# Rim Country Community Wildfire Protection Plan

# Fall 2006 Update





Photo by: J. Schwennesen

# Gila County, Arizona

#### The Rim Country Community Wildfire Protection Plan

is a collaborative effort of individual property and business owners, fire districts, local, county, and state government, along with the USDA Forest Service.

For more information about the plan, contact your local fire district, the Gila County Department of Administration, the Forestry Division of the Arizona State Land Department, the Payson Ranger District of the USDA Forest Service, or one of the other cooperators listed below:

- Payson Fire Department (928) 474-5242
- Diamond Star Fire Department (928) 474-3835
- Pine Strawberry Fire District (928) 476-4272
- Christopher-Kohl's Fire District (928) 478-4011
- Beaver Valley Fire District (928) 472-4711
- Houston Mesa Fire District (928) 472-7908
- Tonto Village Fire District (928) 478-4875
- Gila County Arizona, Department of Administration (928) 474-2029
- Arizona State Land Department, Payson Field Office (928) 468-6411
- USDA Forest Service, Payson Ranger District (928) 474-7900

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## 2004 Rim Country Community Wildfire Protection Plan Executive Summary

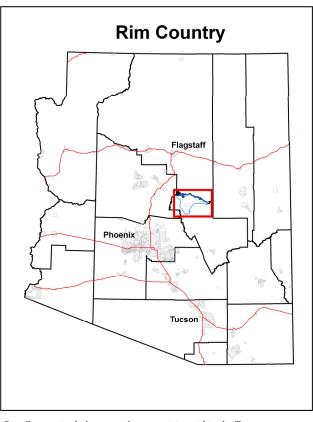
The Rim Country Community Wildfire Protection Plan takes both a landscape and local view to ensure the safety of the extensive rural communities under the Mogollon Rim, in central Arizona. This region is characterized by a mix of dryland forest, mixed conifer and riparian ecotypes in broken to steep topography, dominated by the sharp cliffs dividing the northern part of the state from the lower elevations in the south. The forests are particularly adapted to, or influenced by, natural fire: the Ponderosa type is specifically adapted to frequent fires, and the Pinon-Juniper and Oak Chaparral types are at least partly the result of relatively recent fire suppression policy at the national level.

The great preponderance of the 298,000 acres within the 450 square miles of the proposed Protection Plan lies under the jurisdiction of the US Forest Service. Most of that is currently in fire hazard condition class 3, with at least three missed normal fire events and large accumulations of fuels. Tree density has increased a hundredfold in the last century.

There are at least 88 defined communities and 30,000 residents within 9 fire districts, all of which rank as significantly threatened by the accumulated fuels in the surrounding forest. Residents and local emergency services have been actively addressing wildfire danger through education, training, coordination and cooperation.

Wildfire risk assessment has been carried out in detail. Emergency planning and coordination are up to date and comprehensive between agencies and departments. However, the scale of the community protection task is enormous, considering that over 90% of the area is National Forest, where the dangerous fuel buildup has occurred. In short, these communities are surrounded by massive (average estimate of 37.5 tons per acre or 11.8 million tons total) amounts of accumulated fuels which must be aggressively removed, and soon, if a catastrophe is to be averted. The present drought, now in its ninth year, and consequent bark beetle mortality, adds a high degree of urgency to this already-critical situation. Fortunately there is good research, science and expertise close at hand through the state's three universities and the USDA's Rocky Mountain Research Station in Flagstaff. While the results of their research have perhaps not received sufficient recognition by federal policymakers in the past (warnings of dire consequences to fire suppression policy in the West have been made for decades), the present fire crisis has underlined the necessity of a serious revamping of the approach to dryland forest management.

It is not just human communities which are at risk; wildlife, watersheds and the forests themselves are in the balance. New approaches are needed for new times.



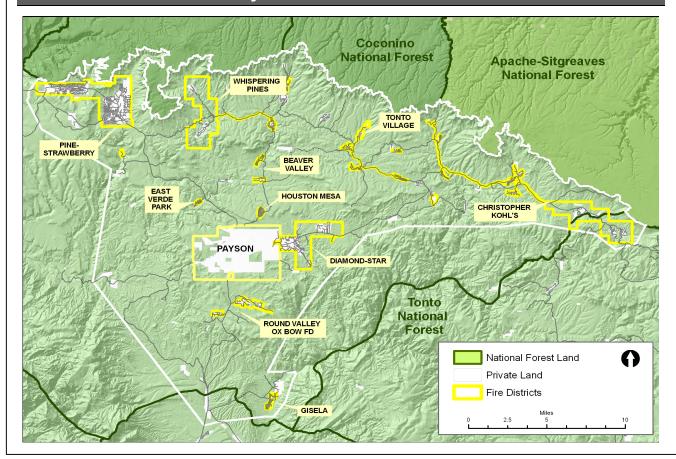
Rim Country includes several communities within the Tonto National Forest of northern Gila County, Arizona.

## Rim Country Community Wildfire Protection Plan 2006 Update

Gila County Arizona's Rim Country Community Wildfire Protection Plan was submitted in October 2004 by a core team which agreed to fuels treatment priorities, preferred methods for fuels treatment projects, the location of the wildland-urban interface and structural ignitability recommendations. It was agreed that the core decision makers would convene annually, after each fire season to review and update this dynamic and evolving plan.

It has since been concluded that every 2 years is a more realistic update schedule in order to allow sufficient time for progress to be measurable. The first UPDATE meeting was held August 30, 2006. Overall, it was concluded that the plan, as it stands, is still relevant, the direction provided remains on target and that it is useful in support of grant applications. It was determined that this first UPDATE will monitor progress to date and blocks to progress that need to be addressed. There will be another UPDATE in 2008 and a re-assessment, in which the hazard surveys will be redone on a neighborhood by neighborhood basis, in 2010. At that time, data may be weighted differently, but then compared to a re-weighted original if communities feel too much emphasis was placed upon conditions outside their control.

Prevention, Education and Protection progress is summarized on the following pages and maps:



## **Rim Country CWPP and Local Fire Districts**

# **USDA Forest Service**

The forest surrounding the communities of Pine, Strawberry and Payson has sustained a heavy amount of ponderosa pine mortality as a result of continuing drought and the pine bark beetle epidemic. All communities within the Payson Ranger District are at risk due to potential for wildfires. The following are actions that the district has taken or are currently underway:



The Wildland Urban Interface near Payson

#### **Hazard Trees**

- 2003 surveys showed the ponderosa pine mortality on the Payson (RD) to be widespread, and very high near Pine/Strawberry communities.
- Approximately 150 hazard trees in Pine and 100 hazard trees in Strawberry identified, cut, piled and burned.

## **Fuel Breaks**

- 2003 2007, Payson RD area under contract: 4,696 acres.
- Pine/Strawberry area:
  - Listing of Chiracahua leopard frog and Mexican spotted owl required consultation with U.S. Fish & Wildlife Service (USF&WS).
  - Construction of the project began utilizing Arizona Department of Correction (DOC) crews.
  - Fuel break contract awarded to RCO Reforesting from Yreka, CA, on September 18, 2003 for 752 acres; piles created in the fuel break were burned during the winter of 2004.
  - In 2006, the Pine-Strawberry Fire District maintained fuel breaks funded through public donations; authorized under a Participating Agreement.
- In 2003, contracts awarded for fuel break construction of approximately 1,874 additional acres.
- 2004-2005, goats were utilized as a fuel reduction treatment of approximately 1,000 acres at the southern boundary of Payson.

- In 2006, the Gila County Board of Supervisors authorized funds to be spent on fuel breaks on National Forest System lands adjacent to Pine/ Strawberry, Payson, Star Valley and East Verde Park.
- The Town of Payson, Tonto-Apache Tribe, and local homeowner's associations also provided funding for additional fuel breaks.
- 481 acres were cut and piled with these projects; fuel breaks were authorized by the Forest Service with a Participating Agreement.

## Water Sources

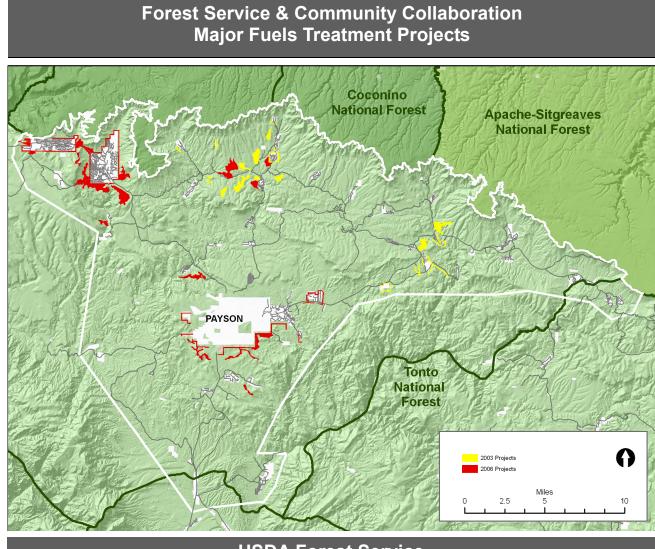
- In 2006, Gila County Board of Supervisors authorized purchase of 10 water tanks and bladders to be strategically located throughout northern Gila County for wildfire suppression purposes.
- Tanks are approximately 5,000 gallons; bladders are approximately 20,000 gallons.
- Where water sources were placed on private land, Land Use Agreements were developed.

## Forest Thinning and Salvage Sales

- Salvage logging, thinning and prescribed burning and harvesting was initiated with a Decision Memo using the streamlined provisions of the Healthy Forests Restoration Act (area south of Pine includes approximately 670 acres, with estimated volume of 800,000 board feet -- 1600ccf).
- Approximately 60 acres salvage sale with estimated volume of approximately 250,000 board feet.
- In 2006, contract to thin and remove hazardous fuels on approximately 1,012 acres (approximately 582 acres in the Pine/Strawberry area) was completed.
- Since fiscal year 2001, the Payson Ranger District has prescribe-burned 18,350 acres.

## **Brush Disposal Pits**

- Payson RD opened five old borrow pits for disposal of brush by the public.
- Areas are managed in cooperation with the Regional Payson Area Project (RPAP) and a Wildland Urban Interface (WUI) volunteer working group, which assists with checking loads when the pits are open.
- The local fire districts also assist with burning the pits once they are full.



## **USDA Forest Service**

## **WUI Planning**

- The Payson Ranger District has planning for largescale WUI treatments. Treatments consist of fuel breaks, prescribed burning and forest thinning.
- Three planning areas have been approved:
  - Verde Analysis Area: 48,688 acres, with 12,111 acres available for thinning and 28,438 acres for prescribed burning.
  - Payson Analysis Area: 68,242 acres, with 10,307 acres available for thinning and 35,037 acres for prescribed burning.
  - The Pine/Strawberry Analysis Area contains 72,447 acres, with 17,105 acres available for thinning and 40,927 acres for prescribed burning.
- The Christopher/Myrtle planning area of 24,288 acres is scheduled to start in FY 2007.
- There are 2,500 acres ready for contract using the Verde, Payson and Pine/Strawberry projects, but work is currently unfunded.

## **Community Involvement**

The Payson District Ranger has attended numerous public meetings throughout the district regarding the Ponderosa Pine mortality and wildfire threat. There is overwhelming support for the Forest Service to complete any actions that would reduce the threat of wildfire.

## Arizona State Land Department / Forestry

#### **Prevention:**

In coordinated efforts between the Arizona State Land Department Forestry Division and Department of Corrections fire/fuels crews...

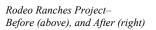
- Acres thin/cut and piled immediately south of The Knolls community in collaboration with Diamond Star Fire Department, USDA Forest Service - Payson Ranger District. (The Knolls Project)
- 6 Acres pile burning on private land in conjunction with Pine Strawberry Fire District. (Carlyon Burn Project)
- 4+ Acres of forest land thin/cut and piled immediately South and West of Rodeo Ranches subdivision, in collaboration with Payson Fire Department and USDA Forest Service - Payson Ranger District. (Rodeo Ranches Project)
- 10 Acres prescribed burn on private and forest land adjacent to Bray Creek Ranch in collaboration with USDA Forest Service - Payson Ranger District. (Bray Ranch Project)
- 11 Acres cut/thin and chipped within greenbelt adjacent to 250 homes in Payson North III subdivision in collaboration with Payson North III Homeowners Association. (Payson North III Project)
- 95 Acres (61 lots and 105 structures) cut/thin and chipped from around structures in an ongoing collaboration with Pine Strawberry Fire Department. (Pine Strawberry Project)

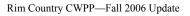
#### **Education:**

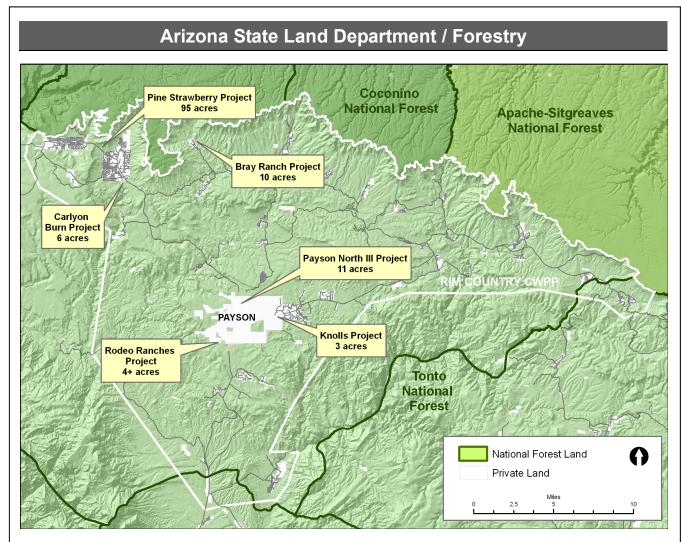
- 48 Properties within the CWPP footprint received Individual assessments/education relating to wildland urban interface risk reduction practices in 2005. Assessments took place in the following communities: See Canyon, Brooks, Kohl's Tonto Creek (Kohl's Ranch), Bray Ranch, Pine, and Strawberry.
- 2 Forest management plans were written in 2005. One covering 9.4 acres for See Canyon Homeowner's Association in the Christopher Creek area and one covering 4 acres in Pine.
- 200+ Acres of Non-industrialized Private Forest impacted by education attributed to community workshops and assistance with CD Forestry Program.
- 5 Management plans completed in 2006 for Kohl's Ranch—49.5 acres, Fumusa Pine—3 acres, Elk Ridge Payson –32 acres, East Verde Park Firewise Plan—160 acres, and Rim Golf Club Firewise Plan –390 acres.
- 1 Advisory support on Portals 4 Management Plan in 2006—125 acres.
- 71 FIREWISE Assessments completed in 8 different communities in 2006—including Kohl's Ranch, Portals 4, Christopher Creek, Ponderosa Springs, Hunter Creek, Chaparral Pines, Rim Golf Club, and Ellison Creek that involved more than 895 total acres.
- 2.5 Acres included in insect and disease evaluations.
- 3 FIREWISE presentations in 2006 at Ellison Creek, Rim Golf Club, and East Verde Park involving 81 people and impacting more than 530 acres.



Community meetings are a critical component in sharing information and understanding public concerns.











## **Points of Concern:**

- Encouraging increased collaboration on CWPP projects between public agencies, residents, and private enterprise to include training, resource sharing, grant/funding proposals, technology transfer, and public information/education.
- Developing effective and economical methods to overnight State Forestry/DOC Fuels-Fire Crews in the CWPP area. This would increase the availability of out of area crews to perform fuel hazard reduction.
- Training and qualifying more individuals as
  Firewise assessors and advisors. This will expedite
  community's abilities to work towards and receive
  "Firewise Communities USA" recognition status.



## Payson

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#### **Prevention:**

- 150 Acres private land treated.
- 55 Hazard trees removed.
- 377 Acre fuel break on the southeast, south, and west boundary of Payson cut and stacked.
- Planning underway for fuel break at northwest corner of Payson proposed for 2007.
- 88 Acre fuel break at East Verde Park completed cut and stacked.
- 3 Communities achieved FIREWISE USA recognition in 2006. (Rim Club, Elk Ridge, East Verde Park
- 1 Community working toward FIREWISE USA recognition (Chaparral Pines).
- Mayor's task force on FIREWISE Communities established in 2006.
- Town of Payson Multi-Hazard Mitigation Plan approved by Arizona Division of Emergency Management and FEMA in March 2006.
- Continued funding and support of regional brush disposal pits.

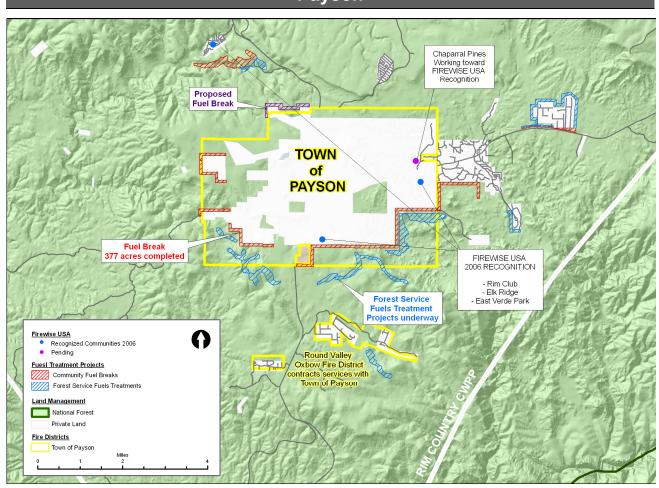
Elk Ridge achieves Firewise USA Recognition

### Education:

- 8 Public wildfire risk reduction presentations completed.
- 6000 Letters and *Living With Wildfire* tabloids mailed to residents of Payson, Round Valley, and Oxbow Fire Districts.
- 500 *Living With Wildfire* tabloids delivered to residents.
- TV4 informational and wildfire safety video produced.
- 4 Television appearances on KMOG "Town Tuesday" programs.
  - Television appearances on TV4 "TOP Talk" programs with wildfire awareness focus.
  - Multiple wildfire awareness articles published in newspapers.



## Payson



## **Protection:**

- 1 Wildland fire engine added in 2005 (Brush 111)
- 2 Water tanks installed in Round Valley Oxbow Estates in 2004
- Continuing seamless fire response with US Forest Service.



#### Firefighters and equipment share a "Survivable Space" message.

#### **Points of Concern:**

- Continuing the battle against public apathy.
- Maintaining community buy-in of the need for effective fuels management practices.
- Establishing and maintaining the necessary infrastructure for fire protection services.
- Establishment of renewable forest resources using industries to effect sustainable hazardous fuel reduction.
- Funding for property owner assistance and public education.

# **Diamond Star Fire / Star Valley**

#### **Prevention:**

- 183 Acres of fuel break completed around Star Valley utilizing a \$ 50,000 dollar donation from Gila County and funds provided by the USFS.
- 192 Acres of fuel reduction on private property performed by the Urban Interface Fuels Reduction Specialist program personnel.
- 465 Trees of sizes between 8" to 52" cut and removed from private property.
- 53 Firewise assessments on private properties within the district.
- 9,250 Cubic yards of brush hauled off and burned by our UIFRS program
- 95,000 Estimated cubic yards of brush burned at the Blatner Pit.
  - Purchased a 2006 A300 Bobcat and 20 ton trailer to haul brush off site, which has been cut by the homeowner or contractor in the fire district at no cost to the property owner.
  - Obtained a SFA grant for fuels reduction of \$ 180,800.00 at 50/50 matching funds.

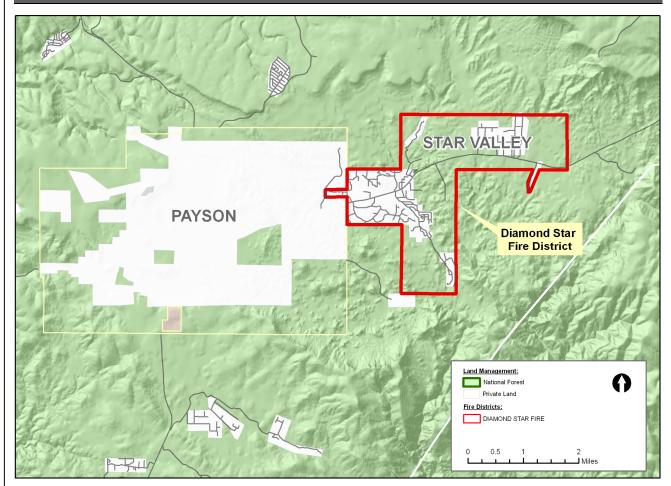
#### Education:

- We continue to meet with the public and offer Firewise and other discussions on protection in the Urban Interface.
- Work closely with the Town of Star Valley to update them and assist in their efforts to reduce fire dangers in their town limits and surrounding areas.
- *Living with Wildfire* tabloids handed out at many area functions and provided to the Town of Star Valley to hand out.
- Website update on Firewise issues and other fire prevention issues.

### **Protection:**

- Built two wildland fire engines, on 2006 Ford 4x4 four door chassis for fighting fires in the Urban Interface.
- Re-equipped 3,000 gallon Water Tender to provide better wildland firefighting by installing pump & roll and spray bars.
- Responded to more than 50 major National Wildland fires in the past 3 years with apparatus and personnel. The knowledge obtained by our personnel will better protect our community in case of a major wildland fire.
- Our personnel coordinate with other local fire departments and provide for Severity Patrols through the Arizona State Lands Department for unincorporated communities in the Rim area during high fire danger periods each year.

# **Diamond Star Fire / Star Valley**



### **Points of Concern:**

- Fuel breaks with piled fuels on them need to be burned off as soon as weather permits.
- Completion of fuel breaks by the USFS if they are funded for 2007-08.
- One-way in/One-way out subdivisions and access to these areas.
- Funding of fire protection services by the district and tax rates.

#### **Prevention:**

- 752 Acres of fuel break completed around Pine/ Strawberry utilizing donations received from residents and a contribution from Gila County.
- 180 Acres of fuel treatments completed by contractors and Arizona State Land Department / Forestry.
- 2285 Personal residence acreage cleared.
- 57 Acres of fuel treatment utilizing grant funding.
- 96 Structure areas cleared utilizing grant funding.
- 200+ Property assessments completed.
- Substantial fuels reduction work taking place in many areas by hand crew or homeowners.
- Selected roads widened and paved in northwest area of Strawberry

## Education:

- FIREWISE Education CD created and distributed.
- Billy Brushwacker youth education CD created and distributed for use in schools and youth Fire Safety education programs.
- Continue to organize monthly Pine/Strawberry Fuels Reduction Advisory Meetings with residents.

## Special Programs

#### FUELS PICKUP PROGRAM. A FREE

service that is vital to the community and key to community participation — this program allows the removal of debris from homes that wouldn't be collected otherwise. Many residents have no truck access, cannot afford landfill fees, or are elderly—and the pickup program allows for efficient collection of fuels debris and reduction in dangerous and illegal dumping.

**GOATS** have been an essential use in the field. They are used to do initial cleanup; breaking in to the dense brush, making paths, and reducing brush to allow crews to do mechanical clearing. Once initial cleanup has been done, goats can be used for annual maintenance. In the absence of fire, goats are the next best thing to reduce yearly fuel buildup.



Goats are used for initial cleanup, breaking in to dense undergrowth, making paths, and reducing brush.



Brush Pits are burned when conditions are safe.

#### Pine / Strawberry Coconino National Forest Service Timber Stand Forest Improvement 10,000 Gallon Water Tank Roads joined to create second egress 752 Acre Fuel Break ET KAVIDI STRAWBERR W Heli dip sites 752 Acre Fuel Break PINE (W Fuels Treatment Projects A Forest Service Fuel Break **Fuel Treatment** Forest Service Timber Stand Improvements **Projects Underway** Forest Service Fuels Treatment Projects Forest Service Timber Stand Water Sources - Dip sites W Improvement Land Management Tonto National Forest Private Land National Fire Districts Forest (W)

## **Protection:**

- 2 Water bladders obtained from County and ready for use.
- 1 10,000-gallon water tank located at Highway 87 and Fossil Creek donated and ready for immediate use.
- 2 Heli-dip sites established at west end of Strawberry and south end of Pine.
- Dead-end roads joined in Strawberry for needed secondary ingress and egress to area.



Arizona State Land Department Crews work on the Carlyon burn project in conjunction with the Pine/Strawberry Fire District.



# **Christopher - Kohl's**

#### **Prevention:**

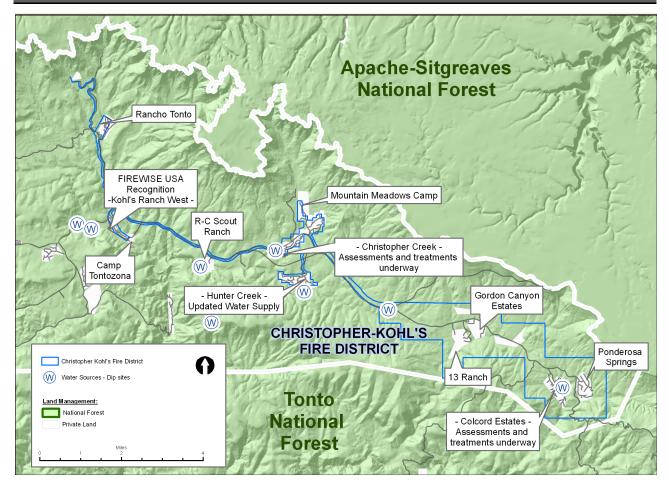
- 19 Property Assessments complete in Christopher Creek
- 10 Property Assessments complete in Hunter Creek and fuel reduction begun.
- FIREWISE USA recognition achieved for Kohl's Tonto Creek Subdivision (Kohl's Ranch).
- 91 Residence Assessments completed in Kohl's Tonto Creek and fuel reduction is underway.
- Fuel reduction underway in Mountain Meadows Camp.
- 6 Residence Assessments completed in Ponderosa Springs and fuel reduction has begun.
- 6 Residence Assessments completed in Colcord Estates and fuel reduction has begun.
- 13 Residence Assessments completed in See Canyon and fuel reduction has begun around residences and common areas.
- 2 Residence Assessments completed at The Brooks and fuel reduction has begun.





Kohl's Ranch achieves Firewise USA recognition in 2006.

# **Christopher - Kohl's**



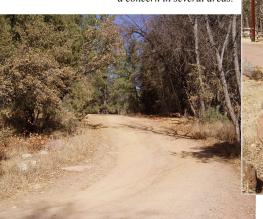
### **Protection:**

- Fire Water tanks & pumps have been added in Camp Tontozona.
- Hunter Creek water supply updated and is now more adequate for firefighting.
- Fire pump installed at Rancho Tonto.

### **Points of Concern:**

- Roads and evacuation routes are a concern in the Tontozona area.
- Road widths, evacuation routes, and water supply are all a concern in Mountain Meadows Camp.

Road widths and evacuation routes remain a concern in several areas.





## **Beaver Valley**

#### **Prevention:**

- 3,000 Cubic Yards of hazardous brush removed from community.
- 65% Property owner compliance with FIREWISE standards.
- 2 Firebreaks created by Flagstaff Hotshots. One north and one south of community.

#### Education:

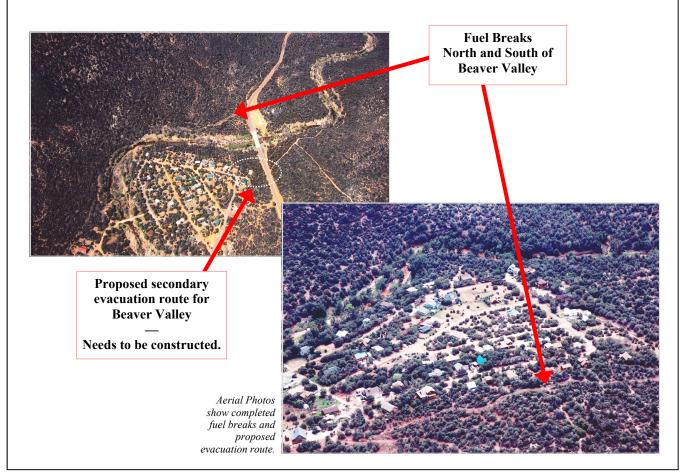
1 FIREWISE Education Event over 2006 Labor Day weekend with over 300 people in participation.

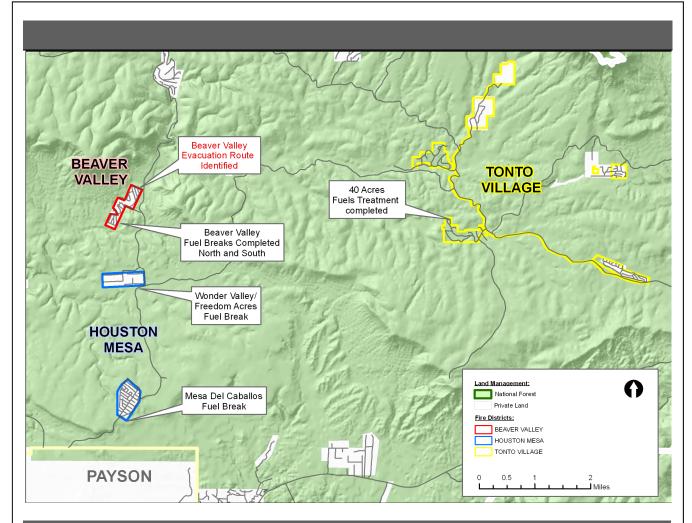
#### **Protection:**

- 70% Roads now paved via chip seal. (all were dirt in 2004)
- 3 10,000 gallon water tanks installed at water company and plumbed to accommodate emergency fire truck use.

#### **Points of Concern:**

- Establish secondary evacuation route. Location has been identified.
- Thinning of forest south of Beaver Valley. With prevailing winds coming out of the South/ Southwest, and our Community located in a valley, a wildfire originating south of our community could be disastrous.
- Moving power lines underground.
- Widening of some roads to 20' wide.





# **Houston Mesa**

## **Prevention:**

- 50% Completion of fuel break around entire Mesa del Caballos community.
- 65% Completion of fuel break around Wonder Valley/ Freedom acres community.

### Protection:

- Roadways now all-weather gravel surfaced in Wonder Valley and Freedom Acres subdivisions.
- Utilities underground in Wonder Valley and Freedom Acres subdivision.

## **Points of Concern:**

• Unable to move utilities underground in Mesa del Caballos subdivision.

# **Tonto Village**

#### **Prevention:**

40 Acres hazardous fuels treatment completed

## **Gila County**

In 2006 the 4,200-acre February Fire in (of course) February spurred Gila County officials to begin a series of meetings with local fire chiefs and everyone else who could be impacted by a catastrophic wildfire. Attendees were challenged to think of ways to do things better, to communicate and coordinate better, and to act more like a team. As a result of these meetings:

- Various agencies started talking to each other and, more importantly, started understanding each other's concerns and seeing things from the "other guy's" point of view—a level of cooperation that never existed before.
- Gaps in radio communications were revealed, and radios were reprogrammed to allow communications between County Public Works units and firefighters.
- Where necessary, non-fire personnel were given basic training in Incident Command, Fire Operations and the use of emergency fire shelters.
- Adaptors were purchased to allow County Public Works tanker trucks to connect with fire trucks to be able to readily move water between them.
- Sites at water sources were identified where county equipment could be quickly set up to fill fire trucks and other tankers. When needed, site prep work was performed for easier access.
- In an effort to get the word out to more people when fire restrictions are in effect, Gila County purchased 50 pairs of magnetic signs, and supplied them to County departments and local fire departments. The signs say "Fire Danger Extreme. No open burning. No campfires." The signs became so popular that 50 more pairs were purchased and distributed.



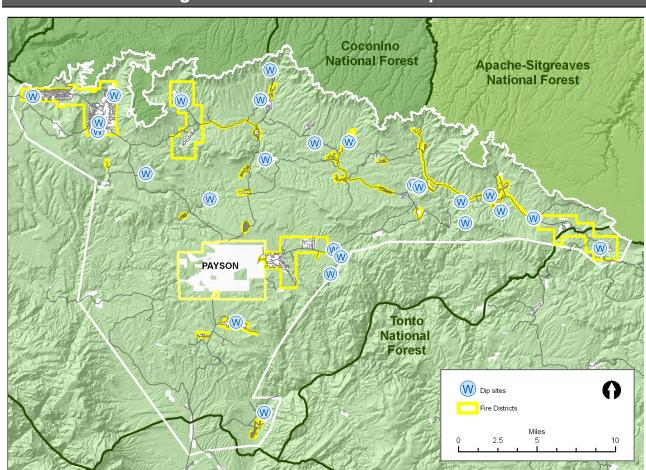
Helicopters utilize one of the new dip sites near Kohl's Ranch during a 2006 fire.







Surplus Military "Pillow Tanks" were purchased by Gila County and installed by County Public Works personnel.



### **Mogollon Rim Water Source Expansion**

A 2006 inventory of potential dip sites for firefighting helicopters revealed large areas where no dip sites were available. A plan was put together to install dip tanks, made out of ten-foot tall sections of ten-foot diameter culvert pipe, with a steel plate bottom welded on.

Where no water source existed to supply the dip tanks, surplus military 20,000 gallon bladders, also known as "pillow tanks," were purchased by Gila County, and were installed and filled by County Public Works personnel. Seven such sites were installed.

There are now nearly 30 identified helicopter dip sites available from Strawberry to east of Christopher Creek, and south to Payson and beyond. Virtually all areas of the Rim Country are now within just a few minutes flight time of a helicopter dip site, making for a quick hard-hitting aerial attack on any new fires. Gila County also purchased four 6,000 gallon "pumpkin" tanks, which can be set up even closer to a fire scene if necessary for extended operations.



Water sources identified for Wildfire Protection (above) and "pumpkin tanks" (left) purchased by Gila County that can be set up close to a fire scene.

Notes:		