

Tusayan Community Wildfire Protection Plan an At-Risk Community of the Kaibab National Forest in Coconino County

February 24, 2005

prepared by:

Tusayan Community Wildfire Protection Committee

P.O. Box 3625

Grand Canyon, AZ 86023

(928) 638-3473

e-mail: tfdgc@msn.com



Committee Members:

Robbie Evans, Tusayan Fire District, Chief

Lora Pitsinger, Tusayan Fire District, Administrator

Clarinda Vail, Red Feather, INC., Tusayan Representative

Barry Baker, Best Western Grand Canyon Squire Inn, Tusayan Representative

Brent Kok, National Geographic Visitor Center, Tusayan Representative

Cooperating Federal and State Agencies Representatives:

Robert Blasi, Tusayan Ranger District, Fire Prevention/Forest Protection Officer

Richard Stahn, Tusayan District Ranger and Kaibab National Forest RCA Coordinator

Jim Kitchen, Kaibab National Forest, Acting Fire Staff

John Kraske, Arizona State Land Department, Assistant Fire Management Officer

Brian Power, Kaibab National Forest Service, Retired, Fire Staff

Christopher Marks, Grand Canyon National Park, Fuel Specialist

DRAFT

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Acronyms and Abbreviations

ARS	Arizona Revised Statutes
CWPP	Community Wildfire Protection Plan
GCNP	Grand Canyon National Park
HFRA	Healthy Forests Restoration Act of 2003
KNF	Kaibab National Forest
NEPA	National Environmental Policy Act
NFP	National Fire Plan
TCWPP	Tusayan Community Wildfire Protection Plan
TFD	Tusayan Fire Department
USDA	United States Department of Agriculture
USFS	United States Forest Service
WUI	Wildland-Urban Interface

I. Introduction and Purpose

The collaborative process for developing the Tusayan Community Wildfire Protection Plan (TCWPP) began May 5, 2004 at a Tusayan/Grand Canyon Chamber of Commerce Board meeting in Tusayan. The topic was discussed and five committee members, representing various interested parties, were appointed that day. Other State and Federal representatives were then invited to participate and the committee listed was formed. The committee had its first meeting August 18, 2004.

The TCWPP is for a federally recognized “at-risk” community located in the Kaibab National Forest (KNF) managed by the United States Department of Agriculture (USDA) Forest Service and located in Coconino County. It was developed in response to the Healthy Forests Restoration Act of 2003 (HFRA). This recent legislation established unprecedented incentives for communities to develop a comprehensive wildfire protection plan in a collaborative, inclusive process. Furthermore, this legislation gives direction to the Departments of Interior and USDA to address local community priorities in fuel reduction treatments, even on nonfederal lands. The HFRA represents the legislative component of the Healthy Forests Initiative, introduced by President Bush in January 2003. Congress passed the HFRA in November 2003 and the president signed it into law that December. When certain conditions are met, Title I of the HFRA authorizes the Secretaries of Agriculture and Interior to expedite the development and implementation of hazardous fuel reduction projects on lands managed by the Forest Service or the Bureau of Land Management.

The HFRA emphasizes the need for federal agencies to collaborate with communities in developing hazardous fuel reduction projects and places priority on treatment areas identified by communities themselves through development of a Community Wildfire Protection Plan (CWPP). Priority areas include the wildland-urban interface (WUI), municipal watersheds, areas impacted by wind throw or insect or disease epidemics, and critical wildlife habitats that would be negatively impacted by a catastrophic wildfire. In compliance with Title 1 of the HFRA, the CWPP requires agreement among local government, local fire districts, and the state agency responsible for forest management (in Arizona, the Arizona State Land Department [State Forester]). The CWPP must also be developed in consultation with interested parties and the applicable federal agency managing the land surrounding the at-risk communities. A CWPP is developed to assist local fire districts, local governmental agencies and residents in the identification of lands—including federal lands—at risk from severe wildfire threat and to identify strategies for reducing fuels on wildlands while improving forest health, supporting local economies, and improving firefighting response capabilities. Guidance for development of the TCWPP is based on *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities* (Communities Committee, Society of American Foresters, National Association of Counties, National Association of State Foresters 2004). This TCWPP was collaboratively developed through consultation with the KNF.

A. Community Information

Tusayan is located within seven miles of the South Rim of the Grand Canyon on State Route 64-180 in Coconino County, Arizona. The community of Tusayan is comprised of 144 acres with overnight accommodations (930 hotel rooms), various restaurants, retail stores and other services. The community has a great deal of infrastructure to help serve the approximately 5 million people that visit the Grand Canyon each year. This includes commercial, residential and advanced sanitary/reclaimed water systems. The adjacent Grand Canyon National Park

Airport is 859 acres with various air tour and retail operations and has a residential area. The Tusayan Ranger District residential compound of the KNF is located approximately ¾ of a mile north of Tusayan and is 40 acres in size. The residential population is mainly employed by Tusayan businesses, Grand Canyon National Park Airport or KNF. The population varies, depending on the season, from 500-700 residents. The Tusayan Fire District (TFD) was formed in July of 1996 and has achieved a current Insurance Service Organization (ISO) of rating 6/9. Private ownership of developed land is mainly restricted to areas within the community, although there are a few private in-holdings in the plan area. There are no homeowners associations in the plan area. The plan area has numerous United States Forest Service fuel reduction projects planned, with several currently underway. See attached map (B) for fuel reductions projects and attached map (C) for community infrastructure.

B. Goals

The TCWPP Committee has agreed to the following goals:

- ❖ promote community involvement in the TCWPP process
- ❖ improve fire prevention and suppression
- ❖ reduce hazardous forest fuels
- ❖ restore forest health
- ❖ educate the public in firewise treatments around their homes and businesses to reduce structural ignitability in the TCWPP area
- ❖ recommend measures to create a more wildfire defensible community
- ❖ support HFRA, Title II- Biomass, Section 201-203 (Explained on page 8)

II. Wildland-Urban Interface

The WUI is commonly described as the zone where structures and other features of human development meet and intermingle with undeveloped wildland or vegetative fuels. Communities within the WUI face significant risk to life, property, and infrastructure.

Wildland fire within the WUI is one of the most dangerous and complicated situations firefighters face. Both the National Fire Plan (NFP), a response to catastrophic wildfires, and *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, 10-Year Comprehensive Strategy* (2001) places a priority on working collaboratively with communities in the WUI to reduce their risk from large-scale wildfire. The HFRA builds on existing efforts to restore healthy forest conditions in the WUI by empowering local communities and by authorizing expedited environmental assessment, administrative appeal and legal review for qualifying projects on federal land. The community of Tusayan is a federally recognized “at risk” community for catastrophic wild fire.

The high priority inhabited area containing critical human infrastructure is identified as the primary zone in red on the attached map (A) and is 15,800 acres. The secondary zone is in orange on the attached map (A) and is 47,920 acres. The total acreage for both zones is 63,720 acres. There are a few private in-holdings in the plan area, both in the primary and secondary zones. They are in white on the attached map (A).

The primary red and secondary orange zones were determined based on KNF recommendations and fire behavior/incidence history, the risk of crown fire, topography and

predominant south/south west wind direction as deciding factors. The attached map (B) depicts both zone's fire history from 1970-2004, acreage of the primary and secondary zones and how much acreage has been treated and how much is left to treat. There are no sensitive watersheds in either zone. Rain Tank, a natural catchment, exists at the southwest edge of the primary red zone. Only wildlife catchments exist throughout both zones.

The Tusayan Evacuation Plan completed in 2003 is attachment (D).

A. Risk Assessment, Current Condition and Recommended Measures

Representatives from TFD and KNF have conducted a risk assessment of the community of Tusayan, in both the residential areas and the urban interface area, where the community's boundary is adjacent to the KNF. During this assessment critical areas that need immediate treatment were identified.

The most critical area that should receive priority treatment are those WUI areas located adjacent to existing infrastructure such as Arizona Public Service Company sub-station and electrical power distribution lines. These electrical power lines are above ground and are crucial to maintain power to the communities potable and non-potable water systems, to keep their fire pumps operational, along with emergency radio communication systems for USFS, TFD and the Coconino County Sheriff Department.

In the primary red zone, in Tusayan, we have identified priority areas such as the timbered ridgeline located on the southwest side of Tusayan. Situated on this ridge is the local radio tower, which houses the TFD repeater. This ridgeline contains KNF and private property. The proposed treatment would be to thin dense stands of jackpot fuels that would be piled and burned at a later date, along with a prescribed burn to remove the pine litter. Mowing of the field adjacent to the timbered ridgeline may be considered in order to reduce threats in that area.

Ongoing mechanical thinning projects and prescribed burns have been conducted around the community in the last few years, especially on the south and west sides, refer to attached map (B). Based on KNF recommendations thinning, prescribed burns and low intensity ground fire will be conducted on a rotating 7-10 year basis in this primary red zone. This primary red zone is the greatest threat to the community due to topography and predominant wind direction in the Tusayan area. The secondary orange zone would be one of the trigger points for considering in the event of a crown fire red zone evacuation. The secondary orange zone is predominately pinion/juniper forest with very thin ground cover. The orange zone is open to the wildland fire use program by lightning caused fires. Any lightning caused fire in the orange zone, which falls within the parameters of the KNF guidelines, will be considered as a wildland fire use fire. These fire use incidents have minimal cost associated for the acreage treated and have proved to be a cost effective way of providing thinning, ladder fuels removal and ground fuels removal.

Most of the forest surrounding Tusayan's primary red zone has received some kind of treatment or the KNF is currently in the planning process for the areas that have not received any treatment such as. See attached map (B):

1. The Tusayan South burn, which are mechanical thinning and prescribed burns south of the airport housing area.

2. The mechanical thinning & burning projects on both the north and east side of Tusayan between KNF housing and the South Rim Mobile Home Park.

Protection and surveying of cultural or heritage sites will be performed according to KNF procedures.

The assessment of the needs for private residences would involve some minor thinning programs along the interface perimeter on all sides.

We felt that a collaborative effort by TFD and USFS/KNF to initiate a Fire Wise program would provide a means for the local residents to have their homes and businesses assessed. We could then provide recommendations to make to homeowners and businesses to make them fire safe. TFD would try to find the available manpower, resources or grants, to assist the local residents with clean up and educational programs. Aggressive public education and private property treatment projects within the community, coupled with current efforts of TFD and USFS/KNF programs, will make the area a safer, more informed community that will meet the intent and spirit of the TCWPP.

Tusayan Fire Department
Robert Evans, Fire Chief

USFS, Kaibab National Forest
Robert Blasi, Fire Prevention/Forest Protection Officer

B. Monitoring, and TCWPP Reporting

TFD and the TCWPP Committee will administrator and be responsible for implementing and monitoring the TCWPP recommendations. The TFD Board will appoint committee members, as they deem necessary. The TCWPP should be periodically reviewed and updated, as needed by TFD and the TCWPP Committee with participation from the KNF.

C. Future Funding Needs

1. Increased reclaimed and fresh water storage and more hydrants in the Tusayan Community. TFD to assess actual need and placement primarily in the urban interface zone.
2. Funds to provide at least two staff members and up to \$400 per acre, on private property or assistance in the KNF in the WUI zones, for implementation of mechanical treatment projects in the private property areas listed in the assessment.
3. Funding for wildland fire training for the mostly volunteer TFD.
4. Funding to train homeowners to make their homes more wildfire defensible.
5. Funds for future projects in the KNF. All shown in pink on the attached map (B)
KNF estimated costs \$1,916,800 broken down as follows:
 - ❖ Reed: 690 acres @ \$400/acre= \$276,000
 - ❖ Long Jim: 1280 acres @ \$350/acre= \$448,000
 - ❖ Railroad: 5964 acres @ \$200/acre= \$1,192,800

II. Recommended Measures to Create a More Wildfire Defensible Community

The community takes the risks of a wild land fire igniting and spreading in the WUI seriously. TFD, USFS, and Grand Canyon National Park (GCNP) fire response crews' performance can be leveraged through combined responses. In the wake of a large fire or in

the case of multiple fires, however, it may not be possible to protect every home and structure in the WUI. Community leaders as well as private landowners must take actions to reduce fire risks and promote effective responses to wild land fires. The following are recommendations to enhance protection capabilities in the TCWPP:

1. Provide this TCWPP and the Tusayan Evacuation plan to Tusayan businesses and residents and describe high-risk areas, specific land standards that apply to trees and make recommendations to address fuels treatment.
2. Local land use policies could include incentives for private landowners to address defensible space and fuels management on their properties and implement fire-sensitive land use planning.
3. TFD and USFS/KNF will enhance regulatory and control policies, such as open burning, campfires, smoking restrictions, and other use of fire within their boundaries and will enhance relationships with local law enforcement to ensure compliance with any regulations adopted.
4. Additional comprehensive and frequent training for fire fighters will be provided. TFD and USFS/KNF will conduct a common training activity at least once a year prior to the start of fire season for the purpose of emphasizing tactics of WUI suppression and interagency coordination. Grand Canyon National Park (GCNP) participates in many cooperative training activities as well.

A. Priorities for Promoting Community Involvement through Education, Information and Outreach

The TCWPP and USFS/KNF have developed and implemented public outreach programs to help create an informed citizenry. The goal is to have residents support concepts of fire-wise landscaping and naturally functioning forest systems through restoration management and rapid response to wildland fire. The TCWPP is intended to be a long-term strategic tool to address and reduce hazardous fuels and enhance forest health. To effectively achieve these goals, a grass roots collaborative structure of individual citizens, supported by local government as partners, will provide the most effective long-term means to maintaining a defensible community over time. The components of such a structure include the following recommendations:

1. Expand the use of current public information tools for fire-safe business and residential treatments as an immediate action step. This will be accomplished through a public presentation describing treatments that can be undertaken to promote defensible space, through modifications/improvements to both structures and the vegetation located in the WUI.
2. TFD and USFS/KNF personnel will act as “goodwill ambassadors” by making available wildland fire/fuel reduction and residential preparedness information at community activities and events. Information will be made available in both printed and oral formats that explain the need for fire awareness and the benefits of preparing private property for potential damage from wildfires. Promote awareness of issues in attachment (D).

B. Enhancing Local Wood Products-Related Industries

HFRA, Title II- Biomass, Section 201-203 is of particular importance to the TCWPP committee. A feasibility study has been completed by TSS Consultants for a Biomass Gasification Facility in the Tusayan-Grand Canyon Area. The facility has been deemed feasible and is now in the second phase. The TCWPP committee is in support of this study

and will continue to support this idea as a potential utilization opportunity for hazardous fuels removed in support of fuels reduction efforts in and around the community of Tusayan.

Other areas of support will include:

1. Support the development of markets and industries that extract saleable material from fuel reduction management projects (e.g., biomass, firewood, post and poles, etc.) as these markets develop.

C. Future Forest Conditions Will Improve

The TCWPP will improve fire prevention and suppression, reduce hazardous forest fuels, restore forest health, promote community involvement, reduce structural ignitability and encourage economic development in the community. The community of Tusayan and the natural wonders of the GCNP are extraordinary resources that deserve protection from catastrophic wildfire. Approval of this plan will enhance the protection of the southern boundary of GCNP. This TCWPP will provide the first step in the long process to help protect this area, its residents, visitors, homes, businesses and infrastructure.

IV. Declaration of Agreement and Concurrence of all Required Agencies

The following partners in the development of this Community Wildfire Protection Plan have reviewed and do mutually agree or concur with its contents:

AGREEMENT

Richard Stahn, Tusayan District Ranger and Kaibab National
Forest RCA Coordinator

Date

CONCURRENCE

Robert Evans, Fire Chief, Tusayan Fire District

Date

Kirk Rowdabuagh, State Forester, Arizona State Land Department

Date

Liz Archuleta, Chairman, Coconino County Board Of Supervisors

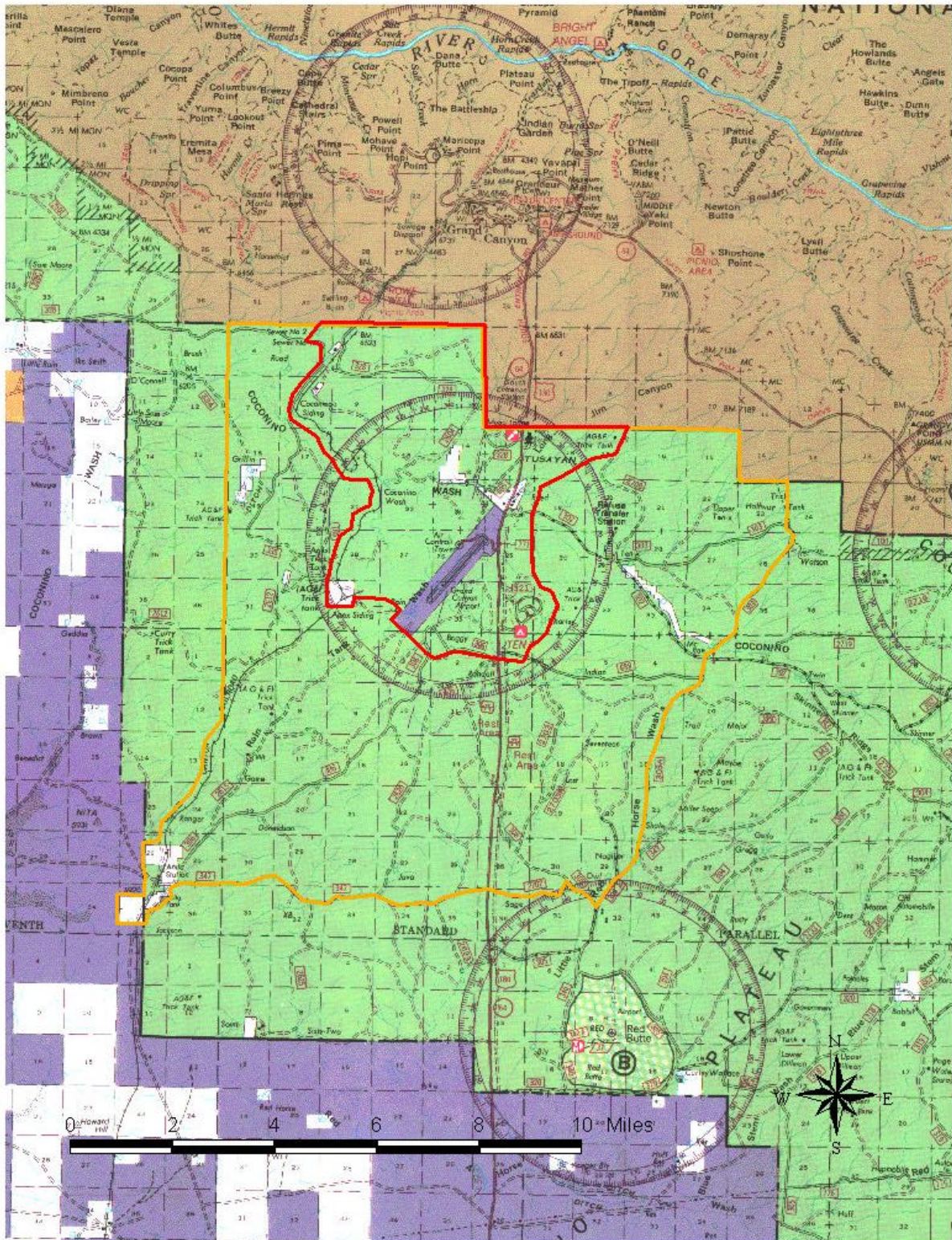
Date

V. Public Comment

COMMENTS FOR THIS TCWPP MUST BE RECEIVED BY 5:00 pm, ARIZONA TIME, ON MARCH 25, 2005 TO THE ADDRESS OR E-MAIL LISTED ON THE COVER PAGE. COMMENTS WILL BE CONSIDERED FOR DRAFTS AND SHARED WITH THE CONCURRENCE AGENCIES ABOVE.

COPIES ARE AVAILABLE AT TUSAYAN FIRE DEPARTMENT IN TUSAYAN, AZ.

ATTACHMENT A



Primary Protection Zone In RED: 15,800 Acres

Property In WHITE

Secondary Protection Zone In ORANGE: 47,920 Acres

property in PURPLE

Private

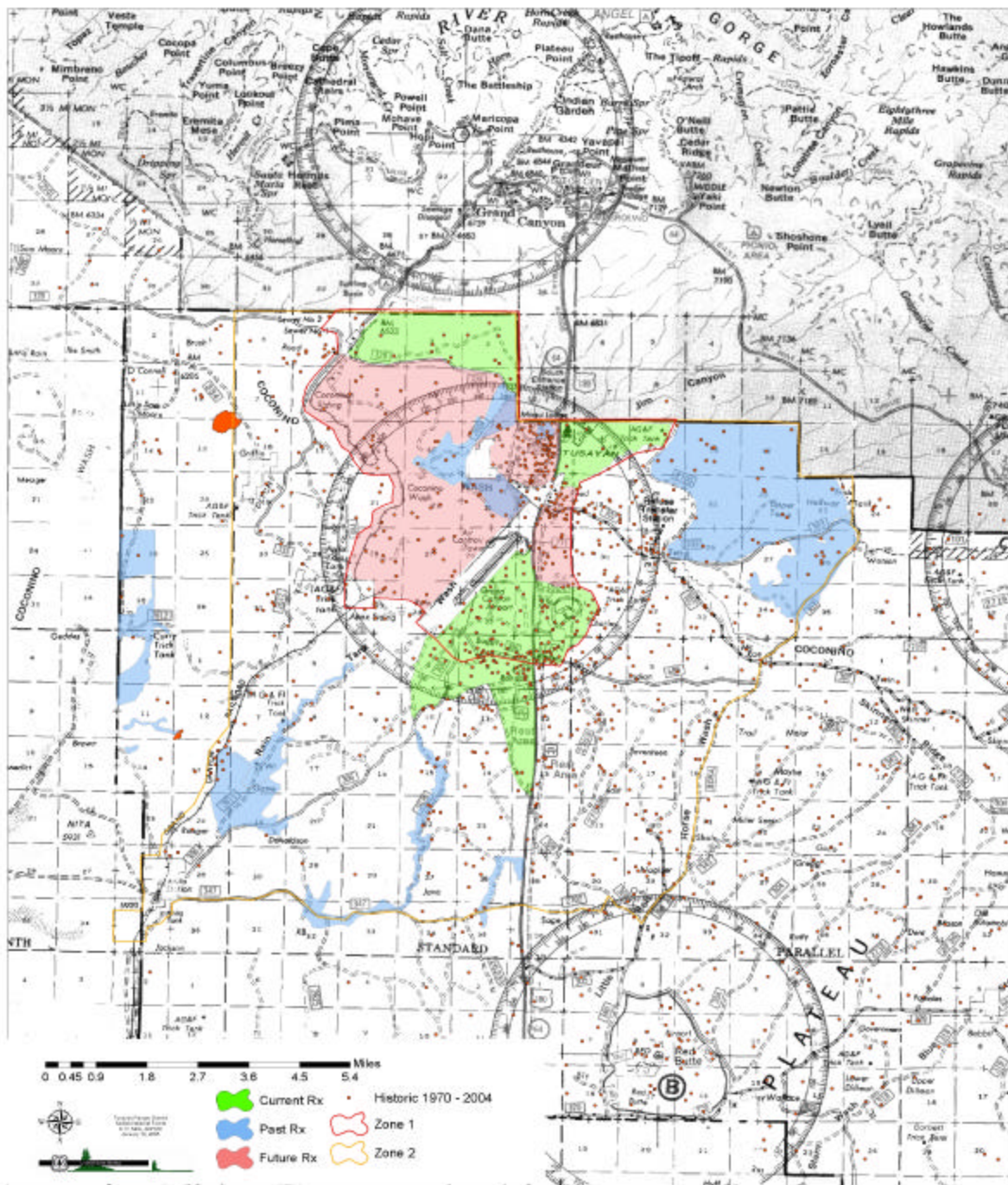
State

Total of Both Zones: 63,720 Acres

KNF in **GREEN**

GCNP in **TAN**

ATTACHMENT B



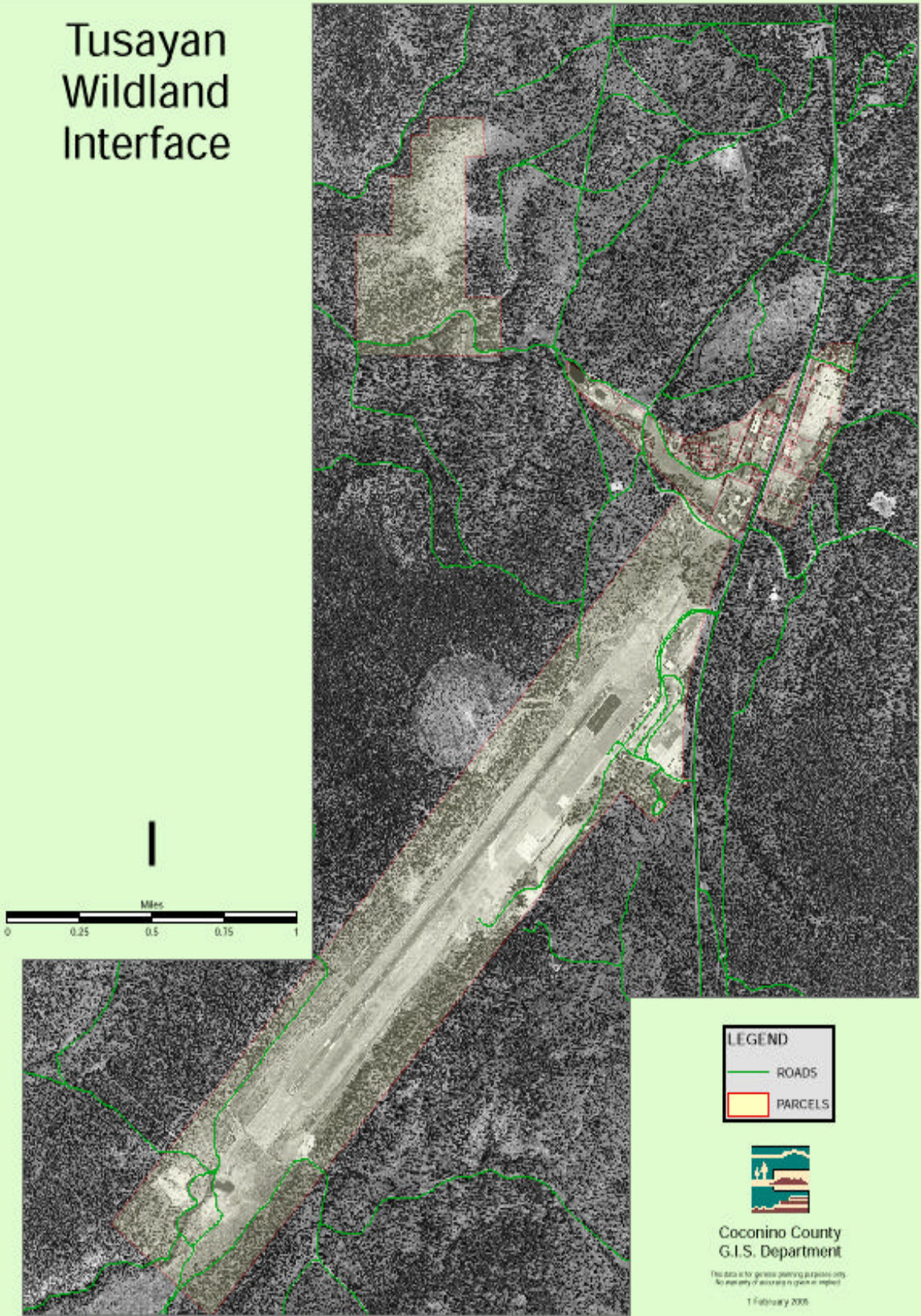
Current Fuel Reduction Projects in **GREEN**= 4,842 Acres in the Primary Red Zone
1,800 Acres in the Secondary Orange Zone
6,642 Total Acres in Both Zones

Past Fuel Reduction Projects in **BLUE**= 1,001 Acres in the Primary Red Zone
6,791 Acres in the Secondary Orange Zone
7,762 Total Acres In Both Zones

Future Fuel Reduction Projects in PINK= 7,934 Acres in the Primary Red Zone
Fire Ignition areas in RED dots

ATTACHMENT C

Tusayan Wildland Interface



LEGEND

- ROADS
- PARCELS



Coconino County
G.I.S. Department

This data is for general planning purposes only.
No warranty of accuracy is given or implied.

1 February 2005

ATTACHMENT D

**Tusayan Fire District
Standard Operating Guidelines**

*Division: 200
Article: 7*

Page: 1 of 7

**Effective Date:
EVACUATION PLAN
Revised Date: 06/19/2004**

Robbie Evans

Fire Chief:

Purpose: The purpose of this Guideline is in response to the need of pre-planning for a natural or manmade disaster that would precipitate an evacuation of the Tusayan area. Some events that may call for evacuations are: the threat of wildland fire, earthquakes, or hazardous materials incidents.

This plan is generic in nature, allowing flexibility depending on the nature or urgency of the emergency evacuation. This plan must also work in conjunction with the Grand Canyon National Parks emergency evacuation plan, along with Coconino County's Emergency Evacuation procedures.

Policy:

- a. It is the policy of Tusayan Fire District to provide for the safety and protection of the residents and visiting public to the Tusayan/ Grand Canyon area.
- b. If the need to evacuate Tusayan becomes apparent due to an emergency that would threaten the safety of the public and local residents. The Tusayan evacuation plan is intended to ensure a safe and efficient emergency operation. This policy needs to take into consideration the advisability of putting in excess of 12,000 vehicles in the busy summer months, south bound on Hwy 64 if an evacuation is called for. Alternatively, if it may be best to protect in place here in Tusayan.

Procedures:

- a. Decision and call for evacuation of Tusayan: Will be made in concurrence with Coconino County Sheriffs Office and Tusayan Fire District.
- b. Command structure: Will be managed under the Incident Command System. This will provide a flexible command structure. And by using the Incident Command System a unified command is easily implemented and allows for two or more agencies to have primary incident responsibilities. The Incident Commander will designate a Command post as soon as the evacuation declaration is made.
- c. Communications: Grand Canyon National Park Dispatch will serve as the primary incident communications center for Tusayan Fire District. The National Park Service Dispatch center has the capability to connect various communication centers through radio/telephone patching.
- d. Information: A Public Information Officer will be designated and operate under the direction of the Incident Commander.
- e. Notification: Will be made to the various governmental and public service agencies as soon as possible upon the decision to evacuate. The NPS communication Center will have primary responsibility for

conducting these notifications. Tusayan Fire and Coconino County Sheriffs Office will notify local businesses and residents.

Local Resources for Tusayan Fire Department

- a. National Park Service
- b. Coconino County Sheriff's Office
- c. U. S. Forest Service, Kaibab National Forest, Tusayan Ranger District
- d. Arizona Department of Public Safety
- e. Guardian Medical Transportation
- f. Arizona Department of Transportation, Williams Maintenance Yard
- g. Arizona Department of Game and Fish
- h. Grand Canyon National Park Airport

Immediate Resource Contacts

Coconino County Emergency Management, and the State of Arizona Department of Emergency Management. Both of these agencies can provide access to other resources, equipment and manpower, which includes mobilizing the Arizona National Guard. Either entity can make a disaster declaration and immediately begin providing assistance and resources. The State of Arizona will determine costs and request funding through the Federal Emergency Management Agency (FEMA).

Shelters

The American Red Cross can create disaster shelters. There are contracts with both Williams School District and Flagstaff Unified School District along with the National Guard Armories. These facilities can be set up within evacuation travel times from the Tusayan area. Contact is 928-779-5494.

Funding Resources

Both state and county funding channels are available through the Coconino County Sheriff's Office based on a Declaration of a State Emergency.

Tusayan Evacuation Procedures

Public Notification

Public evacuation information will be broadcast as soon as possible on 92.1 (KSGC) with either telephone notification or personal contact with the area businesses and residents. The information provided will address the securing of residences, available egress routes out of Tusayan, Evacuation Collection Area's, and Safety Zones.

Evacuation of Residents and Overnight Visitors

Evacuation of guests and residents will be conducted under the direction of Coconino County Sheriffs Department.

Bus Transportation

Any residents or visitors requiring bus transportation out of the area, to an evacuation shelter, will be transported by local tour bus operators that are operated out of Grand Canyon Airport. A local representative will respond to the Incident Command Post to act as liaison for the use of all buses during the evacuation phase.

Hotel Guests

All local hotels will be notified that evacuation procedures have been initiated and the need to begin evacuation of all guests. Either the General manager or the Front Desk Personnel will be contacted, and using the available on duty personnel at each hotel. They will contact and notify all guests of the order to evacuate. Each guestroom will be physically checked by these personnel to insure that the guests have received the notice and have evacuated or are in the process of evacuating. After each room is cleared a pillowcase or towel shall be tied to the exterior door handle of the room to mark it as checked and cleared. After each hotel/area is checked and cleared, the personnel involved shall report to either the G.M or Front Desk Personnel, who will in turn notify the Incident Command Post of the progress and status of their evacuation efforts.

Any guests requiring transportation will be directed to report to the front desk associated with their hotel. Front Desk Personnel will then contact the ICP transportation manager to relay information regarding the numbers of guests needing transportation as well as any special needs.

A different team of personnel from each hotel will make a secondary check of each area following the initial check and evacuation.

Residential Areas

Coconino County Sheriff Department and National Park Service Ranger units if available will manage residential evacuation. This activity will be conducted under the direction of Operations Chief.

Teams of officers (CCSO, DPS, NPS Rangers, USFS Kaibab and Tusayan Fire District Personnel) will be assigned to residential areas to inform residents of the need to evacuate. Forcible removal is questionable unless there is immediate threat of injury occurring.

Residents shall turn on their front porch light and tie a pillowcase, towel or similar item to their front door handle to signify that they have evacuated their residence.

Due to the many seasonal employees that have no transportation, buses will be provided to assist in their transportation to evacuation collection areas.

Available buses will be dispatched to the different hotels and employee housing areas.

After each bus is filled the driver will report via radio to the transportation manager, and state the number of passengers and any need for additional assistance. The drivers will then proceed to the designated evacuation collection area.

After the initial evacuation, all residential areas will receive a second check to insure complete evacuation.

Safety Zones

The following areas have been designated as Urban/Wildland Interface Safety Zones in the Event that immediate evacuation egress from the Tusayan area is not possible during such an incident. Incident personnel shall be assigned to supervise each safety zone.

Safety Zone Locations

Grand Canyon Airport - south ramp road, main terminal parking lot
Papillion Helicopter Terminal - Parking areas
Grand Canyon Helicopter Terminal – Parking areas

Traffic Control

All highway traffic control will fall under the jurisdiction of Department Of Public Safety and Coconino County Sheriff Department. And they will implement all procedures for traffic control.

Notification List

Arizona Department of Public Safety	928-773-3600
Arizona Department of Emergency Management	602-231-6262
Coconino County Sheriff Department	800-338-7888
Coconino County Emergency Management	800-338-7888
Arizona Department of Transportation	928-779-7547
NPS Dispatch	911 or 638-7805
Tusayan Ranger District U.S. Forest	928-638-2443
Williams District	928-635-2681
Grand Canyon Airport	928-638-2446
American Red Cross	928-773-2523
Arizona Public Service	928-638-2282
Hydro-Resources	928-638-9243
SGC Sanitary District	928-638-0906
Graves Butane	928-638-9295
Ferrell Gas	928-526-0466
Q-West	928-638-7854
Cassi Bus Lines	928-638-2463

Also, notify all area businesses

Air Star Helicopters	928-638-2622
Café Tusayan	928-638-2151
Camper Village	928-638-2887
Canyon Food Mart	928-638-2608
DNPS	928-638-2854
Grand Hotel	928-638-3333

Holiday Inn	928-638-3000
Imax Theater	928-638-4629
Kenai Helicopters	928-638-2764
McDonalds Restaurant	928-638-2208
Monarch Gifts	928-638-9330
Moqui Lodge	928-638-2195
Papillon Helicopters	928-638-9330
Quality Inn	928-638-2673
Red Feather Lodge	928-638-2414
Steak House	928-638-2780
7 Mile Lodge	928-638-2291
Squire Inn	928-638-2681
Trading Post	928-638-2417
We Cook Pizza	928-638-2778
Wendy's	928-638-6484

ATTACHMENT E

Protecting your Home, Business and Community Against Fire

These are some precautions you can take to help guard against wildfire:

Firewise

- ❖ Stack firewood or lumber at least 100 feet away and uphill from structures.
- ❖ Clear a 10-foot area around propane tanks and barbecues
- ❖ Regularly clean your roof and gutters.
- ❖ Inspect chimneys at least twice a year and clean them at least once a year.
- ❖ Keep dampers in good working order.
- ❖ Remove portions of trees and bushes that extend within 10-15 feet of your flue openings.
- ❖ Flue and chimney tops should have a screen covering with openings no larger than ½ inch.
- ❖ Install ABC approved fire extinguishers and learn how to use them.
- ❖ Keep handy household items that can be used as fire tools: a rake, axe, handsaw or chain saw, bucket, shovel, and a ladder that will reach the roof.
- ❖ Identify and maintain an adequate outside water source such as a hose or hydrant. Have a garden hose that is long enough to reach any area of the home and other structures on the property.
- ❖ Clean out storage areas. Don't let trash such as old newspapers, boxes and magazines accumulate.
- ❖ Check electrical wiring. Inspect cords for frayed or exposed wires or loose plugs.
- ❖ Do not overload extension cords or outlets. If you need to plug in two or three appliances, get an UL-approved unit with built-in circuit breakers to prevent sparks and short circuits.
- ❖ Make sure your heating source is clean and in working order. Many home fires are started by faulty furnaces or stoves, cracked or rusted furnace parts and chimneys with creosote build up. Call professionals for help.
- ❖ Use caution when using alternative heating sources, such as wood, coal, kerosene heaters, and electrical space heaters.
- ❖ Place heaters at least three feet away from flammable materials.
- ❖ Make sure the floor and nearby walls are properly insulated.
Use only the type of fuel designated for your unit and follow manufacturers' instructions.
- ❖ Store ashes in a metal container outside and away from the house.
- ❖ Keep open flames away from walls, furniture, drapery and any flammable items. Keep a screen in front of the fireplace.
- ❖ Make sure insulation does not touch electrical wiring.
- ❖ Know the locations of the gas valve and electric fuse or circuit breaker box and how to turn them off in an emergency. If you shut off your main gas line for any reason, allow only a gas company representative to turn it on again.
- ❖ Make sure there is ample room for fire and other emergency vehicles around property.

Firewise Inspection Contact.....Tusayan Fire Department 638-3473

ATTACHMENT E (cont.)

PREPARING A HOUSE FOR WILDLAND FIRE SEASON



1) Remove dead or overhanging branches. During the windy conditions that exist during a wildland fire, flames, sparks and firebrands could travel from the tree to the roof of this structure.

2) Remove leaf accumulation from your yard. Leaf accumulation provides fuel for a wildland fire.

3) Remove leaf clutter from your roof and gutters. During a wildland fire, leaves on the roof and/or in the gutters could be ignited by flying embers.

4) Remove tall, dry grasses. Tall, dry grasses provide a path for fire that can lead directly to a house.

5) Remove "ladder fuels". Prune tree limbs so the lowest is between 6' - 10' from the ground. Fire burning through tall, dry grass could ignite these limbs and climb to the top of the tree with relative ease.

6) Check your generator and/or hose to be sure it is in good repair. Refuel garden equipment carefully. Yard equipment needs annual maintenance and proper fueling. Hoses develop leaks and deteriorate with age and exposure. During wildland fire season, fuel your lawn mower properly --away from dry, flammable grasses.

7) Prune bushes and shrubs regularly. Remove excess growth as well as dead leaves and branches to decrease their flammability, and the threat they could pose during a wildland fire.

Dispose of cuttings and debris promptly, according to local regulations.

Find more Firewise tips at our website.

www.firewise.org