



# Southern Arizona Project Report FY 2015

BUREAU OF LAND MANAGEMENT - ARIZONA



THE BUREAU OF LAND MANAGEMENT ARIZONA HAS MADE SIGNIFICANT PROGRESS IN MITIGATING THE IMPACTS OF ILLEGAL BORDER-RELATED ACTIVITY ON SOME OF THE NATION'S MOST SIGNIFICANT DESERT LANDSCAPES. INNOVATIVE INITIATIVES LIKE OPERATION ROAM AND THE BORDERLANDS MANAGEMENT TASK FORCE PROMOTE COLLABORATION AND PRODUCE TANGIBLE RESULTS.

The United States shares a nearly 2,000-mile border with Mexico, 372 miles of which form the southern boundary of Arizona. This stretch of the international border – composed in large part by federal and tribal lands - has become one of the busiest in the country for illegal drug and human smuggling.

The rise of illegal cross-border activities over the past 15 years has led to impacts on public lands and those who use them. Since 2003, the Bureau of Land Management (BLM) has focused on preventing and repairing the damage inflicted on natural landscapes by those activities through the Southern Arizona Project (SAP). The project spans three BLM districts (Gila, Phoenix, Colorado River), four field offices (Safford, Tucson, Lower Sonoran and Yuma) and multiple National Conservation Lands units.

This report summarizes the BLM's SAP accomplishments in FY 2015. These efforts bring the BLM together with key partners through the Borderland Management Task Force and other forums to realize the goals of BLM Arizona's Border Strategy.

## BLM ARIZONA'S BORDER STRATEGY

1) PROVIDE A SAFE AND SECURE ENVIRONMENT FOR THE PUBLIC, EMPLOYEES AND USERS OF PUBLIC LANDS

2) PROTECT PUBLIC LAND RESOURCES AND VALUES FROM THE EFFECTS OF SMUGGLING

3) COORDINATE AND COLLABORATE WITH OTHERS WORKING ON BORDER SAFETY, SECURITY AND ENVIRONMENTAL PROTECTION



The U.S. Border Patrol's Tucson Sector is the busiest in the nation for illegal drug smuggling. In FY 2014 alone, Border Patrol agents seized nearly a million pounds of marijuana and made roughly 88,000 apprehensions.

Much of this illegal activity occurs in the remote, rugged and fragile environment of the Sonoran Desert. The traffic creates new and ad hoc roads, trails and other transportation corridors that damage native vegetation and disturb wildlife on public lands. Drug and human smuggling also generate thousands of pounds of garbage in the form of discarded personal items, bicycles, tires and abandoned vehicles. The activity can also pose a hazard to public land visitors, employees and other users.

### **Ironwood Forest National Monument and Sonoran Desert National Monument – American Treasures**

The Sonoran Desert boasts the highest biologically variety of the North American deserts. The 487,000-acre Sonoran Desert National Monument and 129,000-acre Ironwood Forest National Monuments exemplify this tremendous diversity. The striking vegetation protected by these Monuments– saguaro cacti, palo verde, ironwood and mesquite trees, wildflowers – shape the iconic images of the American Southwest.

These two monuments, which form the primary focal area for SAP, also protect a record of human habitation dating back more than 10,000 years. These delicate sites are easily disturbed by off-road travel.

Border-related impacts are also felt on other significant public lands near the international border such as the San Pedro Riparian National Conservation Area and Las Cienegas National Conservation Area. Both areas contain intact examples of river and stream habitats that are rare in Southwest. These waterways can also serve as expedient routes for illegal activity.

**8.8 MILLION**  
ACRES OF BLM LAND IN  
ARIZONA WITHIN 100  
MILES OF THE UNITED  
STATES-MEXICO BORDER



*Cultural sites like these petroglyphs are easily impacted by illegal border-related activity.*



## Project History – Southern Arizona Project and Operation ROAM

By the late 1990s, drug smuggling and illegal immigration from Mexico was having adverse effects on the health and safety of public lands in Arizona. Impacts were initially near major ports of entry, such as Yuma and Nogales. However, as port control increased, activity moved to more isolated areas such as BLM lands.

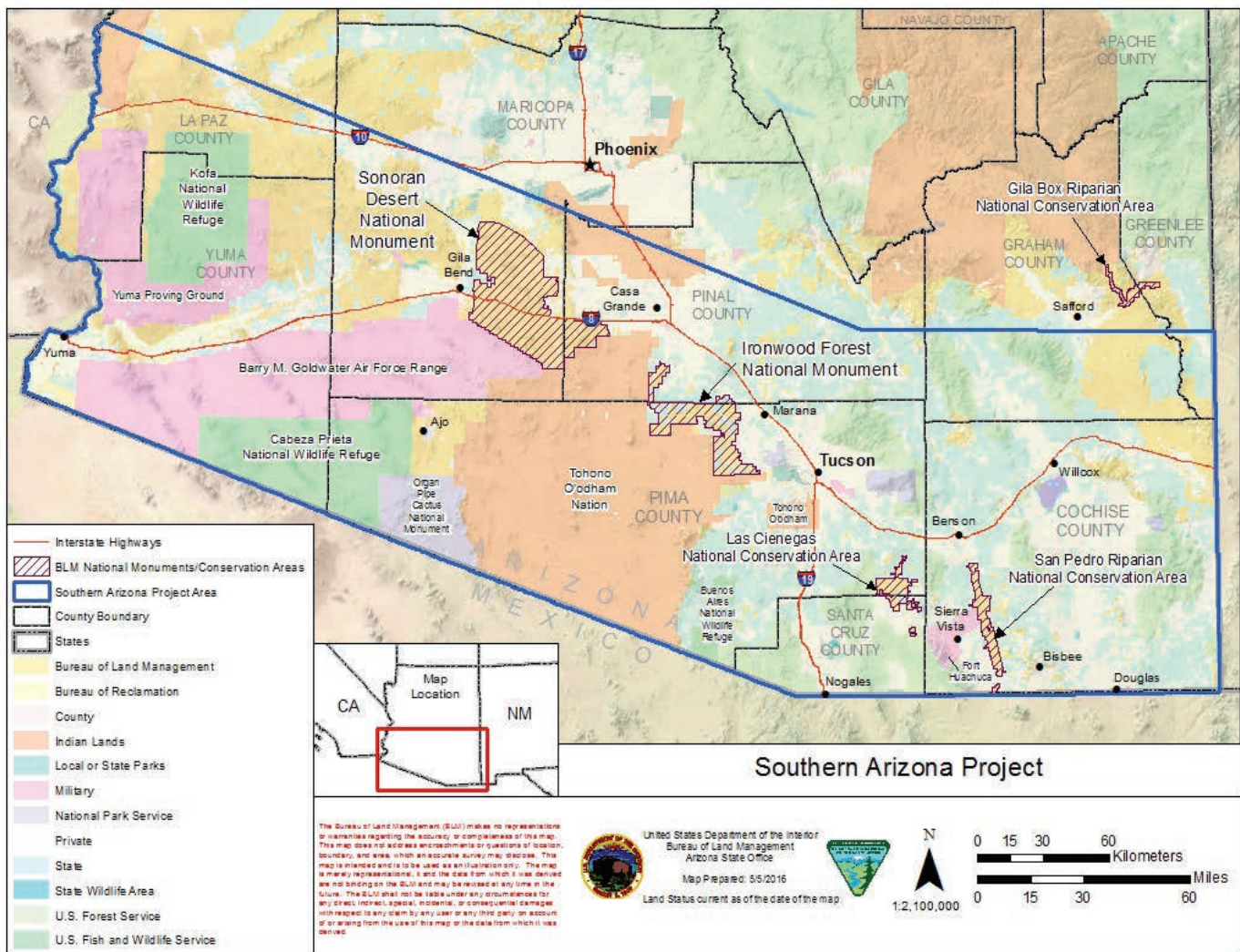
Law enforcement patrols increased in response and cross-border violators began off-road travel that impacted wilderness values, riparian habitat, and other back-country resources. These travelers left more than tracks. Millions of pounds of trash and waste, and damaged roads, structures, and fences were left in their wake.

Combating these impacts has required a set of

natural resource conservation.

A key component of SAP, Operation Reclaim Our Arizona Monuments (ROAM), was chartered by the BLM Arizona State Director in 2010 to respond to an increase in illegal border impacts specific to several National Conservation Lands units in Arizona. Since its inception, the intent of the initiative is to integrate all necessary resources to increase public safety and remedy resource impacts affecting these units.

Under Operation ROAM, targeted “surges” of law enforcement personnel deter illegal activity and provide a window of opportunity for resource restoration and mitigation projects to be completed. The BLM relies on partners such as the state of Arizona, American Conservation Experience and tribal communities to prioritize and implement these projects.



# GOAL #1

## PROVIDE A SAFE AND SECURE ENVIRONMENT FOR THE PUBLIC, EMPLOYEES AND USERS OF PUBLIC LANDS

In addition to directly impacting natural and cultural resources, illegal border activity can prevent routine land stewardship work from taking place. Concerns over employee, crew and contractor safety can limit the ability of the BLM and other partners to protect and restore public land resources. Increased law enforcement presence through SAP and during Operation ROAM surges has facilitated the completion of restoration and mitigation work by contributing to a safe work setting.

### **Disrupting Transportation: Vehicle Barriers**

Illegal border activities have created numerous routes and even “constructed” roads on sensitive public lands. To reduce the overall level of traffic and make transportation more difficult for smuggling activities, BLM work crews decommission and restore these roads.

Vehicle barriers - installed where appropriate – have been an important tool in obstructing cross-country travel in heavily used smuggling areas such as Freeman Wash and the South Maricopa Mountains Wilderness in the Sonoran Desert National Monument. In FY 2015, eight of these “Normandy”-style barriers at crossing points along Interstate 8 were maintained following flood damage.

The vehicle barriers have been successful in reducing the number of vehicles abandoned on public lands. In FY 2015, just one abandoned vehicle was retrieved from public land in the SAP focus area.



*Vehicle barriers have proven effective in the effort to limit unauthorized smuggling routes.*



*BLM Firefighter Leo Chavez and volunteers clean up smuggling trash on the Sonoran Desert National Monument.*



### Project Daylight: Improving Visibility

Illegal activities often center on major transportation networks like interstates and major highways, where “lay up” locations serve as drop off points for individuals or drugs. Dense roadside vegetation in these corridors provides cover that limits detection by law enforcement. Along Interstate 8 through the SDNM, the BLM has looked to resolve this through Project Daylight, a vegetation reduction project in the right of way of the interstate. The project reduces threats to public and employee safety by improving visibility and limiting the availability of concealment.

### Informing the Public

Providing clear information to the public on the risks of border-related activities improves safety by instilling situational awareness among visitors. In the past five years, over 190 safety signs have been installed on public lands. In FY 2015, the BLM maintained a total of 11 public information kiosks along the Interstate 8 corridor of the SDNM. Other areas frequently used by recreational visitors, like the main access roads on the IFNM, also feature

signage that was maintained in FY 2015. The BLM also maintains border-related information and visitor materials for affected public lands destinations on BLM.GOV.

### Engaging America's Youth

As in previous years, the SAP continues to emphasize involvement of America's youth in these restoration activities. Through partnerships with youth employment and training organizations such as American Conservation Experience and the Arizona Conservation Corps, and other organizations, individuals age 25 years old and under get meaningful work experience. These youth work alongside BLM staff, to mitigate the direct impacts of illegal activity by removing trash, eliminating evidence of vehicle travel and maintaining vehicle barriers. In FY 2015, over 150 youth were engaged in border-related work throughout the three BLM districts.



**“I feel like work out here on the Ironwood is tangible - you can see the difference you're making every day”**

- Caleb Cline, BLM Tucson Field Office intern with the American Conservation Experience, on working to mitigate natural resource damage.

*American Conservation Experience interns work to remove debris from a smuggling layup site on the Ironwood Forest National Monument.*



# GOAL #2

## PROTECT PUBLIC LAND RESOURCES AND VALUES FROM THE EFFECTS OF SMUGGLING

Arizona's public lands contain unique cultural and natural resources held in common by all Americans. Arid lands along the US-Mexico border are fragile and easily disturbed landscapes. These areas support over hundreds of species of plants and animals, along with a deep record of human history.

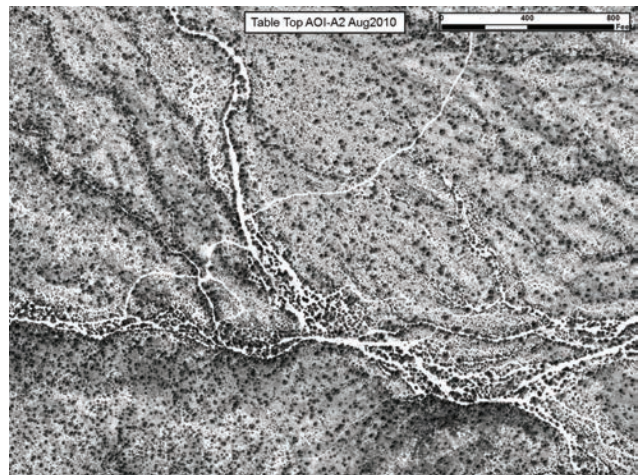
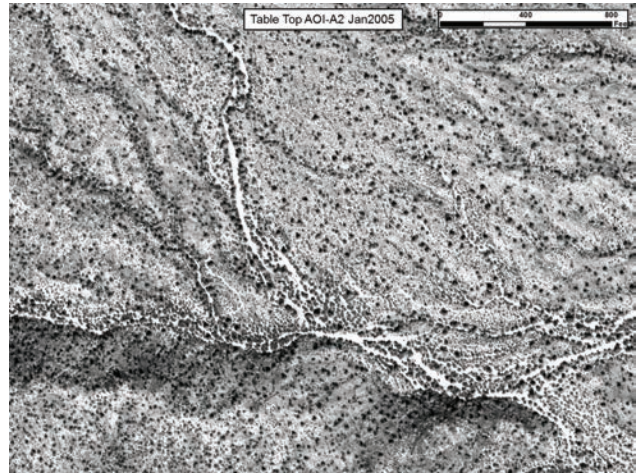
### Gauging Success: Resource Impact Monitoring System and Arizona Border Trash Website

#### Resource Impact Monitoring System

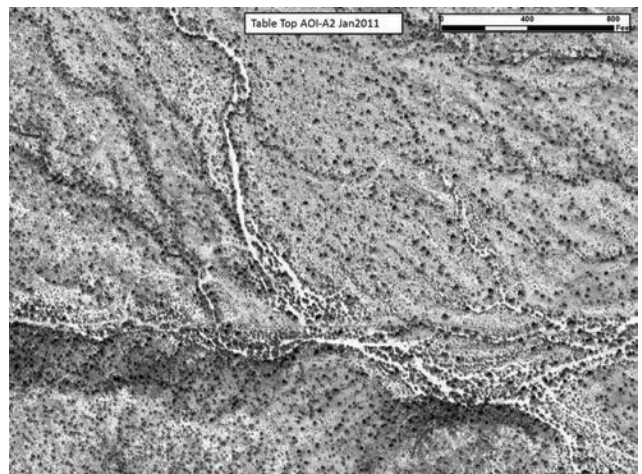
Remote sensing techniques have become an important component of the overall SAP approach. Hundreds of thousands of acres of public lands are affected by border activities, requiring far reaching monitoring techniques. The Resource Impact Monitoring System, developed in FY 2010, has employed new techniques to aid in the identification and measurement of human impacts resulting from illegal immigration, drug smuggling, and recreation uses in the SDNM, IFNM and adjacent public lands.

Detailed application of commercially available data at several study sites confirmed that relatively simple black-and-white panchromatic satellite images with a spatial resolution of 0.5-meter are suitable for detecting and monitoring linear human impacts down to the scale of roads and footpaths. This data - relatively inexpensive and widely available - has been critical in gathering data in a timely and reliable manner.

With the original goals of remote sensing project largely met, the project is exploring new avenues for the application of remote sensing technologies. Additional goals include developing standard protocols; creating a monument-wide mosaic data image for the SDNM that would act as baseline information; strengthening a partnership with the U.S. Geological Survey to help aid in data acquisition; and applying the information to map landscape-scale dynamics such as dust storms and the growth of fine fuels.



*These images from 2005 (top) and 2010 (above) identified growing travel networks from illegal activities. A repeat image from 2011 (below) was taken after restoration efforts.*



## Restoring the Sonoran Desert

Unauthorized transportation networks destroy native vegetation and contribute to soil erosion. SAP projects focus on a) closing and rehabilitating existing routes and b) preventing new routes from being created.

After closing an unauthorized route, restoration of the area begins. The desert surface is de-compacted by scoring with a disk or harrow pulled by an all-terrain vehicle. Crews then rake and apply “vertical mulching” techniques, which include placing boulders, dead and down vegetation, and even the planting of some live vegetation such as cholla cactus. Only vegetation, rock and woody materials native to the immediate closed route vicinities are used. The technique is designed to

imitate the adjacent vegetation and terrain, while encouraging plant succession and route naturalization.

New routes are prevented by maintaining barriers and signage. Ongoing smuggling activity, combined with the desert’s annual monsoon season, lead to a recurring need for maintenance and replacement.

97  
MILES OF UNAUTHORIZED  
ROUTES DECOMMISSIONED  
SINCE 2010

*Ranger Eric Keefer provides security for Youth Corps Crews removing trash from the Sonoran Desert National Monument.*



## Trash Removal

Fighting the accumulation of trash and debris continues to be a major focus for SAP. Areas subject to border-related traffic have seen millions of pounds of waste over the past two decades. Arizona estimates 2,000 tons of trash are discarded each year.

While trash accumulation has slowed along with rate of undocumented immigration, it continues to create impacts. In FY 2015, SAP led to the cleanup more than 13,000 pounds of waste across the project area.

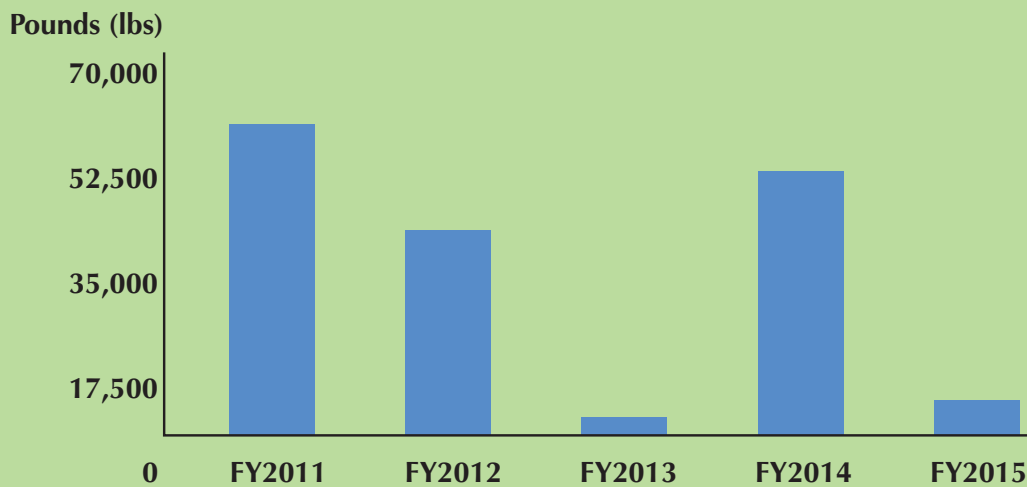
In FY 2015, the Yuma Field Office continued the integration of SAP and border-related activities into their daily work. As interns and staff conduct

field work throughout the Field Office, trash is gathered and deposited into bins. When opportunities for volunteer events arise, a bin is delivered to the work site and removed after the event. In FY 2015, about 8,300 pounds of trash, including 134 tires, were removed from locations where illegal activities have been noted.

### Arizona Border Trash Website

Tackling border-related trash requires accurate tracking and reporting. Through the Arizona Border Trash Website ([www.azbordertrash.gov](http://www.azbordertrash.gov)), the Arizona Department of Environmental Quality allows members of the public to view the same up-to-date information as agency and tribal partners.

## OPERATION ROAM TRASH COLLECTED AND REMOVED (FY 2011 TO FY 2015)



*BLM Law Enforcement Rangers work closely with agents from U.S. Customs and Border Protection to protect public land resources.*





## COORDINATE AND COLLABORATE WITH OTHERS WORKING ON BORDER SAFETY, SECURITY AND ENVIRONMENTAL PROTECTION

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BORDER PATROL SECTORS  
NATIONWIDE THAT HAVE ADOPTED  
THE COLLABORATIVE BORDERLAND  
MANAGEMENT TASK FORCE MODEL

### A Growing Partnership – the Borderland Management Task Force

The BLM's efforts to increase collaboration between U.S. Customs and Border Protection and land managers dates back to 2002, when Arizona BLM formed an interagency group to address common concerns of resource and infrastructure damage. This group, known as the **Borderland Management Task Force** (BMTF), brings together the federal land management agencies (including the U.S. Forest Service, National Park Service and U.S. Fish and Wildlife Service) with border security officials several times each year to share information and coordinate operations. The BMTF model has proved so successful in working to combat these issues in the Tucson Sector, that the efforts were replicated in all Border Patrol sectors in the nation.

### SOUTHERN ARIZONA PROJECT PARTNERS

The mission of **U.S. Customs and Border Protection**, an agency within the Department of Homeland Security, is to "... safeguard America's borders thereby protecting the public from dangerous people and materials while enhancing the Nation's global economic competitiveness by enabling legitimate trade and travel." CBP has been a critical and core partner in BLM's effort to mitigate the impacts of illegal activity on public lands.

The **Arizona Department of Environmental Quality** provides key support through the operation of the Border Trash Web site ([www.azbordertrash.gov](http://www.azbordertrash.gov)).

**Arizona Game and Fish Department** has worked closely with SAP partners to remove border-related trash throughout Southern Arizona as part of their overall mission to "...conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations."

The **Tohono O'Odham Nation** encompasses approximately 75 miles of international border with Mexico. As a result, the Nation experiences a significant amount of illegal border-related activities. The BLM has worked with the Nation for approximately 10 years as a SAP partner, and assists with funding to help in the clean ups and restoration of Nation lands as part of the greater borderlands efforts to mitigate the impacts on natural resources. The Nation and the BLM have also worked cooperatively to repair and replace fencing between the Nation and public lands for the protection of natural and cultural resources, and the proper containment of cattle and other livestock.

The **Pascua Yaqui Tribe**, which oversees land southeast of Tucson, and has been an active and engaged SAP partner. The tribe organizes and executes several clean ups each year of tribal and non-tribal land.

**American Conservation Experience** is an Arizona-based non-profit that has become works nationally to recruit and engage volunteers to work on restoration projects. The group serves a key role by providing natural resource interns for SAP.



## Working with Arizona's Tribal Communities

The BLM and other SAP partners work closely with the Tohono O'Odham Nation and Pascua Yaqui Tribe, two tribal communities with lands near the international border affected by border-related activity.

## Range Rider Program

The **Tohono O'Odham Nation** shares long stretches of boundary with BLM public lands. Much of this boundary is fenced to prevent unwanted movement of livestock. The fences are often cut during illegal smuggling and immigration activities. These breaks allow livestock and feral burros from the Nation to cross onto public lands on the two monuments. In FY 2015, the BLM inventoried and maintained 53 miles of fencing.

The **Pascua Yaqui Tribe** has participated in the maintenance and clean-up of tribal lands, but also BLM lands. Approximately 7,250 pounds of trash accumulated within tribal and BLM lands was cleaned up and properly disposed in FY 2015 alone. While removing the accumulation of trash, several restoration projects of the lands were performed, 12 acres were restored to their natural condition. Fence repair occurred along the border between BLM and tribal lands. These fences assist the BLM in further protecting the IFNM from illegal smuggling and "lay up" sites.



*"In Tucson Sector, we have worked hard with our land management agencies to learn to incorporate each other's missions. We understand that being a guardian for our nation's borders is more than just for our family and neighbors; it's also for our resources and our environment."*

*Charles Trost, U.S. Customs and Border Patrol - Tucson Sector Public Lands Liaison*



## SOUTHERN ARIZONA PROJECT REPORT ACCOMPLISHMENTS – FY 2011 TO FY 2015

Event	FY2011	FY2012	FY2013	FY2014	FY2015	Total
# OF MARIJUANA SEIZURES	18	58	12	9	15	112
ABANDONED VEHICLE				2	1	3
ASSIST				53		53
BAGS OF BUFFEL GRASS REMOVED			40			40
BICYCLES COLLECTED AND REMOVED	112	61	4	2		179
BLM HIKING TRAIL MAINTAINED (FEET)		33264			79200	112,464
BUFFLEGRASS REMOVAL / TREATMENT (ACRES)				5		5
CACHE SUPPLY				8	24	32
CAMP / LAYUP				3	7	10
FENCE BREAKS IDENTIFIED		218	6	12	17	253
FENCE REPAIR				1		1
FENCE REPAIRED / INSTALLED (FEET)				1730	279,840	281,570
FIREARMS SEIZED / RECOVERED		19				19
HUMAN REMAINS DISCOVERED		10				10
ILLEGAL ALIENS APPREHENDED		1234	279	262	183	1958
ILLEGAL FOOT TRAIL REHAB (FEET)		760				760
INTEL				34		34
LAW ENFORCEMENT EVENTS	1000	2040	1284	1448	931	6,703
LPOP				4	11	15
MILITIA				2	6	8
MISC. RESOURCE REHAB (FEET)		1896				1896
MISSING / DAMAGED SIGNS IDENTIFIED	12	8				20
NEW CLEANUP LOCATIONS IDENTIFIED	51	33	14	5	24	127
NEW SIGNS INSTALLED		91	9	68	25	193
POUNDS OF MARIJUANA SEIZED		27454	8980	14816	13,724	64,974
POUNDS OF TRASH COLLECTED AND REMOVED	64,000	48,715	79,10	56,615	13,000	189,710
UNITED STATES CITIZENS ARRESTED		30	2	9	9	50
VEHICLE SMUGGLING ROADS REHAB (FEET)	29,568	81,691	63,360	52,876		227,495
VEHICLE TIRES COLLECTED AND REMOVED	110	242		1	134	487
VEHICLES SEIZED	45	60		4	4	113

