Sonoran pronghorn was being given a "death sentence."⁵⁹

The consultation process under the Endangered Species Act is always imperative, but especially so when actions are planned in habitat for critically imperiled species. Yet, despite the fact that the Border Patrol itself acknowledges that its ongoing operations are likely to adversely affect the Sonoran pronghorn and nearly 40 other threatened, endangered or candidate species, the ABC Initiative is now in its second year, and the agency still has not completed an analysis of the effects on listed species.

Neglecting NEPA, Failing the Public

Enacted in 1969, NEPA is our nation’s Magna Carta for the environment. NEPA declares a national policy of protecting natural resources and applies equally to all agencies of the federal government. NEPA’s most fundamental provisions establish processes to ensure that federal agencies have considered all relevant environmental information in an effort to avoid and minimize adverse environmental effects. Additionally, NEPA provides a mechanism for keeping citizens informed about what their government is doing and for giving them an opportunity for input. NEPA thus serves a critical democratic function, requiring the government to act in a transparent and open fashion and allowing the public to voice its opinions regarding government actions.⁶⁰

Central to NEPA is the requirement that environmental analysis be conducted and finalized before the proposed action is undertaken, otherwise the agency’s obligation to carefully consider environmental effects is little more than an after-the-fact formality. Yet to date, the Border Patrol has failed to finalize NEPA analysis approving the ABC Initiative.

The public input essential to the NEPA process is especially critical given the significant expanses of protected public land that will be impacted by the ABC Initiative’s call for unlimited access for Border Patrol ATVs, motorcycles and other off-road vehicles on all areas of public lands, including wilderness areas. These proposals present great risks to the environment and are of tremendous interest to citizens; they are precisely the types of proposals that should undergo careful and thorough analysis under NEPA.

The Border Patrol’s systematic failure and refusal to take seriously its obligations under federal environmental laws prompted one frustrated Fish and Wildlife Service official to state:

In several instances, the Border Patrol has made commitments to protect natural resources and wildlife affected by its operations, but failed to fulfill them.

The Arizona Border Control Initiative gives Border Patrol the green light to circumvent the Endangered Species Act, Wilderness Act, the San Pedro Riparian National Conservation Area route designations, critical resource protection, NEPA, etc. There appear to be no safeguards built in to ensure any protections for sensitive resources on the border.⁶¹

Broken Promises

In several instances, the Border Patrol has made commitments to protect natural resources and wildlife affected by its operations, but failed to fulfill them. For example, the Border Patrol maintains a significant fleet of helicopters, and typically conducts patrols at an elevation of only 50 to 75 feet. In response to evidence

strongly suggesting that pronghorn could be negatively affected by low-level (50 to 75 feet) helicopter patrols, the Border Patrol agreed in September 2002 to study and address these risks, including reducing the number of flights within Cabeza Prieta National Wildlife Refuge, funding and conducting research to better determine effects, requiring yearly monitoring reports and replacing existing helicopters with a quieter fleet.⁶²

Nearly five years later, the Border Patrol has uniformly failed to meet these important commitments. As outlined in its April 10, 2002, annual report to the Fish and Wildlife Service—the one and only report it has produced—the Border Patrol gives no indication that flights have actually been reduced and acknowledges that none of the required studies has been undertaken because of lack of funding. Similarly, the Border Patrol has now abandoned plans to purchase quieter helicopters “because of cost, maintenance and operational

issues.”⁶³ Instead, it has added four equally noisy helicopters to its fleet.⁶⁴

Failure to adhere to environmental commitments has created an unfortunate air of mistrust among other federal agencies that work with the Border Patrol. As stated by one federal official in considering the potential effects of the ABC Initiative:

Also, trust that [the Border Patrol] would adhere to acceptable solutions is a very critical issue regarding potential resolutions. History indicates that [Border Patrol] field agents and supervisors cannot be trusted to adhere to agreed upon stipulations, plans, and/or proposed actions, even in signed interagency [agreements]. Establishing mechanisms to guaranty [sic] their adherence and penalties for not doing so would lead to easier resolution.⁶⁵



A four-foot barbed wire fence marks the U.S.-Mexico border in the desert south of Tucson. | ©ALAN STAATS/GETTY IMAGES

Similarly, in other correspondence, a land manager stated:

[Border Patrol] agents have been adding field activities such as increased motorcycle use on roads, administrative trails and quite possibly cross-country travel without informing us and [Fish and Wildlife Service] so that these activities can be incorporated in the [biological opinions.]...In addition...I feel it would be inappropriate and useless for me to continue to negotiate with [Border Patrol] on the issues. I do not trust [Border Patrol] to follow through on any promises to limit their actions because of the breadth of the [ABC Initiative’s] proposals.⁶⁶

Border Patrol operations on federal lands present an inherently complex and difficult scenario because they

can potentially conflict with the preservation mission of land management agencies such as the U.S. Fish and Wildlife Service, National Park Service and the U.S.D.A. Forest Service. It is imperative that the Border Patrol can be trusted to follow through on actions that affect land, wildlife and other natural resources under the jurisdiction of other agencies. By failing to follow through on its commitments, the Border Patrol facilitates the impression that federal land managers cannot control another agency’s actions on their own land—a situation that ultimately leads to more environmental degradation rather than a proactive, cooperative, multi-agency approach to environmental protection.

The Park Service Steps Up

In March 2004, the superintendent of Organ Pipe Cactus National Monument took the highly unusual measure of initiating the National Park Service's own NEPA public comment process on ABC Initiative projects that would impact the park-service-managed monument. These projects included the construction of four east-west roads through the heart of the monument in designated wilderness; development of two backcountry "camps;" authorized use of off-road vehicles on illegally established roads and trails; and cross-country use of off-road motorcycles across the entire extent of the monument.⁶⁸

The superintendent received nearly 2,000 comments on the proposed projects, most calling for greater restrictions on Border Patrol actions.⁶⁹ Some of the comments came from former employees of the monument and neighboring Cabeza Prieta National Wildlife Refuge, first-hand testimony to the negligent manner in which Border Patrol conducts operations on sensitive public lands:

"I lived and worked at Organ Pipe National Monument in 2002 in the Resource Management Division. . . . Allowing the Border Patrol to run roughshod over the fragile desert will only degrade what precious little habitat remains for these species. And the Border Patrol will run roughshod. I have personally witnessed the Border Patrol driving off-roads at [Organ Pipe] and I saw first-hand the impact their encampment had on the Bates Well area. Adding roads and camps in the wilderness and allowing

Border Patrol to use ATVs, motorcycles, and horses will exacerbate the already deleterious effects of their presence on the monument."

"I worked at [Organ Pipe] from 1988 to 1996 in the Resources Management Division. . . . During my time at Organ Pipe, the worst offenders of the spirit of the Wilderness Act was the Border Patrol. They drove where they wanted, and when the Monument would send someone up to speak to them, several agents would leave the room. . . . Anyone who has worked at Organ Pipe for more than a couple weeks knows that the Border Patrol does as they please and usually drives where they want."

"The Border Patrol does not respect our desert park lands. Features and sites have tire tracks through them. We watch them speed down the few roads we have access to, doing U-turns off the roads into the desert wherever they wish. . . . We have personally seen Border Patrol drivers off the road in Cabeza and found Border Patrol trash in the desert."

If it weren't for the National Park taking the NEPA process into its own hands, the public would never have known about the Border Patrol's damaging plans for Organ Pipe Cactus National Monument and environs. Many more Arizonans are now aware of the Border Patrol's unprecedented proposals for operations in this important protected area.

Lack of Federal Funding

Inadequate funding for environmental and border security issues is a chronic problem for the federal land management agencies and the Border Patrol.

As of September 2003, the land management agencies had a total of approximately 200 law enforcement officers to cover more than 1,835 miles of federally administered borders.⁶⁷ The International Association of Chiefs of Police, in a review of Department of Interior officer safety conditions and capacity to protect natural resources and visitors, characterizes these conditions as "intolerable." Still the Fish and Wildlife Service, Forest Service and other

agencies charged with protecting Arizona borderlands have consistently received only a fraction of the funds requested for increased law enforcement presence.

Specific to border-related issues, lack of funding is aggravated by the position of the Office of Management and Budget (OMB), which helps prepare the federal budget and formulate spending plans. The OMB posits that providing funds for border security projects to federal land management agencies is not consistent with the mission of these agencies. For example, the Bush administration's 2005 budget, following OMB's advice, did not include funds requested by the Fish and Wildlife Service for construction of a vehicle barrier at

Cabeza Prieta National Wildlife Refuge—despite the fact that such a barrier is desperately needed to stem resource damage and allow the agency to carry out its mission of protecting wildlife resources and human visitors in the refuge.

Land management agencies, hamstrung by the enforcement and security issues caused by the immense scale of illegal activity on federal borderlands, are being denied funding to address these issues because they are not primarily law enforcement agencies. Compounding the problem, biologists and other staff hired for traditional natural resources positions are often detailed to law enforcement duty because of the overwhelming need. As a result, agencies whose core purpose is the protection of wildlife and habitat are consumed by law enforcement and are dramatically understaffed and underfunded to accomplish either goal, much less both. In short, the environment and the safety of the public and agency personnel are all severely compromised by the lack of financial resources.

Surprisingly, despite the rapid increase in agents during the past 10 years, both the Border Patrol and Department of Homeland Security are also plagued by insufficient staffing and the funding needed to meet their statutory environmental responsibilities. Congress, Homeland Security and the Border Patrol have focused on the addition of enforcement agents as the primary means of conducting immigration enforcement efforts, leaving the Border Patrol especially deficient in support

and technical staff for both law enforcement and environmental protection work. For example, the agency has added 2,600 agents since fiscal year 1999, but support and technical staff—the people responsible for monitoring technologies including cameras, underground sensors, radios and computers—“force multiplying” measures that result in 60 percent of all apprehensions—increased by only four positions. A recent report described one support employee being responsible for simultaneously viewing 26 surveillance cameras, notifying agents of buried sensor activations that trigger 100 to 150 alerts per hour, running computer checks on detainees and serving as radio dispatcher—a clearly impossible work load.⁷⁰ Similarly, the Border patrol has failed to hire biologists, planners and other trained environmental staff.

The uniform disregard of environmental laws in the planning and implementation of the ABC Initiative is highly troubling for any federal agency, but especially so for an agency operating on some of the nation’s most spectacular and biologically diverse public lands. Many Americans have devoted significant portions of their lives working to protect, study and preserve areas such as Organ Pipe Cactus National Monument and Cabeza Prieta National Wildlife Refuge. These and many other areas along the Arizona borderlands are American conservation legacies that deserve a much more sustained and honest effort by the Border Patrol to abide by environmental laws intended to protect and conserve them.

VII. FROM BAD TO WORSE

As this report repeatedly demonstrates, environmental concerns have not been adequately addressed and prioritized since the Border Patrol’s Southwest Strategy was first implemented in 1992. Unfortunately, this bad situation is getting worse. Congress recently passed legislation that provides sweep-

ing exemptions from environmental laws, and the Department of Homeland Security has proposed a regulatory program that would create enormous loopholes for escaping the requirements of NEPA.

The Real ID Act: Borders Above the Law

The Real ID Act, passed in March 2005, is better known for its national identification and asylum provisions, but Section 102(c) of the law amended the 1996 Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) to allow the secretary of the Department of Homeland Security to exempt the agency from all federal, state and local environmental laws when constructing walls, fences, roads and other barriers along U.S. borders:

Notwithstanding any other provision of law, the Secretary of Homeland Security shall have the authority to waive all legal requirements such Secretary, in such Secretary's sole discretion, determines necessary to ensure expeditious construction of the barriers and roads under this section. Any such decision by the Secretary shall be effective upon being published in the Federal Register.

According to proponents, this provision was necessary to overcome environmental litigation that had blocked completion of a 3.5-mile stretch of a secondary border security fence in San Diego. In reality, a California state agency, the California Coastal Commission, had rejected the initial project design on the grounds that it would cause massive environmental damage to a state park, coastal wetlands and habitat for several endangered species. However, the commission was committed to reaching consensus on less-harmful design alternative and had been actively negotiating

with the Border Patrol and Department of Homeland Security for several months.

Many Real ID supporters in Congress repeatedly and consistently claimed its provisions would only apply to this particular San Diego project. In fact, the plain language of the Real ID Act waives all laws not only along,

but “in the vicinity” of all 6,000 miles of our international borders with Mexico and Canada—a vague and sweeping grant of powers to a politically appointed official. Despite this fact, the Real ID Act was passed as a rider to “must pass” legislation—a supplemental authorization bill that provided funds for the wars in Iraq and Afghanistan and tsunami-relief efforts. As a result, this controversial law was passed without hearing

and input from the appropriate Congressional committees. As stated by U.S. Representative Sheila Jackson-Lee of Texas during consideration of the bill:

The NEPA regulations proposed by the Department of Homeland Security would unnecessarily carve out large exceptions to NEPA's core purposes of requiring the government to analyze environmental impacts and to notify the public.

To my knowledge, a waiver this broad is unprecedented. It would waive all laws, including laws protecting civil rights; laws protecting the health and safety of workers; laws, such as the Davis-Bacon Act, which are intended to ensure that construction workers on federally-funded projects are paid the prevailing wage; environmental laws; and laws respecting sacred burial grounds. It is so broad that it would not just apply to the San Diego border fence that is the underlying reason for this provision. It would apply to any other barrier or fence that may come about in the future. At the very least, we should have a hearing to consider the consequences of such a drastic waiver.⁷¹

This breathtaking transfer of power and waiver of laws was especially unnecessary given that Congress, in the IIRIRA, had already given the U.S. attorney general power to waive NEPA and the Endangered Species Act in such situations, i.e., if necessary to ensure the expeditious construction of border roads and barriers—a power that had never been exercised.

Completely exempting the secretary of Homeland Security from the critical laws protecting our natural heritage is additionally gratuitous given that many environmental laws, including NEPA, the Endangered Species Act and the Wilderness Act, have exemptions for emergency situations or national security purposes. When controversy does arise as it did with the secondary wall in San Diego, these laws provide critical mechanisms for crafting solutions that allow construction projects to go forward in a less harmful manner.

Nonetheless, Secretary of Homeland Security Michael Chertoff on September 22, 2005, invoked the Real ID Act to “waive in their entirety,” the requirements of NEPA, the Endangered Species Act, Coastal Zone Management Act, Clean Water Act, National Historic Preservation Act, Migratory Bird Treaty Act, Clean Air Act and the Administrative Procedures Act as they apply to the San Diego fencing project. Moreover, Secretary Chertoff—in direct contradiction to the repeated false claims by many lawmakers that the provision would only be applied to San Diego—also reserved “the authority to make further waivers from time to time,” under the authority of the Real ID Act.⁷²

Homeland Security’s NEPA Regulations: Categorical Exemptions

Recognizing that the many agencies of the federal government have widely varied missions and serve very different roles, NEPA requires all federal agencies to develop their own set of regulations that help carry out the law’s provisions.

The NEPA regulations proposed by the Department



Recent documented reports of jaguars, the first seen in the Arizona borderlands since the 1970s, have raised hope for the species’ return. | ©BRECK P. KENT/ANIMALSANIMALS.COM (CAPTIVE)

of Homeland Security in May 2004 would unnecessarily carve out large exceptions to NEPA’s core purposes of requiring the federal government to analyze and disclose all potential environmental impacts of its actions and to notify the public and involve them in decisions. Under the regulations, the Department of Homeland security

would “categorically exempt” a wide range of vaguely defined activities from environmental analysis. Under NEPA, agencies can define such exclusions for categories of activities that will not individually or cumulatively have a significant effect on the environment. Although this provision is primarily intended for routine, administrative actions, the proposed regulations allow “categorical exclusions” for Border Patrol operations acknowledged to have adverse environmental effects, including the low-level helicopter flights believed harmful to the endangered Sonoran pronghorn and off-road vehicle patrols in sensitive areas such as the wilderness of Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument.

The proposed regulations would also allow NEPA

analysis to be withheld from the public for an undefined universe of information deemed by Homeland Security or the Border Patrol as “protected”—effectively preventing citizens from knowing what the government is doing in its own backyard. As is the case with the Real ID Act, the exceptions from environmental law contained in the proposed regulations are not necessary to achieve national security goals.

These regulations would allow the Border Patrol to continue to ignore the environment and community opinion at a time when consideration of such issues is desperately needed, an unnecessary step backward in the effort to better protect people, land and wildlife along our precious and vulnerable borders.

VIII. CONCLUSION AND RECOMMENDATIONS

After more than a dozen years of increasing levels of undocumented immigration and intensive enforcement efforts by the U.S. Border Patrol along the southern border, the need to place greater importance on the protection of borderland ecosystems has become urgent. While this report focuses on the extensive degradation to national monuments, refuges, forests and wilderness areas along the Arizona border and the associated risks to habitat and wildlife, similar environmental damage is occurring in the border states of California, New Mexico and Texas. Addressing the challenges posed by the immigration crisis all along the border will require bold, bipartisan leadership.

Ultimately, preventing adverse environmental impacts on U.S borderlands hinges on comprehensive policy reform that eliminates the current underground immigrant economy and the flow of undocumented immigrants across the U.S.-Mexico border and establishes an orderly and legal framework for immigration.

In addition to this broad call for reform, Defenders of Wildlife offers the following recommendations to address the important goal of protecting our borderland environments:

1. Integrate environmental considerations into any legislation addressing immigration reform. Specific provisions should include:
 - Dedicated funding for development of an environmental program within the Border Patrol equivalent to those of the U.S. military. This program should include 1) comprehensive environmental sensitivity training and education for agents; 2) ecological monitoring of activities and infrastructure; 3) funding for mitigation and restoration activities; and 4) professional biologists on staff to assist in the implementation of environmental programs and to guide environmental compliance.

- Dedicated funding to mitigate and prevent immigration and enforcement related environmental damage on federal lands along the border region. This funding should be earmarked directly for specific units (such as Cabeza Prieta National Wildlife Refuge, Organ Pipe Cactus National Monument and Coronado National Forest) and provided in addition to base operational funds.
- Mandatory early coordination with federal land managers, local governments and communities affected by Border Patrol infrastructure proposals (such as road construction, and construction of wall, fences and other barriers). The existing Borderlands Management Task Force is a potential vehicle for such a process, and Congress should also consider providing dedicated funding for the task force.
- Development, within two years, of two long-term planning documents, (one for the southern border, one for the northern border) for Border Patrol operations that are completed through a public process under the National Environmental Policy Act. A primary benefit of this process is preparing for the inevitable redirection of migrant and vehicle traffic to previously undisturbed areas, and allowing the strategic deployment of activities and infrastructure to minimize impacts to wildlife and habitat.

2. Use low-impact infrastructure where appropriate to mitigate the environmental effects of undocumented migration and other illegal activities in the short-term.



This abandoned van on Buenos Aires National Wildlife Refuge is one of hundreds of vehicles left behind by drug- and people smugglers on the run in the Arizona desert. | U.S. FISH AND WILDLIFE SERVICE

For example, the vehicle barriers under construction at Organ Pipe Cactus National Monument will assist in blocking damaging cross-border traffic on the monument while allowing for unimpeded wildlife movements.

3. Take steps immediately to meet Border Patrol commitments to environmental protection and mitigation, such as funding studies to assess the effects of low-level



Their dreams of a new life in the United States dashed, these illegal migrants apprehended in Buenos Aires National Wildlife Refuge sleep after their border-crossing ordeal. Success in sealing the border in urban areas has only shifted illegal activity to remote areas, much to the detriment of immigrants, habitat and wildlife. | U.S. FISH AND WILDLIFE SERVICE

helicopter flights and other activities on Sonoran pronghorn.

4. Urge Congress and the Department of Homeland Security to place increasing emphasis on high-tech surveillance alternatives and other “force-multiplying” methods that improve border security efforts and minimize impacts on wildlife and sensitive habitat.

5. Reverse the Office of Management and Budget’s position that allocating funds to land management agencies such as the U.S. Fish and Wildlife Service, National Park Service, U.S.D.A. Forest Service and Bureau of Land Management for security and law enforcement

projects is not appropriate because it is outside the primary mission of these agencies.

6. Designate public liaisons and provide more information to affected communities and the general public about the activities and plans of the Border Patrol and Department of Homeland Security to improve the transparency of these border security agencies.

7. Allow conservation organizations and other groups to enter into meaningful cooperative partnerships with Border Patrol and land management agencies for on-the-ground restoration efforts.

ENDNOTES

1. "The Undocumented War: A Marketplace Special. Part V." <http://marketplace.publicradio.org/features/undocumented_war/> (last visited Nov. 30, 2005).
2. Peter Warshall, "Southwestern Sky Islands Ecosystems." <<http://biology.usgs.gov/s+t/frame/r119.htm>> (last visited Nov. 30, 2005).
3. These lands would be consolidated and further protected as the second largest National Park and Preserve unit in the country outside of Alaska under a visionary proposal put forward by the citizen's group, Sonoran Desert National Park Friends. <<http://sonorandesertnp.org/>> (last visited Nov. 30, 2005).
4. Leslie Berestein, "460 Border Crossers Died in Past Year; Posters on Fence Tell of 3,600 Found Dead in 11 Years," *San Diego Union-Tribune*. Oct. 1, 2005.
5. Arthur H. Rotstein, "Border Has Record Illegal Immigrant Deaths," *Associated Press*. Sept. 3, 2005.
6. <<http://www.derechoshumanosaz.net/deaths.php4>> (last visited Nov. 30, 2005).
7. Marc Cooper, "Delusion and Death on the Border of Hypocrisy," *L.A. Weekly*. Dec. 5, 2003.
8. Immigration and Naturalization Service, *Building a Comprehensive Border Strategy*. (Washington: June 1996) p. 3.
9. GAO Report 99-44, *Illegal Immigration: Status of Southwest Border Strategy Implementation*. (Washington: May 1999) pp. 16-22.
10. GAO Report 01-842, *INS' Southwest Border Strategy: Resource and Impact Issues Remain After Seven Years*. (Washington: August 2001) p. 1.
11. Although outside the scope of this report, many factors beyond the Border Patrol's control have played large roles in the continuing escalating levels of undocumented immigration. For example, since the late 1990s, massive increases in exports of heavily-subsidized U.S. corn to Mexico under the North American Free Trade Agreement have reportedly resulted in large displacements of Mexican farmers from rural to urban areas. At the same time, improvements in transportation infrastructure have made it easier to travel northward from Central and South America, and the border security on Mexico's own southern border are very poor. More fundamentally, undocumented immigration to the U.S. would not exist absent a demand within our country for the cheap, and easily exploitable, labor provided by migrants.
12. Douglas Massey, *Backfire at the Border: Why Enforcement Without Legalization Cannot Stop Illegal Immigration*, Cato Institute Center for Trade Policy Analysis, Paper No. 29 (Washington: June 2005) p. 6.
13. U.S. House of Representatives Select Committee on Homeland Security, *Transforming the Southern Border: Providing Security and Prosperity in the Post 9/11 World* (Washington: September 2004) p. 115.
14. GAO Report 04-590, *Border Security: Agencies Need to Better Coordinate Their Strategies and Operations on Federal Lands*. (Washington: June 2004) p. 17.
15. Cooper, "Delusion and Death."
16. Michelle Tirado, "Lonely Watch; Tribes Left Out of Funding for Homeland Security," *American Indian Report*. August 2005.

17. Brenda Norrell, "Civil Rights Commission Hears Indigenous Peoples at Border," *Indian County Today*. Sept. 29, 2004.
18. Borderlands Management Task Force, *Memorandum to Senator John McCain*. May 2, 2005.
19. GAO, Federal Lands Report p. 6.
20. Mitch Tobin, "Perilous Parks: Border's Sensitive Areas are Trampled," *Arizona Daily Star*. Sept. 9, 2002.
21. GAO, Federal Lands Report p. 20.
22. GAO, Federal Lands Report p. 21.
23. Department of Homeland Security, U.S. Customs and Border Protection, *Revised Draft Programmatic Environmental Impact Statement for Office of Border Patrol Operational Activities Within the Border Areas of the Tucson and Yuma Sectors in Arizona*. (Washington: October 2004) p. 2.
24. Department of Homeland Security, U.S. Border Patrol, *Final Programmatic Environmental Assessment for Infrastructure Within U.S. Border Patrol Naco-Douglas Corridor, Cochise County, Arizona*. (Washington: November 2003).
25. GAO, Federal Lands Report p. 21.
26. Department of Homeland Security, Revised Draft Programmatic Environmental Impact Statement pp. 1-25.
27. Immigration and Naturalization Service, U.S. Border Patrol, *Draft Programmatic Environmental Impact Statement for U.S. Border Patrol Activities Within the Border Areas of the Tucson and Yuma Sectors, Arizona*. (Washington: October 2002)(retracted June 2003).
28. Mitch Tobin, "Fences Go Up Along the Mexican Border," *High Country News*. March 3, 2003.
29. Department of Homeland Security, Revised Draft Programmatic Environmental Impact Statement pp. 1-29.
30. Jack Dykinga, John Annerino, and Bill Broyles, "Border Patrol is Seeking Total Access to Treasures," *Arizona Daily Star*. April 25, 2004.
31. Department of Homeland Security, *Fact Sheet: Arizona Border Control Initiative—Phase II*. March 30, 2005. <http://www.dhs.gov/dhspublic/display?content=4415> (last visited Nov. 30, 2005).
32. U.S. Fish and Wildlife Service, *Biological and Conference Opinion for the International Boundary Vehicle Barrier on the Organ Pipe Cactus National Monument* (Phoenix: July 2003) p. 17.
33. U.S. Fish and Wildlife Service, *Biological Opinion for Boundary Barrier* p. 17.
34. Cabeza Prieta National Wildlife Refuge, *Briefing Paper for Office of Border Protection Proposed ABC Plan and related actions*. March 11, 2004.
35. U.S. Fish and Wildlife Service Field Supervisor, "USBP and Pronghorn," *Electronic Mail to U.S. Fish and Wildlife Service Southwestern Regional Director*. May 26, 2004.
36. Arizona Game and Fish Department, *Characterizing and Mapping Potential Jaguar Habitat in Arizona, Nongame and Endangered Wildlife Program Technical Report 203*. (Phoenix: January 2003) p. 1.
37. Ibid.

38. Mary Jo Pitzl, "Jaguars Bring Hope; Conservation Groups Calling for More Protection," *Arizona Republic*. Oct. 22, 2004.
39. Department of Homeland Security, U.S. Customs and Border Protection. *Draft Environmental Assessment. Proposed Border and Access Road Improvements, Sonoita Station Area of Operation, Cochise and Santa Cruz Counties, Arizona*. (Washington: June, 2005).
40. Doug Scott, *The Enduring Wilderness*. (Golden, Colorado: Fulcrum Publishing, 2004) p. 3.
41. 16 U.S.C. §§ 1131-1136 (2005).
42. Dave Foreman and Howie Wolke, *The Big Outside: A Descriptive Inventory of the Big Wilderness Areas of the United States*. (New York: Harmony Books, 1992). p. 324.
43. Roger DiRosa, "Illegal Immigration and Drug Smuggling along the U.S. Border Raises Complex Issues for Arizona Wilderness," *Wilderness Watcher*. July 2004. <<http://www.wildernesswatch.org/newsletters/july%2004/border.html>> (last visited Nov. 30, 2005).
44. Cabeza Prieta National Wildlife Refuge, Briefing Paper for Proposed ABC Plan.
45. Roger DiRosa, "Illegal Immigration and Drug Smuggling Raises Complex Issues."
46. <<http://www.fws.gov/refuges/profiles/index.cfm?id=22524>> (last visited Nov. 30, 2005).
47. Mitch Tobin, "Perilous Parks."
48. U.S. Fish and Wildlife Service, *Recommended Conservation Measures for Emergency Consultation on the Border Patrol's Arizona Border Control Initiative in the Tucson Sector*. Undated.
49. <<http://www.blm.gov/nlcs/>> (last visited Nov. 30, 2005).
50. U.S. Border Patrol, *Naco-Douglas Programmatic Environmental Assessment*.
51. GAO, Federal Lands Report p. 35.
52. GAO, Federal Lands Report p. 34.
53. GAO, Federal Lands Report p. 35.
54. Borderlands Task Force, *Memorandum to Senator John McCain*.
55. 16 U.S.C. § 1531 *et. seq.* (2005).
56. Department of Homeland Security, Bureau of Customs and Border Protection, *Final Biological Assessment: Office of Border Patrol, Tucson Sector*. (Washington: January 2004).
57. U.S. Fish and Wildlife Service Field Supervisor, "USBP and Pronghorn."
58. U.S. Fish and Wildlife Service Wildlife Biologist, "Re: URGENT—ABC Document," *Electronic Mail to Several Recipients*. March 11, 2004.
59. U.S. Fish and Wildlife Service Wildlife Biologist, "Re: Ajo Meeting (7 April 2004)," *Electronic Mail to Several Recipients*. April 13, 2004.
60. 42 U.S.C. §§ 4321 *et. seq.* (2005).
61. U.S. Fish and Wildlife Service Supervisory Biologist, "Re: Plan Arizona BP Requests." *Electronic Mail to Several Recipients*. February 10, 2004.

62. U.S. Fish and Wildlife Service, *Summary Biological Conference Opinion for United States Border Patrol Activities in the Yuma Sector, Wellton Station, Yuma, Arizona*. (Phoenix: September 2000).
63. Eric Verwers, Director INS A-E Resource Center, *Annual Report*, sent to Mike Coffeen, Arizona Ecological Services Field Office, U.S. Fish and Wildlife Service (April 2002).
64. Department of Homeland Security, *Fact Sheet. Arizona Border Control Initiative*. March 16, 2004. <http://www.ice.gov/graphics/news/factsheets/bordercontrolfs_031604.htm>(last visited Nov. 30, 2005).
65. Cabeza Prieta National Wildlife Refuge, *Plan Arizona-Comments*. Feb. 8, 2004.
66. Cabeza Prieta National Wildlife Refuge, *Briefing Paper for Proposed ABC Initiative*. March 11, 2004.
67. GAO, Federal Lands Report p. 29.
68. U.S. Department of Interior, National Park Service, *Scoping, Border Enforcement Activities, Organ Pipe Cactus National Monument*. March 2004.
69. U.S. Department of Interior, Office of the Solicitor, *Freedom of Information Act response to Defenders of Wildlife*. July 7, 2005.
70. U.S. House of Representatives Select Committee on Homeland Security, *Transforming the Southern Border* p. 41.
71. 151 Cong. Rec. H 453, 459 (daily ed. Feb. 9, 2005) (109th Cong. 1st Sess.) (statement of Rep. Jackson-Lee).
72. Department of Homeland Security, Office of the Secretary, *Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 as Amended by Section 102 of the Real ID Act of 2005*. 70 Fed. Reg. 55622, 55623 (Sept. 22, 2005).



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