

Field Hearing  
Subcommittee on National Parks, Forests and Public Lands  
Committee on Natural Resources  
*Losing Ground: The War on Buffelgrass in the Sonoran Desert*  
Written Testimony Submitted by C.H. Huckelberry, County Administrator  
Pima County, Arizona  
Date of Testimony: April 10, 2010

## **I. Introduction**

Chairman Grijalva and subcommittee members, I would like to thank you for holding this hearing on the ecological and social challenges of controlling the buffelgrass (*Pennisetum ciliare*) invasion in the southwest and for inviting Pima County to testify. The impact of the buffelgrass invasion on federal lands, and consequently on the adjacent County lands, is of great importance to the residents and visitors to southern Arizona. Therefore, I greatly appreciate this opportunity to formally convey concerns on behalf of Pima County.

Unfortunately, Pima County seems to be ground zero in the buffelgrass invasion in Arizona, and the presence of this invasive exotic grass threatens the very existence of the Sonoran Desert in our region. Only through the coordinated partnership efforts of local jurisdictions, NGOs, state agencies and the federal government can we systematically and aggressively address this threat on the many fronts necessary. To do otherwise could seal the fate of the demise of the Sonoran Desert as we know it today, and the accompanying ecological and economic disaster is unacceptable.

There is little question within the scientific community about the potential impacts and alteration of the fundamental workings of the Sonoran Desert ecosystem that the buffelgrass invasion can bring. One only needs to look south to Mexico to see the catastrophic changes to native plant communities where buffelgrass has been introduced and not controlled to gain a strong sense of urgency. We do not want to see our region follow the same destructive pathway and a similar ecological fate.

## **II. The Risks of the Buffelgrass Invasion to Pima County**

The current buffelgrass invasion's roots can be traced back to the well meaning, but now clearly understood as ill advised, introduction of the grass for erosion control and livestock forage in the 1930s by federal land managers. For over 60 years, the grass was spread around the region by agencies and individuals; yet the distribution and density of the introductions were generally contained. In the last decade, however, a rapid and dramatic expansion of the grass distribution, as well as the size and density of existing patches, has dramatically increased, leading to the current crisis conditions.

Pima County has experienced tremendous population growth and is dealing with the challenges of accommodating continued growth while conserving the watersheds and unique natural areas that are a vital part of the quality of life in our communities and that

bring new residents and visitors to our area. Pima County has been implementing a regional plan, the Sonoran Desert Conservation Plan, which balances these growth issues and minimizes the need for federal regulatory actions that can be divisive. Public support for the Sonoran Desert Conservation Plan has been very high, as demonstrated by voter approval of \$174 million in bond funds to purchase lands for conservation.

The County's current network of biologically important lands includes more than 85,000 acres of fee title lands and another 100,000 acres of state and federal grazing leases held for conservation uses by Pima County. Added to that is over 1.5 million acres of federally owned conservation lands within the over all Sonoran Desert Conservation Plan identified planning boundaries. Many of these lands are in direct jeopardy of losing their fundamental conservation and natural habitat values due to the buffelgrass invasion. The risk to the key conservation lands in Pima County like Saguaro National Park, Organ Pipe Cactus National Monument, Cienega Creek Natural Preserve, Las Cienegas National Conservation Area, Ironwood Forest National Monument, Catalina Ranger District of the Coronado National Forest and the 85,000 acres acquired by Pima County is real and inevitable without strong action and leadership by both local jurisdictions and the federal government. The visionary outcomes of the Sonoran Desert Conservation Plan will be increasingly difficult, if not impossible, to achieve if the buffelgrass invasion is not controlled. The investment and commitment by Pima County of millions of dollars and tens of thousands of hours of community planning efforts will have been in vain.

Like many areas with unique natural resources and important National Parks and Monuments, tourism is an important component of the local economy. Imagine the impact on the local economy if the iconic Sonoran Desert is significantly altered or lost. The saguaro cactus is extremely susceptible to the increased fire regimes brought to the historically fire resistant desert ecosystem with the buffelgrass invasion and could be lost. Lose the natural systems that have attracted residents and visitors from around the world and the impacts will unquestionably ripple through the local economy. Tourism and bed tax revenues will decline, property values will be reduced, infrastructure will have to be modified to be protected from annual buffelgrass fires, and fire suppression time commitments and costs will increase thus reducing the ability of fire agencies to also respond to routine medical calls. At this time, the full impact of the current buffelgrass invasion on the local economy is not entirely understood. However, even the more conservative projections place the impacts at hundreds of millions of dollars over time. An emerging environmental issue of this magnitude cannot be ignored.

### **III. Pima County's Current Investment in Buffelgrass Control**

Pima County has been developing responses to the buffelgrass invasion since the late 1990s. In October 2005, the Pima County Board of Supervisors passed a resolution establishing an Invasive Species Working Group to coordinate actions and activities within the County structure. This working group identified buffelgrass as a priority species and has worked to integrate buffelgrass control activities across the various Public Works agencies with land management responsibilities. The policy guidance from the Board also directed County staff to play a visible and supportive role in coordinating buffelgrass planning and control efforts. The County investment in those programs is thousands of staff hours and hundreds of thousands of dollars annually and would be more if overall budgetary resources were not currently so constrained. The County's commitment to this issue has been clear, visible and supported with on-the-ground funding.

In February 2007, the Board of Supervisors again passed a resolution targeting policy efforts to control buffelgrass as part of the lead up to the first Buffelgrass Summit held in Pima County. In that resolution, the Board of Supervisors stated "... the Pima County Board of Supervisors strongly supports the 2007 Pima County Buffelgrass Summit and its stated outcomes, and encourages in the strongest terms that local, state and national agencies, jurisdictions and organizations allocate human and financial resources to assist in coordinated buffelgrass control efforts in their areas of responsibility as well as the County as a whole, until control efforts have been determined effective." Unfortunately, that call to action did not result in the desired visible support. Responses from key partners have ranged from a lack of available funds, questions regarding the actual severity of the issue, lack of information on buffelgrass distribution, no staff resources to take on additional projects, and a general lack of pressure from the public to take action.

In 2000, a volunteer group was formed by the County called the Sonoran Desert Weedwackers, to combat buffelgrass in Tucson Mountain Park. This group of community volunteers has invested over 30,000 hours over the past decade at a value to the County conservation efforts of over \$450,000. We have conservation education staff that conduct community programs on buffelgrass awareness and how to take action at the local community level and how to conduct volunteer control projects and events. The County utilizes Summer Youth work crews to conduct buffelgrass control projects on County lands and roadways each summer.

Adult probationers are also used to conduct buffelgrass control programs along roadways and in neighborhoods as part of their community restitution program. County staff assists with the annual Beat Back Buffelgrass Day activities across the Tucson basin and provides significant amounts of information to the public on the buffelgrass issue and ways for

people to take positive action and be part of the solution. Community awareness of the dangers of buffelgrass invasion is at an all-time high. There can no longer be a question of public interest and demand for government, at both the local and national levels, to take action.

In 2009, the County adopted a modification of the current Weed Ordinance in the unincorporated portions of the County that allows the County to require removal of buffelgrass infestations on private lands where they are determined to be a public health and safety risk. Our major utility companies have agreed to voluntarily control buffelgrass and other invasive plants on County rights of way where they disturb the ground as part of their development and maintenance activities, since these pathways have been found to be major vectors for the movement of buffelgrass within the urban areas.

One of the more significant efforts the County has made is to support the Southern Arizona Buffelgrass Coordination Center (SABCC). The County took a leadership role in the formation of the group and is one of its major financial sponsors at this time. SABCC is an important link in actually bringing the major land management agencies to the table to begin coordination efforts on the scale necessary to actually tip the buffelgrass war back in our favor. This nonprofit organization needs broad based support and a commitment of resources to meet its potential. Unfortunately, once again, the financial resources necessary to move our collaborative efforts forward are slow in coming. Participation of some federal agencies could be improved and financial support more forthcoming. This is one area that the federal government could be of specific assistance. All opportunities need to be explored and supported to get the SABCC a steady flow of the resources it needs to be an effective facilitator for research, control projects and public outreach. This role could not be played as well by any other local organization, institution or jurisdiction.

#### **IV. Interrelationships with Federal Lands and Future Scenarios**

Pima County enjoys hundreds of miles of shared boundary with federal land management agencies. At some points, the County urban footprint directly adjoins the federal lands. The National Park Service, Bureau of Land Management and the US Forest Service manage the largest units of those federal lands. The County has maintained a strong working partnership for many years with the various agencies and under the Sonoran Desert Conservation Plan, the health of those federal lands within Pima County will play important roles in the future growth and conservation priorities of our County.

The current lack of a systematic effort to control buffelgrass is a clear and multi-jurisdictional concern. The potential for fire to move back and forth across the land

boundaries is a real threat and currently without any comprehensive strategies to combat such occurrences. Current efforts by the Forest Service in their Coronado National Forest Firescape planning process shows promise, but it will take time to mature and be implemented. Buffelgrass control needs to be integrated into all local fire plans, and we would hope to explore in the near future the development of a County level Community Action Fire Plan to focus on the needs and strategies required to address the new fire regimes the buffelgrass invasion has created. Because of the many, expanding interface zones of buffelgrass infestations and urban growth, the potential for loss of life and property from a catastrophic fire is a real possibility if strategic control actions are not taken immediately. New fire models on public lands show a bleak future and fire behavior previously unknown to our desert ecosystem. The front face of the Catalina Mountains appears to be an especially vulnerable area at this time. Federal agency participation and support is critical to a successful outcome to establishing comprehensive fire management strategies and defendable spaces. The emerging buffelgrass fire concerns in southern Arizona rival those in the pine type of northern Arizona and warrant the same types of resource allocations in the future.

At the present time, while federal agencies in Arizona expend limited resources to combat the buffelgrass invasion, the US Department of Agriculture is working to hybridize this exotic invasive grass to make it more cold tolerant. Because of the proven serious invasive nature of buffelgrass in the desert ecosystem, the federal government should be restricting all activity in use or development of hybrids of this invader. It seems counter to good environmental policy to have some federal agencies fighting buffelgrass and others trying to make the species more adaptable. How can this expenditure of federal funds be justified when we at the local level are paying the price? Why is buffelgrass not being recognized as the invasive species it is by the federal government and its use and distribution by all agencies, both inside and outside the United States, prohibited? Arizona has taken action within our borders; we need the federal government to recognize that need and mirror local actions.

It is critical that the County and federal land management agencies work closely on future buffelgrass control efforts. Joint multi-year projects will be necessary to ensure that resources are being targeted on the priority areas and that adequate project boundaries are treated to ensure that seed banks of the grass are not maintained on adjoining lands. Based on the most recent discussions, it appears that most of the local federal agencies do not have adequate resources available to address the buffelgrass invasion with a systemic approach. Funding commitments from the federal government must be adequate for the task and sustained over the necessary life of control efforts. Because of the aggressive nature of buffelgrass and long-lived seed banks, control efforts must be considered in terms of three to five repeat year treatments and not single year efforts in any given area.

In the past, Saguaro National Park implemented comprehensive control programs only to see funding cut and much of their positive effort lost due to the inability to apply the necessary continued control effort. Ultimately, they experienced a reestablishment of buffelgrass in specific areas previously treated for several years within the park. This is a disappointing waste of manpower, funding and control effort impact.

Pima County is facing a rapidly diminishing timeline for effective action. Action response needs to be intensified and measured in years, not decades. The County and federal lands infested with buffelgrass need aggressive treatments now. If we wait a decade, it may well be too late, and the costs of required routine control efforts to contain the inevitable fires will be far greater than potential control efforts today. Buffelgrass knows no boundaries; therefore, the County and adjacent federal lands must be viewed as a holistic ecological system. The County cannot continue to focus resources on lands adjacent to public lands without assurance of support from federal agencies to address the buffelgrass problem cooperatively, collaboratively and effectively.

## **V. Summary and Recommendations**

We have an ecological and economic disaster looming on the horizon, and parties are working diligently to avert that impending disaster. However, the commitments and resources necessary to address the issue are not available or coordinated at a level necessary to move concern to true action. Because buffelgrass knows no boundaries and much of the current infestation is on federal lands, the problem is one of local, state and federal significance. All of the land management agencies must be active and committed participants in control efforts and public outreach. We cannot adequately address this issue from just the local level. The federal government needs to provide its local units with the funding and tools necessary to address the buffelgrass invasion responsibly.

I would like to conclude this testimony by listing the following recommendations that the federal government could take that I believe will make a measurable difference in the fight to control buffelgrass now and into the future:

- Ensure that federal agencies in Pima County have adequate and sustained funding to systematically control buffelgrass infestations on their lands with special emphasis on those shared boundaries with Pima County and the urban lands interface.
- Cease any further work on hybridization of buffelgrass and distribution of this invasive exotic grass outside of its native habitats.

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- Direct all of the federal land management agencies in Pima County to be active participants and funding support partners with the Southern Arizona Buffelgrass Coordination Center.
- Provide local jurisdictions and organizations in Pima County with emergency funding support to address buffelgrass infestation control efforts on lands that border federal public lands.
- Ensure that the federal land management agencies have adequate authority and planning documents in place to take aggressive action with all the control tools available when implementing buffelgrass control programs.
- Direct and fund the federal agencies to increase research efforts into the ecology, control methodology and social implications of the current buffelgrass infestation.

I hope I have communicated to you a sense of urgency in the need to address the buffelgrass issue head on and allocate the resources at the federal level necessary to make a difference in the open space lands we cherish. The areas of interface between Pima County and federal lands are too important for watershed protection, habitats for special status species of plants and animals and our local tax base to not step forward and address the buffelgrass invasion now. If we do not address this invasion by an exotic, human introduced species cooperatively, aggressively and financially we will share the disastrous environmental and economic consequences of inaction.

Again, thank you for inviting Pima County to provide testimony on this most critical and time sensitive environmental issue.

Respectfully submitted,

**ORIGINAL SIGNED BY**

C.H. Huckelberry  
County Administrator

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