

“Comprehensive Historical Perspective of the Department’s Activities that have been Restricted Resulting from Special Land Designations and Anticipated Future Restrictions.”

SPECIAL LAND DESIGNATION TIMELINE

Wilderness

Wilderness Act of 1964

Arizona Wilderness Act of 1984 – Public Law 98-406 (8/28/1984)

Apache Creek Wilderness, Aravaipa Canyon Wilderness, Bear Wallow Wilderness, Castle Creek Wilderness, Cedar Bench Wilderness, Chiricahua Wilderness, Cottonwood Point Wilderness, Escudilla Wilderness, Fossil Springs Wilderness, Four Peaks Wilderness, Galiuro Wilderness, Grand Wash Cliffs Wilderness, Granite Mountain Wilderness, Hellsgate Wilderness, Juniper Mesa Wilderness, Kachina Peaks Wilderness, Kanab Creek Wilderness, Kendrick Mountain Wilderness, Mazatzal Wilderness, Miller Peak Wilderness, Mount Logan Wilderness, Mount Trumbull Wilderness, Mt. Wrightson Wilderness, Munds Mountain Wilderness, Paiute Wilderness, Pajarita Wilderness, Paria Canyon-Vermilion Cliffs Wilderness, Red Rock-Secret Mountain Wilderness, Rincon Mountain Wilderness, Saddle Mountain Wilderness, Salome Wilderness, Salt River Canyon Wilderness, Santa Teresa Wilderness, Strawberry Crater Wilderness, Superstition Wilderness, Sycamore Canyon Wilderness, West Clear Creek Wilderness, Wet Beaver Wilderness, Woodchute Wilderness.

Arizona Desert Wilderness Act of 1990 – Public Law 101-628 (11/28/1990)

Aravaipa Canyon Wilderness, Arrastra Mountain Wilderness, Aubrey Peak Wilderness, Baboquivari Peak Wilderness, Big Horn Mountains Wilderness, Cabeza Prieta Wilderness, Coyote Mountains Wilderness, Dos Cabezas Mountains Wilderness, Eagletail Mountains Wilderness, East Cactus Plain Wilderness, Fishhooks Wilderness, Gibraltar Mountain Wilderness, Harcuvar Mountains Wilderness, Harquahala Mountains Wilderness, Hassayampa River Canyon Wilderness, Havasu Wilderness, Hells Canyon Wilderness, Hummingbird Springs Wilderness, Imperial Refuge Wilderness, Kofa Wilderness, Mount Nutt Wilderness, Mount Tipton Wilderness, Mount Wilson Wilderness, Muggins Mountain Wilderness, Needle's Eye Wilderness, New Water Mountains Wilderness, North Maricopa Mountains Wilderness, North Santa Teresa Wilderness, Peloncillo Mountains Wilderness, Redfield Canyon Wilderness, Sierra Estrella Wilderness, Signal Mountain Wilderness, South Maricopa Mountains Wilderness, Swansea Wilderness, Table Top Wilderness, Tres Alamos Wilderness, Trigo Mountain Wilderness, Upper Burro Creek Wilderness, Wabayuma Peak Wilderness, Warm Springs Wilderness, White Canyon Wilderness, Woolsey Peak Wilderness.

Monuments

The Antiquities Act of 1906

Monument designation in Arizona begins in 1906 after the establishment of the Antiquities Act through the latest five monument designations by President Clinton, for management by the Bureau of Land Management, including:

- Agua Fria National Monument (January, 2000), 71,100 acres
- Grand Canyon-Parashant National Monument (January, 2000), 807,881 acres
- Ironwood Forest National Monument (June 2000), 129,022 acres
- Sonoran Desert National Monument (January, 2000), 486,603 acres
- Vermilion Cliffs National Monument (November 2000), 280,324 acres

HISTORICAL INFORMATION

“The Arizona Game and Fish Department has experienced restrictions resulting from Special Land Designations including project delays, increased costs, increased man-hours, etc. This ultimately leads to decreased efficiency in protecting and managing Arizona’s wildlife resources.”

Excerpted from a letter from Duane Shroufe, Director Arizona Game and Fish Department, dated June 20, 1989 addressed to ‘The Honorable Wayne Owens, Committee on Internal and Insular Affairs, Subcommittee on National Parks and Public Lands’ in response to questions posed at the Wilderness Hearing on June 9, 1989.

Over fifteen years later, this statement still applies to many Department activities on public lands where special area designations have been enacted.

It has been the Department’s experience that different agencies and individuals within these agencies interpret Wilderness Act or other legislative guidelines differently. One individual may be permissive in interpreting these rules, while the next may be extremely restrictive. From a project-planning standpoint, it is extremely difficult to second-guess a particular reaction to implementing a study, developing or maintaining a wildlife project or requesting permission for emergency access to a Wilderness Area. This is a frustrating reality, especially when some nongame and big game projects have been implemented with ease under certain administrations, while virtually identical projects have taken months to years for implementation or have been canceled. This concern is what initiated the Commission to draft wildlife management criteria to be included in the wording of the 1990 Wilderness Bill, which was sent to Arizona’s Congressional delegation.

The appropriateness of projects in designated Wilderness has been challenged internally within land management agencies, among resource specialists, as well as externally by various environmental organizations. This occurs even with policy documents in place* that describe the commitment of the federal agencies to coordinate closely with state wildlife agencies on projects within Wilderness (and Wilderness Study Areas). Ultimately, the Department is concerned with the negative effect that delays on project implementation may have on wildlife populations, as well as costs to the Department, in both man-hours and direct project costs.

*Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness (FS, BLM, and IAFWA – August 1986)

Past Designated Wilderness and Wilderness Study Area Restrictions

Listed below are past examples where the Department has been met with resistance to take actions believed necessary to prevent potential losses to wildlife resources on Bureau of Land Management (BLM) administered lands:

Paria Canyon Wilderness - Paria Peak Water Development Proposal - A small population of bighorn sheep in the Paria Peak area are forced to travel to the Colorado River as their only water source. This, in turn, subjected the sheep to increased vulnerability from predators and other threats. Management projects were initiated to improve this sheep herd that included three

supplemental transplants, in 1984, to increase the size of the herd (pre-wilderness designation). Transplant locations were selected by joint agreement between the Department and BLM based on a proposal to site a permanent water for sheep away from the Colorado River. After the bighorn sheep releases were made in July of 1984, the area was designated wilderness. BLM then decided that the water project was not compatible with Wilderness designation.

Woolsey Peak WSA - Bermuda Spring Development – The Department has water rights to a small spring that often goes dry in the summer months. The Department believed this represented a threat to wildlife and proposed to develop a storage system that would provide a year-round source of water. BLM denied this request based on visual incompatibility and because the site was located within a Wilderness Study Area.

The following is a partial list of additional wildlife project proposals that have been prohibited due to BLM's determination of "unsuitable for Wilderness".

- Bermuda Spring water catchment / Woolsey Peak WSA
- Planet Peak water catchment / Planet Peak WSA
- Masada water catchment / Swansea WSA
- Crossman Peak water catchment / Crossman Peak WSA
- Virgin Mountain water catchment / Paiute Wilderness Area
- Woolsey Peak pothole / Woolsey Peak WSA
- Black Mesa pothole / Black Mesa WSA
- Rawhide Mtn. catchment / Mohave Wash WSA
- Little Black Mtn. catchment / Mohave Wash WSA
- Castanada catchment / Mohave Wash WSA
- Bill Williams pothole / Mohave Wash WSA

The following projects were designated as part of the Paria-Kanab Creek HMP in 1983, but never completed because of Wilderness designation in 1984.

- Fisher Springs pipeline and drinker
- Wilson Canyon Seep development
- Paria Point Seep development #1
- Paria Point Seep development #2
- Jacob Pools Upper Spring dike
- Moehave Seep development
- Badger Canyon Slick Rock catchment
- Riparian vegetation plantings Soap Creek, Badger Creek, Fisher Springs, Lowry Springs, Paria Canyon, and Kanab Creek
- Spring fencing on Wilson, Soap, and Fisher Springs
- Paria Canyon nongame survey and water quality testing has been rendered impractical by restrictions on the use of helicopters.

Aravaipa Wilderness

The wilderness designation in Aravaipa resulted in BLM denying AGFD requests to land a helicopter to capture and diagnose the causes of a bighorn sheep die-off in the late 1980s. Invaluable wildlife management information was lost due to this denial as well as a large portion

of a world-famous bighorn sheep population. Each year the Aravaipa wilderness designation causes additional coordination with BLM for annual helicopter bighorn sheep surveys. Letters are sent out to all hikers who hold Aravaipa permits during that day of our survey to tell them why we are flying a helicopter over wilderness.

Table Top Wilderness

In the mid-90's, BLM personnel proposed to block construction of a wildlife water in the Table Top Wilderness Area. Reasoning for BLM's reluctance to approve this project included potential impacts to vegetation as a direct result of population increase of desert bighorn following construction of the water catchment. The BLM also stated that a catchment could negatively impact visual quality of the wilderness, although the Department provided examples of how a catchment could be constructed in order to blend in with the landscape. Disturbance of the wilderness experience was also a concern if the catchment would need to be filled during periods of low rainfall. The Department proposed to consider area rainfall in the capacity design of the catchment to avoid the necessity of filling the catchment during drought. The Department also anticipated that impacts to wilderness visitors would be relatively low during the hot summer months when supplemental water might be needed to fill the catchment.

Maricopa Wilderness Complex

In development of the Maricopa Wilderness Complex Plan, BLM proposed minimum and maximum bighorn population thresholds, which must be met prior to allowing transplants of individual bighorn sheep into or outside of the wilderness area. Because existing data for this population is limited, the Department was uncomfortable providing such threshold figures. Imposing these restrictions represents a situation where the Department's wildlife management responsibilities were impacted.

Harcuvar Mountain Wilderness

More recently, the Department has been working cooperatively with BLM to redevelop a wildlife water within the Harcuvar Mountain Wilderness Area. The Department and BLM were working on finalizing the NEPA documentation and compliance, and implement the project in this upcoming year (2004/2005). However, recent questions/concerns voiced by a wilderness group have essentially stalled the project. We feel that because of the comments received, even though we feel we can address the concerns appropriately, there is now some hesitancy on BLM's part to continue moving forward perhaps because of the potential for legal challenge.

It is often proposed by BLM staff to Department staff (or vice versa) to move projects outside of designated Wilderness to reduce these issues with workload, time delay, or possible legal challenges.

In the case of the water redevelopment proposed in the Harcuvar Mountains (as mentioned above); it was the wilderness group that proposed moving the water project outside the wilderness boundary. They do not agree that management of wildlife populations via providing reliable waters is consistent with the Wilderness Act's intent that wilderness remain untrammelled by "human interference" in natural processes. Moving a project can be appropriate in some cases, however, many times it will not work logistically or biologically, and in this case,

providing a water source within core bighorn habitat (i.e. within the Wilderness) is critical because of the higher quality habitat. Providing water at lower elevations would be less likely to benefit bighorn sheep, because they utilize the higher topography of the mountain. In addition having to move to lower elevations brings them into closer contact with domestic livestock and mule deer, which is a concern because of disease and competition.

Listed below are Department wildlife projects that were either historically, or more recently, affected by interpretation of Forest Service Wilderness management guidelines:

Juniper Mesa Water Catchment/Juniper Mesa WA (Prescott NF)

This catchment was constructed prior to the designation of Wilderness. When the Department requested permission to enter the Wilderness area for maintenance purposes, the Prescott NF denied that request and required us to remove the tank by June 1989 on the grounds that it is incompatible with Wilderness.

South Canyon Pipeline Water Projects/ Saddle Mountain WA (Kaibab NF)

The Arizona Game and Fish Department has been prevented from placing drinkers on the existing South Canyon pipeline for wildlife use in the South Canyon area on the Kaibab National Forest.

Sycamore Canyon Mountain Lion Study/ Sycamore Canyon WA (Prescott NF)

Constraints imposed by Wilderness designation made this research project logistically and financially unfeasible. The project was relocated to a non-wilderness area.

Winter Range Aerial Deer Survey/ Kanab Creek WA (Kaibab NF)

A new quadrant based winter range aerial deer survey has been stopped by USFS by their refusal to allow marking the quadrants in any manner which could realistically be seen from the air.

Inability to retrieve valuable data and expensive electric equipment/ Superstition WA (Tonto NF)

The Department has several radio-collared bighorn sheep in the Superstition Wilderness Area. The purposes of collaring these sheep is to monitor movements and to determine the causes of mortality. When an animal dies, the radio sends a mortality signal. It is important to get to the cause of death. In one case, permission to land a helicopter to retrieve the collar and inspect the animal was denied by the Forest Service.

Inability to initiate emergency law enforcement procedures for the benefit of the fish and wildlife resources

During 1980-81 winter wildlife helicopter surveys, one of our officers observed a big game violation in progress in the Superstition Wilderness Area and had the pilot land the helicopter so he could contact the suspects. Subsequent to the incident, the suspects complained to the Forest Service and a directive was given by the Forest Service not to land helicopters in a Wilderness

area without prior approval. The need to land in this case would have been impossible to forecast.

Gould's turkey transplant project/ Galiuro WA (Coronado NF)

The Department transplanted Gould's turkey into the Galiuro Mountains in 1994, 1997, 1999, and 2001, but not within the Wilderness Area, and outside of the best quality habitat. The transplants activities have not been successful, although it is unknown if the population would have been successfully established in the better quality habitat within the Wilderness Area. Considerable time and money were spent on these efforts.

Bat Gating Project – Dacite Cliffs Mine / Superstition WA (Tonto NF)

Dacite Cliffs Mine is an abandoned mine in the Superstition Wilderness that receives substantial human disturbance due to its proximity to the heavily used Peralta trail. The mine is easily accessible to visitors, who can drive within a quarter mile of the mine entrance to access hiking trails that pass near the mine entrance. Five species of bats have been documented using the mine, including the Townsend's big-eared bat and the California leaf-nosed bat, both considered special status species by the Department and the Western Bat Working Group. In addition, of the 463 documented bat roosts that the Department tracks statewide, only 14 sites have been documented as having five or more species. Dacite Cliffs Mine is among only 3% of the roost sites currently known to support this level of bat species diversity. Because bats have specific roosting requirements depending on the species of bat, sex of bat, and time of year, we believe a mine that supports this level of diversity is very important.

The Department believes the number of bats using the mine has decreased substantially over the last several years. The large amount of accumulated guano in the mine, and an estimate of pre-1996 numbers of approximately 2000 bats, indicates the roost was previously used by a considerably larger number of bats. Dacite is an important roost as indicated by continued use by up to 200 bats of 5 species despite persistent and harmful human disturbance. During every monitoring visit in the last 8 years, the Department has found evidence of human use at the interior and exterior of the mine. This evidence includes shotgun shells, cigarette butts, baseball bats/wooden clubs, racquet, firecrackers, sparklers, beer cans and bottles, carpet remnants, a mattress, a lawn chair cushion, and candles inside and around the mine. The frequent use of pyrotechnics, smoking, and human presence in the mine is disruptive to the bats and decreases the quality of their habitat. However, it is anticipated that protection of the site would result in an increase in bat numbers.

The Department has been encouraging the Forest to consider installing a bate gate for several years. The Forest completed public scoping, an Environmental Assessment, and a Minimum Requirement Decision Guide, with no public concerns. However, based on a recent meeting with the Department, the Forest expressed concerns over the placement of the gate in the Wilderness.

The Forest Service contends that, based on their interpretation of the Wilderness Act, it would be very hard to make the case that the bats are a "wilderness resource" since they do not depend on the wilderness per se, but rather on a man-made structure that happens to be in wilderness.

Furthermore, the Tonto National Forest Plan does not provide specifically for retaining this structure, but rather calls for removing such nonconforming structures.

The Department contends that the bats (and all fish and wildlife species) are a wilderness resource, and the mine is essentially a permanent structure in the wilderness that provides habitat for wildlife. In addition, we have documented the excessive disturbance at this mine for years and believe it must be adequately addressed. We maintain that installing a bat-compatible gate, placed far enough inside the mine to be completely out of visitor view, is an important step in mitigating the human disturbance that is occurring throughout the entire length of the mine corridor. A gate would prevent human access to the extensive mine corridor and would protect the bats from direct harm. It would also minimize human contact with histoplasmosis (a fungus that can thrive on bat guano in mines and caves and cause respiratory problems) and potential rabies exposure.

We believe this is one of the rare instances where proximity of wilderness to human habitation, and repeated human activity at this mine requires necessary actions to mitigate the impact of visitor use through direct wildlife management actions. At this time, the gate project has not moved forward.

Native Fish Reintroduction and Monitoring

In the early 1980's razorback sucker and Colorado pikeminnow were proposed for stocking within the Verde and Salt Rivers. This project was stalled on the Salt River based on the Department's request to use a gasoline-powered generator to sample fish within the Salt River Canyon Wilderness. We provided data to illustrate the differences in survey effort with the use of electroshocking equipment vs. nets alone.

The differences the Department experiences in process time for approval seems largely attributable to differences in attitudes of local USFS staff toward Wilderness and management projects. When the delays in the fish project were brought to the attention of the Forest Supervisor's staff and the Regional Forester, the District Office processed the proposal within a few days. Currently, the Department is coordinating the Salt River component of this project under an MOU with the Globe Ranger District that allows for the use of the generator to sample and monitor native fish.

In 2002 the Regional Supervisor at the time, Karl P. Siderits, sent a letter to Region VI in support of restocking and supplemental stocking of native fish into waters on the Tonto National Forest. The Department appreciates the support of land management agencies to conduct wildlife management within and outside of special land designations. However, without agency-wide support and guidance, we anticipate that Department activities will be delayed and/or possibly rejected.

Historical/Current Legal Challenges and Delays

Legal challenges (or potential legal challenges) external to either BLM or AGFD have caused and are causing lengthy delays, impacting both staff time and resource expenditures. Examples include:

Sonoran Desert NM - The Department and BLM worked cooperatively to develop a programmatic EA that permits the Department's maintenance of 16 existing wildlife water catchments within the monument. The Proposed Action would allow for the increase in storage capacity, update and replacement of worn or malfunctioning parts, provide for dependable year-round water, and eliminate regular water hauling trips to the wildlife water catchments. The BLM completed the EA (EA No. AZ020-2001-0035) and issued a Decision Record on May 29, 2002.

On July 8, 2002, the Arizona Zoological Society, Center for Biological Diversity, Friends of Cabeza Prieta, Sierra Club, Grand Canyon Chapter, and the Wilderness Society (all represented by the Land and Water Fund of the Rockies) appealed the BLM's decision to allow the Department to maintain and enhance our existing wildlife water catchments within the Sonoran Desert National Monument. The Appellants claimed irreparable harm if maintenance and redevelopment of the existing catchments were to proceed and that the EA was "inadequate and unsupported."

The Appellants filed the appeal to the Interior Board of Land Appeals (IBLA) and requested a Stay of the maintenance. The BLM did not oppose the granting of the Stay. The BLM believed that, even if the Stay were granted, it would be permissible for BLM and/or the Department to maintain the status quo, that is, to keep in proper functioning condition those catchments that were functioning at the time the Stay was granted. By Order dated August 15, 2002, the Board granted Appellants' request for a Stay. The Department did oppose the granting of the Stay and asked the Board to grant Intervenor status in the appeal. That Intervenor status was granted in the above cited order.

On April 16, 2003, the BLM and the Department requested clarification on whether the Departments activities to date constituted "maintenance" as contemplated by the IBLA, and further asked the IBLA to expedite its review of this appeal.

By Order dated June 23, 2003, the IBLA granted a request by BLM to clarify the August 15, 2002 order. Under the Stay Order the Department can continue to haul water to the catchments as it has in the past, but is prohibited from their maintenance that was approved by the BLM, pending the outcome of the appeal. In the same Order dated June 23, 2003, the IBLA denied BLM's and the Departments request for expedited consideration and encouraged the parties to resolve the case through settlement negotiations.

On August 26, 2003, the BLM requested from the Director, Office of Hearings and Appeals, to take jurisdiction over the appeal under 43 CFR 4.5 and to direct the IBLA to issue a decision within 60 days after the date of this memorandum. On August 27, 2003, the Department submitted an independent, but similar request.

The IBLA did not issue a decision on the appeal, and in December 2003, the Department submitted a request to Secretary Gail Norton, Department of Interior, to assume complete jurisdiction over the case.

Secretary Norton denied this request. The Stay Order remains in effect to date (May 2005 - almost 3 years), the appeal continues to be before the IBLA awaiting its ruling.

The key legal issues in this case are:

1. Does the proposed Action by BLM to maintain and redevelop 16 existing wildlife water catchments in the Sonoran Desert National Monument (in cooperation with the Department), comply with the purpose for which the Monument was established by Presidential Proclamation?
2. Does the proposed maintenance and redevelopment of these 16 existing catchments impose irreparable harm on the Appellants sufficient to justify and sustain a Stay?
3. Does the Proposed Actions EA satisfy NEPA compliance requirements?

The Department worked aggressively during the development of the Presidential Proclamations and the BLM's Interim Management Policy to maintain our ability to manage wildlife populations and habitat within the monuments. We are concerned that this appeal represents the first of many legal challenges of our public trust responsibilities and necessary wildlife management actions in the new monuments and other areas. Clearly, this appeal sends a strong message regarding the approach that certain special interest groups intend to pursue during development of the management plans and implementation of future management actions.

While we await the IBLA's decision on this case, the situation with regard to wildlife on the Monument grows more serious each day the drought continues in Arizona. The Department has been hauling water at an ever-increasing rate statewide, putting severe pressure on the Department's human and financial resources. In the last several fiscal years, the need for water statewide has increased 300% when compared to the previous four-year average. We need to know whether we can begin planning for the maintenance of the catchments approved by the BLM (and eliminate the need to haul water), or whether to begin planning for alternatives to accommodate the water needs of wildlife on the Monument. Those alternatives might necessarily include elimination of other Department programs and activities to accommodate the water hauling activities to the Monument.

Desert Bighorn Sheep Capture / Four Peaks WA

The Department was recently challenged on the use of helicopters in designated Wilderness for routine wildlife management activities (wildlife captures). Intervention by special interest groups resulted in interference with capture efforts on the Four Peaks Wilderness between about June 2000 and September 2001 (USFS allowed us to continue after that time). This delay resulted in reduced numbers of radio-collared animals early during the study, gaps in data, and modification of initial study design. Subsequently, animal rights groups sued USFWS and challenged USFS, this issue only recently being resolved. Use of helicopter on wilderness to capture bighorn was a key issue.

McKinney, T., J. C. deVos, Jr., and R. D. Broscheid. 2000. Public intervention in wildlife research-a case history. Desert Bighorn Council Transactions 44:14-21. This article documents problems we faced in our recent study in Mazatzal Mtns [GMU22].

As examples of the significant time delays involved in legal decisions, listed below are a few additional wildlife-related or access-related NEPA decisions (from 1992 – 2005) from BLM in which appeals have been filed to the IBLA. The information includes the number of years IBLA took to make a determination on the reason for appeal.

IBLA # (year)	Action Upheld	Action Reversed	Action	Reason for Appeal	Years
92-624		X	Extending cherry-stemmed road in WSA on grandfathered mining claims	Did not meet standards for grandfathered uses over non-impairment standards	3.58
92-564		X	Regravel road crossing WSA and ACEC	Failure to do environmental analysis	1.08
94-802, 94-903	X		BLM approved construction of temporary fence for grazing in WSA	Fence will presuppose grazing and limit alternatives in future grazing decisions, will impair WSA	3.33
96-206	X		BLM denied request for ROW to do geological research in WSA because of non-impairment	Important earthquake info on geological formation is only found within WSA	1.92
99-295	X		BLM proposed to install 6 small mammal and bird water catchments	Failed to analyze impacts to wilderness values in lands not inventoried	0.58
2001-414	X		BLM approved ROW for existing and used airstrip in area "surrounded by wilderness quality lands" – was not WA or WSA	Procedure did EA not EIS and did not adequately review impacts to primitive recreation	2.58

Impacts to wildlife, Impacts to the Department

During the July through June fiscal years ending in 1998 through 2002 (five years) the Department hauled an average of 30,190 gallons of water per year to the catchments in the Sonoran Desert NM (covered in the above mentioned EA). Assuming we averaged 1500 gallons per trip and four trips per 10-hour day, this equates to approximately 20.1 trips, 5 ten-hour days and 50 man-hours. At an average of \$0.25 per gallon, the average overall cost was at least \$7,547.50 per year, and likely higher due to high vehicle maintenance costs and rising fuel prices.

During the fiscal year that overlapped most closely with the drought of 2002 (July 2002 to June 2003), those numbers jumped to 56,300 gallons, 37.5 trips, 9.4 ten-hour days and 94 man-hours. This equates to an approximate cost of \$14,075 for FY 03. Statewide, our water-hauling numbers increased by over 4 times the average during FY 03, from approximately 400,000 gallons to 1.8 million gallons.

Statewide, we have approximately 647 true catchments, 725 when you add tinajas, 813 when you add developments with springs as their water source. There are literally hundreds more if you

add the BLM and Forest Service water catchments built specifically for wildlife that we maintain if deemed important to wildlife.

Restrictions to access or wildlife management activities caused by public land designations or allocations made by Field Offices to implement on-the-ground projects, haul water, or maintain or restore the functionality of waters impact the Department's authorities, cost the Department time and dollars, and impact the state's wildlife resources.

A study by Hervert and Krausman (1986) evaluated the behavioral effects on desert mule deer when traditional watering sites were removed. They observed that the deer traveled outside of their known home range, through areas where no other deer had been observed during the previous 3 years of study. These were open areas with little palatable forage. During the summer season, it was documented that collared deer remained inactive during the day to conserve energy and to reduce water loss. Hervert and Krausman found that does were more likely to water during the hours around sunset. The Department is concerned that animals being forced to move greater distances, across poor or varying habitat put themselves at risk for a variety of factors including, health, dehydration, reduced fecundity, predation, etc.

Additional anecdotal evidence (ADBSS 2004) exists that documents direct mortality events at dry waters, and population increases when dependable water is added to the dry areas. These individual scenarios support the value of maintaining and developing additional waters, where warranted, particularly in areas where habitat fragmentation has occurred, resulting in loss of natural waters. In years of drought and extended dry and hot weather, it becomes vital for Department staff to access waters, to coordinate with land management agencies, and to move on projects in a reasonable time frame.

The effects of expanding human populations on wildlife habitat are the greatest challenges that wildlife management agencies face. Management of small wildlife populations is a growing concern as human-related infrastructure such as highways, powerlines, dams and aqueducts, and urban expansions fragment habitats and wildlife populations into smaller, discreet units, which in turn increases the risk of a species extinction. A hands-off, preservationist approach to maintenance of biological diversity is no longer a feasible option, especially in Arizona, where human related impacts have resulted in generally small population sizes.

As habitat becomes more fragmented, and water sources become more limited, the Department will need to provide a more proactive approach to wildlife management in efforts to maintain and improve declining populations of game and nongame species. Limitations to the Department's abilities to access public lands will lead to decreased resources going to on-the-ground projects, and more time and effort being used to address legal issues.

Hervert J.J. and P.R. Krausman. 1986. Desert mule deer use of water developments in Arizona. *J. Wildl. Manage.* 50(4): pp. 670-676.

Arizona Desert Bighorn Sheep Society. 2004. Wildlife water developments and desert bighorn sheep in the Southwestern United States. 16pp.

ANTICIPATED FUTURE RESTRICTIONS

The Arizona Game and Fish Department has placed a high priority on being involved in the beginning stages of resource management plans on federal lands to ensure coordinated efforts to manage Arizona's wildlife resources. The Department has been striving to negate some of the anticipated future restrictions resulting from special land designations.

Wilderness on BLM Lands

The Department greatly values the need to conserve landscapes for wildlife population viability and health. However, we are concerned that, as in the past with proposed wildlife management activities in Wilderness Areas, the prescriptions and desired future condition settings associated with "managing lands to maintain or enhance wilderness characteristics" (IM 2003-275) (and other allocations) on BLM lands and within ONA/ACECs sets up a "wilderness philosophy" and a framework of management that resembles management in Wilderness Areas. The tables listed below illustrate that congressionally managed wilderness and lands managed for wilderness characteristics as an allocation are hard to differentiate.

To make the link between wildlife management in Wilderness Areas, and future management of wildlife within ONAs, ACECs or lands managed for wilderness characteristics, a comparison of language matrix follows:

Below extracted from the Wilderness Act of 1964	Below extracted from definitions within IM 2003-275-Change1 Attachment1 for Wilderness Characteristics
"Where the earth and its community of life are untrammelled by man"	"where the sights, sounds, and evidence of other people are rare or infrequent"
"imprint of man's work substantially unnoticeable"	"...imprint of human activity is substantially unnoticeable."
"affected primarily by the forces of nature"	"affected primarily by the forces of nature"
"outstanding opportunities for solitude or a primitive and unconfined type of recreation"	"outstanding opportunities for solitude, or primitive and unconfined types of recreation..." "where visitors can be isolated, alone or secluded from others..."
"without permanent improvements or human habitation"	"the imprint of human activity is substantially unnoticeable."
"no structure or installation within any such area"	"no or minimal developed recreational facilities are encountered"
"an area of undeveloped federal land retaining its primeval character and influence"	"Lands and resources exhibit a high degree of naturalness..."
"protected and managed so as to preserve its natural conditions"	"a high degree of naturalness..."

Below extracted from the Wilderness Act of 1964	Below extracted from VRM Class I objectives IM 2005-007 (assigned to designated wilderness and in some cases, wilderness characteristics)	Below extracted from Backcountry definitions IM 2005-007 (settings consistent with Wilderness)
“Where the earth and its community of life are untrammelled by man”	“preserve existing landscape character” “very limited management activity” “provides for natural ecological changes”	“undeveloped, primitive, and self-directed visitor experience without provisions for motorized or mechanized access”
“without permanent improvements or human habitation”	“preserve existing landscape character” “very limited management activity” “provides for natural ecological changes”	
“an area of undeveloped federal land retaining its primeval character and influence”	“preserve existing landscape character” “provides for natural ecological changes”	“undeveloped, primitive, and self-directed visitor experience without provisions for motorized or mechanized access”
“protected and managed so as to preserve its natural conditions”	“managed so as to preserve its natural conditions...”	
“affected primarily by the forces of nature”	“provides for natural ecological changes”	
“no structure or installation within any such area”	“managed so as to preserve its natural conditions...” “very limited management activity”	
“outstanding opportunities for solitude or a primitive and unconfined type of recreation”		“undeveloped, primitive, and self-directed visitor experience without provisions for motorized or mechanized access”
“imprint of man’s work substantially unnoticeable”	“very limited management activity” “provides for natural ecological changes”	“undeveloped, primitive, and self-directed visitor experience without provisions for motorized or mechanized access”

SUCSESSES

There are projects that have been successfully implemented within lands designated under a special designation:

- Redevelopment of 712 and Triple Eye Tank (Eagletail Wilderness)
- Redevelopment of Woolsey, Bunyan, and Signal Tanks (Gila Bend Wilderness)
- Redevelopment of Red Cliff Tank (Buckskin Wilderness)
- Redevelopment of Arch Tank in 2004 (Bighorn Wilderness)
- Redevelopment of North Pinta and Heart Tanks in 2005 (Cabeza Prieta National Wildlife Refuge, Wilderness)
- Four new waters for Sonoran pronghorn in 2004/2005 (Cabeza Prieta National Wildlife Refuge, Wilderness)
- At least seven projects completed since 1995 (Kofa National Wildlife Refuge, Wilderness)

The Region II Office, cooperatively with the Arizona Strip BLM Field Office developed the Arizona Strip Desert Bighorn Sheep Management Plan, Amended May 2001, that directs bighorn management activities related to releases, captures, and water facility maintenance. This document has been pivotal in the implementation of bighorn sheep management projects, both within and outside of Wilderness Areas.

Paiute Wilderness Area Bighorn Sheep Transplants/Augmentations

Nov 1979: 12 sheep put into an enclosure in Hedricks/Fhrehners Canyon – numbers increased to 25. Of the 25, 21 were released in May 1992.

Nov 1981: 20 bighorn released into Sullivan's Canyon

Nov 1931: 21 bighorn were released near Buck Springs south of the currently designated wilderness

No other releases occurred in the area after wilderness designation, because the population has been thriving. The Department is now looking at the potential of conducting a capture of bighorn from the Beaver Dam/Paiute Wilderness Area to be transplanted to the Kanab Creek Wilderness Area. We have not met any objections by BLM, likely due to the project falling under the Arizona Strip Desert Bighorn Sheep Management Plan.

Grand Wash Cliffs Bighorn Sheep Transplants/Augmentations

July 1983: 22 bighorn released into Squaw Canyon

Aug 1983: 12 bighorn released at Olaf Knolls Wildlife Water Catchment

July 1984: 5 bighorn released at Olaf Knolls Wildlife Water Catchment

July 1985: 22 bighorn released just south of Wilderness boundary in Grand Gulch Canyon

1995: 22 bighorn released outside of wilderness in Snap Canyon

1999: 22 bighorn released inside wilderness at the Olaf Knolls Wildlife Water Catchment

The recent release within wilderness was done in conjunction with the Bighorn Management Plan. The Department was not met with adverse reactions or unnecessary time delays related to this project.

Additional activities that have occurred within these wilderness areas include water development repair and maintenance, new water development and construction (Ferguson Pockets North), and helicopter water hauling and water development inspection. Again, it is due to the cooperative management plans developed specifically for bighorn sheep. The Department was able to successfully argue many of the repairs because bighorn sheep are considered a wilderness value.

While there continues to be occasional opposition from BLM regarding the need to locate a new water in wilderness, or inspecting or hauling water via helicopter, these efforts remain implementable, mainly due to bighorn sheep being identified as a wilderness resource and identified in the BLM wilderness plans and in the Department – BLM bighorn sheep management plan.

SUMMARY

1. Interpretation of the Wilderness Act language by federal agencies – inconsistent applications within and across agencies.
2. There are no over-arching FS or BLM agency-wide or statewide policies in place to guide district and field offices regarding coordination of projects with the state wildlife management agency. The guidance in place for management of wildlife within wilderness areas is still subject to interpretation, and is seldom referenced by either FS or BLM. This does not allow for consistency between agencies.
3. The use of Wilderness Act language by certain publics has proven effective at stalling and halting projects.
4. Lack of consideration for wildlife resources, including management, as an important wilderness resource (solitude, human recreation are set as priorities above wildlife projects).
5. Courts/lawsuits/appeals continue to further define the language in the Wilderness Act (i.e., U.S. Court of Appeals Ninth Circuit Ruling on *The Wilderness Society, Alaska Center for the environment v. U.S. Fish and Wildlife Service*), as well as the logistics of on-the-ground wildlife management on public lands, regardless of special land designation.
6. Success has been met on a regional level when wilderness area management plans identify key wildlife management activities, and species-specific management plans can be developed cooperatively between resource agencies.

Attachment

Land Status and Designations in Arizona

<u>Land Status in Arizona</u>	<u>Number of Acres</u>	
PRIVATE	12,798,850.60	
STATE TRUST LANDS	9,300,310.50	
BUREAU OF LAND MGMT	12,129,110.60	
U.S. FOREST SERVICE	11,155,856.30	
INDIAN RESERVATION	20,095,146.30	
MILITARY	2,853,163.10	
USFWS NWR	1,713,815.50	
REGIONAL/STATE PARK	145,339.80	
MIXED/OTHER	19,124.90	
NATIONAL PARK SERVICE	2,569,468.90	
AGFD	30,804.20	
U.S. BUREAU OF RECLAMATION	120,175.50	
TOTAL	72,931,166.20	100% of All Lands

Federal Lands (Not including Tribal Lands)

BUREAU OF LAND MGMT	12,129,110.60	
U.S. FOREST SERVICE	11,155,856.30	
MILITARY	2,853,163.10	
USFWS NWR	1,713,815.50	
NATIONAL PARK SERVICE	2,569,468.90	
U.S. BUREAU OF RECLAMATION	120,175.50	
TOTAL	30,541,589.90	41% of All Lands are Federal

Federal Public Lands With Use Restrictions

BLM WILDERNESS	1,400,000	
USFS WILDERNESS	1,334,409	
USFWS NWR WILDERNESS	1,343,444	
NPS WILDERNESS	440,589	
Total Acres of Designated Wilderness in Arizona (including NPS)= 4,518,442		
BLM MONUMENTS	2,004,337	
USFWS NWR NON-WILDERNESS	370,371	
MILITARY	2,853,163	
NPS NON-WILDERNESS	2,128,879	
Total Acres of Restricted Federal Public Lands = 11,875,192		
TOTAL		38% of All Federal Lands have restrictions