Introduction

Heber-Overgaard (H-O) is situated in northeast Arizona in the midst of Navajo County at approximately 6,500 feet altitude. According to the 2000 U.S. Census, the full time population is 2,722. Summertime population numbers climb to nearly 12,000 (LNR Inc. n.d). Median family income is $35,380 and median household income is $28,665. Median value for owner-occupied housing is $110,500 (U.S. Bureau of Census 2002).

The vegetation surrounding H-O is made up of thick stands of untreated, small-diameter ponderosa pine on private and federal lands. Within H-O some 10,251 acres of private and federal land have been identified as at high risk for wildfire. Another 21,000 acres are identified as at moderate risk (Logan Simpson Design 2004). The areas to the south of the communities are at the greatest risk due to prevailing southwest winds. Bear Heights and Section 31 neighborhoods are at risk in particular due to limited access and egress and dense vegetation (Ingraham 2004).

Land ownership in the H-O area is private, but surrounded by federally owned lands. As noted by H-O Fire Chief Jack Ingraham, “We’re pretty much land locked by the Forest Service here.” Retirement and tourism are increasingly important to the H-O economy. H-O is a haven for those wishing to escape the heat of Phoenix, nearly 60% of the houses are second homes (U.S. Bureau of the Census 2002).

June 18th 2002 was the start of the Rodeo-Chediski Fire, which destroyed 268 structures in H-O (mainly in Overgaard) and burned some 460,000 acres. It was the largest fire in Arizona history. Overgaard was evacuated for nearly two weeks while the fire was fought. This fire has significantly raised awareness in the area (Ingraham 2004).

In the past H-O has not been very active in pursuing or receiving National Fire Plan money to address its very real threats. However this appears to be changing with the arrival of a new fire chief. United States Forest Service (USFS) representative Mark Empey feels that there has been little funding in H-O because the previous fire chief did not focus on securing mitigation funding—he focused on suppression. Chief Ingraham says that the biggest challenge is that the unincorporated areas cannot pass ordinances or regulations requiring defensible space (Ingraham 2004). “I believe by being unincorporated we don’t have the enforcement powers of getting people to clean their lots” (Ingraham 2004). H-O cannot pass ordinances requiring property owners to create defensible space. Local homeowners see the challenge differently. In regards to wildfire mitigation, homeowners Roy and Betty Weber cited the biggest challenge facing H-O is the absentee landowners that bought their properties for investment purposes, haven’t built, and don’t ever come up to the area (R. and B. Weber 2004). A continuing challenge is public education. “A large problem with these communities across the rim is so many of the landowners are absentee. They are summertime visitors” (Banke 2004).

Improve Wildfire Prevention and Suppression—Firefighting Readiness & Prevention Through Education

Heber-Overgaard Fire Protection District

Heber and Overgaard are both unincorporated areas. The fire department was established in 1973 and is funded through a district tax that levies 1.23 mils on property values (Ingraham
The Heber-Overgaard (H-O) Fire District has 12 full time and 30 part time firefighters and provides protection for more than 4,000 people over 102 square miles (Logan Simpson Design 2004; Ingraham 2004). All the firefighters are certified in wildland firefighting. Heber-Overgaard Fire Chief Jack Ingraham is new to the job and area. He took up the posting in January 2004. He is aware that H-O had received minimal funding through the National Fire Plan in the past. He plans to actively pursue new funding and has acquired more than $500,000 since his arrival (Ingraham 2004). For instance, H-O just received a FEMA grant for a new fire engine, as well as funding for cost-sharing to help homeowners to thin their property. As observed by Bruce Banke of Arizona State Lands the previous Fire Chief was not requesting funding. “[Ingraham] is a lot more proactive than the other chief was.”

The H-O Fire Protection District is promoting Firewise programs in the schools and starting a National Safety Council fire prevention program that school children can take home (Ingraham 2004). A National Safety Week will take place in October 2004. According to Ingraham, “You get a lot better parent participation when you do it through the school. We’re using different materials that we can send home with the kids to hopefully get the parents more involved.” They will do a mass mailing out to all the businesses and targeted groups in the area the then make sure everything is delivered for the programs in the schools.

**Wildfire Response in H-O**

The Heber-Overgaard Fire Protection District has mutual aid agreements with the Northern Arizona Fire Departments for suppression needs. They have a contract with State Lands regarding suppression and have a verbal agreement with USFS for mutual aid (Ingraham 2004). If a fire happens within a fire district and it gets beyond the scope of the fire department handling it, they will request assistance from their neighboring fire district, the State or the USFS (Banke 2004). A mutual aid request from a neighboring fire district means the neighbor will come in on a gratis basis and offer help under a written agreement that stipulates 12 hours or 24 hours of assistance. If that becomes insufficient, the State is usually called in. If the State is called in they will provide whatever resources are necessary to fight the fire, and the State pays. There is a Joint Powers Operating Plan between the Apache-Sitgreaves National Forest and the State. This outlines mutual aid agreements and different agency responsibilities between the State and USFS (Banke 2004).

**Northern Arizona Fire Chief’s Association**

The Northern Arizona Fire Chiefs’ Association meets monthly to discuss fire suppression efforts and hazardous fuel reduction activities. Suppression is coordinated through discussions between the fire chiefs and the USFS Fire Management Officers (Empey 2004). They meet monthly in the winter and early spring at different fire departments. In the spring they have a coordination meeting to share information about resources and radio frequency changes.

**Community Wildfire Protection Plan**

In May 2004, the three counties of Apache, Coconino and Navajo completed a joint Community Wildfire Protection Plan (CWPP). The plan includes the towns of Arpaine, Clay Springs, Forest Lakes, Heber-Overgaard, Hon Dah, Linden, McNary, Pinedale, Pinetop-Lakeside, Show Low and Vernon. The plan was developed in response to the Healthy Forests Restoration Act of 2003 (HFRA), which stipulates that communities receiving money from HFRA must have engaged in
a collaborative planning process. The plan helps “local government, fire districts and residents in the identification of lands at risk from severe wildfire threat and to identify strategies for reducing fuels on wildlands, while improving forest health, supporting coal industry and local economies, and improving fire-fighting response capabilities” (Logan Simpson Design 2004). H-O Fire Chief Ingraham participated in creating the CWPP. In H-O, the plan calls for a three mile buffer around USFS lands to the south and south west of the communities and a half mile buffer to the north, west and eastern parts of the communities (Ingraham 2004). The CWPP prioritizes the treatment of 2,301 federal acres and estimates the treatment to cost $1,169,416. 7,949 nonfederal acres are targeted for treatment at an estimated cost of $5,732,280 (Logan Simpson Design 2004).

Arizona State Lands
Bruce Banke, with the Arizona State Lands Fire Division, is based out of Flagstaff and mainly covers Apache and Navajo counties. His duties deal with fire suppression and training, and works in conjunction with the USFS and Bureau Indian Affairs (BIA) on the trainings (Banke 2004). He holds 130 (Firefighter Training), 190 (Intro to Wildland Fire Behavior) and 1100 (Incident Command System) trainings and refresher courses (Banke 2004). Suppression efforts are coordinated multi-laterally via the Northern Arizona Fire Chiefs Association, which meets monthly. There is also a Wildland Division of the Chiefs Association that deals solely with wildland fire suppression and training issues (Banke 2004).

Banke sees absentee landowners as the biggest problem. Reaching these people is very difficult. State Land’s challenge is to educate the public on wildfire mitigation and hazardous fuel reduction (Banke 2004). The State encourages the local fire department to approach and work with homeowner associations to educate homeowners in preventing/reducing loss from wildfire by creating defensible space. They also encouraged the communities to develop their wildfire mitigation plan to access more funding (Banke 2004).

United States Forest Service
Mark Empey, USFS Fire Management Officer, is in charge of suppression on USFS lands. Empey helps coordinate some FIREWISE outreach with homeowner associations and fire departments.

Hazardous Fuel Reduction—Prioritize hazardous fuels reduction where negative impacts are greatest

Heber-Overgaard Fire District Cost-Share Program
In 2003, the Heber-Overgaard (H-O) Fire District received $250,000 from Arizona State Lands for cost-sharing to thin private lands. The program is a 50-50 cost share that requires three bids from contractors and will reimburse 50% of the lowest bid up to $2000 (Ingraham 2004). The cost-share program has been very popular and demand has outstripped the supply of funding. In 2003, H-O Fire District funded 165 properties, ranging from ¼ acre to 5 acres at an average cost of $1500. The 2003 cost-share money ran out in March 2004, three months early. In June 2004, they received notification that H-O Fire District was approved to receive another $250,000 for FY2004. The program is run on a first come first serve basis and they are not prioritizing any geographic areas. The program is publicized through local papers, but word of mouth is the way program has really spread (Ingraham 2004). A big challenge is that for 10 months of the year
50-60% of the homes are unoccupied because they are owned by people who live in the Phoenix area (Ingraham 2004).

H-O has a brush pit on USFS lands run by the H-O Sanitation Department located on Rt. 277. The brush pit takes slash from private property. It is open Thursday – Saturday during the summer. In the winter it is open only on Saturdays. Disposal is cost free. People in the community have complained about the limited hours. Chief Ingraham is investigating grants that will pay for staffing to help extend the hours (Ingraham 2004).

**H-O Homeowners**

Section 31 homeowners Roy and Betty Weber bought their property in Heber-Overgaard in 1999. They are retired and live there in the summers. When they bought the property, there were more than 400 trees on their 1 ¼ acre lot (R and B. Weber 2004). Many of their trees were dying or dead. For forest health and aesthetic reasons they thinned their property to about 130 trees. The trees range from 3” in diameter to the largest one that is 20” in diameter. The Weber’s lost 71 trees in the front of their property due to drought. Aesthetics and forest health were more of a driving concern than wildfire in treating their property (R. and B. Weber 2004). In the beginning they burned their slash in the winter. As of three years ago, they have taken all of their slash to the brush pit, which is free of cost (R. and B. Weber 2004).

**United States Forest Service**

The H-O area is a small (highly valued WUI) portion of the Black Mesa Ranger District. The Black Mesa Ranger District encompasses approx 680,000 acres on the Apache Sitgreaves National Forest. Priority areas, from a fuels management standpoint, on the District include H-O, Forest Lakes, Clay Springs, Aripine, other private land and improvements, and the very highly used Rim Lakes Recreation Area. WUI and other improvements receive the highest priority from a fuels management standpoint (Klasner 2004c). In the Heber-Overgaard area over the past 5 to 7 years, there has been a lot of planning and very little implementation (Klasner 2004c).

Four major efforts are underway in the Black Mesa Ranger District to address the threat in the vicinity surrounding Heber-Overgaard. These include Brookbank Ecosystem Management Assessment, Heber/Overgaard Ecosystem Management Assessment, Hilltop and the Rodeo-Chedeski long term rehabilitation and fuels program (Klasner 2004c).

**Brookbank Ecosystem Management Assessment (EMA)**

The Brookbank EMA is approximately 10,000 acres, the majority of which was completed under various timber sales in previous years. This project area is not adjacent to H-O, but is within 3 to 7 miles of southwest of town. Approximately 1,350 acres remain to be treated and these are slated to be awarded under the White Mountain Stewardship (WMS) contract. The prescription is generally for large tree retention/old growth; prescribed fire has been implemented in this area (approx 3,500 acres have been burned here since 1998) (Klasner 2004c).

In Brookbank 400 to 500 acres were prescribed burned in Brookbank from 1998 thru 2001. Approximately 1,350 acres are to be awarded in 2004, 2005, or 2006 depending on funding levels. This has been converted to WMS Project (Klasner 2004c).
**Heber-Overgaard Ecosystem Management Assessment (EMA)**

The H-O EMA has experienced some challenges. The NEPA process for this project began in 1999. Over three years lapsed from the beginning of the NEPA process, to the date the Rodeo-Chediski Fire, which burned thru the community of H-O. The NEPA process was in its final stages. The proposed project was in a 19,500 acre area south of H-O. One of the project’s primary objectives was to reduce the wildfire hazard. The area was comprised pinyon-juniper woodlands, pinyon-juniper/ponderosa pine transition, pine-oak, and mixed conifer habitat types. In the latter three types the average number of trees per acre (according to stand exam data) was in excess of 600 trees per acre in the analysis area (Klasner 2004c).

The majority of the H-O EMA project area was effectively treated from a fuels management standpoint, (although, not the treatment the USFS was proposing or hoping for) by Mother Nature before any implementation could begin. In other words, it burned up in the Rodeo-Chediski fire in 2002. Now the USFS sees a great opportunity to maintain public land the Rodeo-Chediski fire treated for them (Klasner 2004c). Approximately, 4,600 acres of the H-O EMA was not burned in the Rodeo-Chediski Fire and a decision memo was signed in June of 2003. Spacing adjacent to private property is 20 to 35 feet in the woodland types, and a target basal area is anywhere from 40 to 60 in the coniferous areas. Only trees less than 9 inches diameter can be cut. The majority of the remaining acres are scheduled to be in the first offering for the WMS. Prescriptions in the H-O EMA vary due to proximity to homes, habitat type, stand attributes, beetle activity, mistletoe presence, wildlife restrictions, Forest Management Plan requirements, etc. Generally, near homes (within 1/2 mile), the prescription is for a 30 x 30 spacing, pruning to 5 feet and chipping and/or mastication of all activity slash. Other areas in the project have spacing anywhere from 10 x 10 to 30 x 30. Stands not adjacent to homes many times have slash piled instead of chipped. Piles are to be burned and prescribed fire is to be implemented on approx 500 acres of the EMA.

In FY 2004 257 acres of mastication (shredding of surface fuels) were accomplished, 235 acres of thinning and piling were completed, another 219 acres will be completed in prior to October 2004 (Klasner 2004a). The WMS Project took approximately 2,600 acres that will be completed by 2006. Approximately 600 acres worth of funding was requested to finish non WMS Project acres in the HO EMA in FY 2005 (Klasner 2004c).

**Hilltop**

The Hilltop project currently is in the NEPA process and is projected to be awarded in FY 2006 or 2007 as part of WMS Project. It should qualify for Healthy Forests (HFI/HFRA) status. It is a 3,900 acre area to the west of H-O and one of the sections in town surrounded on three sides by private property. The Community Wildfire Protection Plan (CWPP) has been of enormous assistance in the planning process as it meets all of the HFI/HFRA requirements (Klasner 2004c). A Decision Memo is expected to be signed once all endangered species surveys are completed in 2005, and implementation would then begin in 2006 (dependant upon funding and grants). The proposed project is comprised of approximately 1,000 acres of mechanical treatments (i.e. thinning, piling or mastication). Prescribed fire will be used on all 3,900 acres (Klasner 2004c).
Rodeo-Chediski long term rehabilitation and fuels program

The Rodeo-Chediski long term rehabilitation and fuels program has not yet begun but there will be a push from the fuels and fire staff, both Mark Empey (the District Fire Management Officer) and Paul Klasner (Assistant Fire Management Officer), to get a portion of the Rodeo-Chediski area treated. Both Empey and Klasner recently moved to this district from adjoining land management agencies in early 2004. The Rodeo-Chediski fire significantly reduced fuel loads adjacent to and in a large portion of the H-O area. There are some excellent opportunities for long term fuels treatments to maintain these low fuel loadings. Primarily by prescribed burning and mastication treatments, the area could and hopefully, will be maintained at levels that will mitigate wildfire concerns (Klasner 2004c).

Rodeo-Chediski rehabilitation and fuels program has treated approximately 200 acres by falling/piling/ and burning dead trees adjacent to H/O this FY (2004). 1,000 acres will be awarded in the WMS Project in 2005 or 06 (Klasner 2004c).

Costs for non-WMS Project range from $300-500+ dollars per acre for mechanical treatments. For WMS Project, the Forest is using the figure of $250 per acre for treatment. Costs for prescribed burning range from $25 to $200+. These costs are entirely dependant upon project constraints identified in NEPA process. These have included in the past, lining snags, lining logs, lining yellow pine, NEPA processes using stand boundaries instead of roads for control lines (this means having to put in line in illogical places from an implementation standpoint), proximity to WUI (increase in cost the closer you are), trying to prescribe burn non mechanically treated areas (it is generally more risky to prescribe burn in areas that have not been mechanically treated) and the number of acres in the project area (large acres generally lowers cost) (Klasner 2004c).

USFS employee Mark Empey said that the biggest percent of the risk to the H-O area is from the USFS land. But the USFS is hindered in getting acres treated by litigation that puts injunctions on planned projects. He feels that appellants, who are not geographically local to the area, do not understand the process the USFS must go through before they can treat. The NEPA process is not very timely and delays fast action (Empey 2004). The appellants are resented by many local H-O residents, who feel the appeals and legal action delay much needed work. Klasner says funding is the biggest constraint to get treatments done and maintenance of the burn areas. He also said that smoke management is a challenge. The internal targets for the Ranger District in FY 2005 are 5,000 acres of prescribed burning and beyond FY2005 10,000 acres per year (Klasner 2004b). In 2004, the USFS was on target to burn nearly 2,500 acres. In 2003 they burned 1,376 acres and in 2002 2,586 acres (Klasner 2004b).

Dave Maurer, USFS forester, handles the timber contracts. In the mid 1990s everything was halted due to injunctions initiated by Mexican spotted owl endangerment. Previously, logging primarily consisted of taking out 10-30% of the large diameter trees per acre, then taking out the multi-product: 5-18” which would go to the pulp mill, then they would do pre commercial thinning which would take out the small diameter timber. This process changed in the late-Reagan era when cost savings measures were being pushed. Forest management included overstory removals, taking everything from 12” and up off of the forests. Today there is a small amount of timber work contracted out, but not much, even though the USFS has returned to
uneven age management. This has drastically affected the economy of the area. Many sawmills have closed down and has caused much resentment in the community toward environmentalists that have caused the timber work to stop. Locals feel that because the forest has not been managed, their communities are at greater risk to catastrophic wildfires and are suffering greatly economically as well (Maurer 2004).

Mogollon Estates Homeowners Association

The Mogollon Estates community is comprised of 70 lots that are approximately one acre in size. 25 lots have homes on them (Floberg 2004). Each tract cost approximately $50,000 and lots that have built homes are worth an average $280,000. A quarter of the lots are investment properties with absentee owners, and there are 7-8 full-time homeowners in the community (Floberg 2004).

The Mogollon Estates Homeowners Association has been very active in requiring thinning on property in the neighborhood. “There’s a requirement that once you’ve bought a lot, you have to come in and thin it and clean it within a year’s time,” says Ken Floberg, Secretary of the Mogollon Estates Homeowner’s Association. They are conducting education and outreach through their annual meeting notices and their quarterly newsletters. The thinning is not defensible space (per se) – not to USFS specifications – but does provide protection to the property. If the landowners do not thin the property within one year they are mailed a certified letter from the homeowners association outlining the requirement to thin the property within 30 days (Floberg 2004). If the property owner does not take action, the homeowners association gets a bid to thin the parcel and notifies the landowner of their intention to do the work and bill the landowner. If the homeowner does not pay, the homeowners association will put a lien on the property. The program has been mostly successful. “The majority of the people are in favor of it. There are those that balk at it because they only bought their lot as an investment, so they don’t really care. So we have those people that we fight” (Floberg 2004). There is currently one lot with a lien on it for $3,500.

The homeowners association also has the right to inspect lots and ask for fire hazards to be eliminated. Dead trees have become an increasing concern with the advent of the bark beetle and the drought. Last year they formed a dead tree committee (Floberg 2004). “I drive around and monitor the lots and send letters out,” says Floberg. Last year he sent out about 40 letters and they had 80% compliance (Floberg 2004).

Ken Floberg, a Mogollon Estate homeowner, stated that people are very dissatisfied with the USFS because they are pushing for the community to create defensible space, but will not develop fuels reduction projects on the USFS lands abutting private property (Floberg 2004). Likewise, he is concerned that USFS contracts for thinning are for taking 10-12” or greater diameter trees, while leaving the smaller trees. Floberg feels the smaller trees are what need to be thinned (Ken and Cheryl Floberg 2004).

The neighboring homeowners association, Mogollon Air Park, and Mogollon Estates do not coordinate their efforts or communicate at all with Mogollon Estates. Residents in Mogollon Estates would like more cooperation and collaboration (Floberg 2004). There are many dead standing trees on the Air Park properties and while the Air Park residents have been good about
Heber-Overgaard Arizona Case Study, June 7-11, 2004, Toddi A. Steelman and Devona Bell

completing initial thinning on the property, they do not require continued upkeep, which has the potential to be a fire danger with the drought and bark beetle epidemic (Floberg 2004).

**Restore Fire Adapted Ecosystems—Rehabilitation, Restoration, Using Science and Information, Monitoring**

No restoration work is underway currently.

**Promote Community Assistance—Increase Local Capacity, Incentives, Biomass Utilization**

Lon Porter is the owner of Precision Pine & Timber, Inc. and Transporting Renewable Resources, Inc. He began Precision Pine & Timber 20 years ago, but had to shut down operations in the mid 1990s due to the Mexican spotted owl injunction put on the Sitgreaves National Forest (Rutheford 2004). Porter also owned sawmills in Winslow and Eager that were forced to close down because of the injunction. Three years ago the USFS opened several tracts to bidding. Porter won the bids and proceeded to prepare the Precision Mill and the Eager Mill to go back to work. Environmentalists, most notably the Southwest Center for Biological Diversity, filed lawsuits again, and work was halted. Porter lost a significant amount of money and the Eager Mill was never opened. He has laid off all but 18 of his original 185 employees (Wiles 2003). Porter filed his own lawsuit against the federal government on the basis that they had a contract for work. He won, but it is now in appeals (Rutheford 2004).

Precision Pine and Timber is now working on the Sitgreaves National Forest. Presently, they have got a one-block contract to salvage burned timber. Precision takes 12” diameter and higher and their operations are not set up to utilize the small diameter timber (Rutheford 2004). Currently (June 2004), they can only work from 12 midnight to 10 am due to the very high winds and drought conditions. Precision sells their by-product to local utilizers, such as Western Organics who produce mulch.

There are no SDT utilizers in H-O. This is one of the goals of the Community Wildfire Protection Plan (Banke 2004). USFS employee, Klasner stated that the local contractors will not be able to fill their needs once the stewardship contracts are in full force (Klasner 2004a). When asked if they have communication with the contractors telling them their future needs, he said it is on an informal basis.

Maurer said that since the Rodeo-Chediski Fire, two sawmills in the area have opened. The Parker Mill, in Clay Springs (16 miles away) takes 8-9” diameter and up. 35 miles east is another mill starting up in Snowflake, that will take 6” diameter and up (Maurer 2004).

Mogollon Tree Service, with owners Ernie and Cherry Delgado, have been in business for 15 years doing tree cutting, thinning, pruning, and chipping. Their main clients have been USFS, commercial private, and private property owners (E. and C. Delgado 2004). Three years ago their client base changed to almost solely private property owners. Since the Rodeo-Chediski Fire the business they have gotten from private landowners has greatly increased. Mogollon has four employees, including themselves, their son and one other employee. Approximately 70% of
their business is from the AZ State Land cost-share work and homeowner associations requiring thinning work (E. and C. Delgado 2004). Most of their clients come from word-of-mouth, but they do have an ad in the yellow pages. For the cost-share work they use the Fire Department’s specified prescription.

Mogollon treats approximately 120 properties a year, generally averaging 1 acre per property. The average cost to treat an acre ranges from $1200-$2200 (E. and C. Delgado 2004). They utilize some of the pinyon-juniper small diameter timber for firewood that they give away to those in need (elderly, poor…), friends and family. The ponderosa pine small diameter timber is not useful for firewood, and the lumber doesn’t have any value. This goes to the brush pit, along with other slash (E. and C. Delgado 2004). The main challenge to their business comes from fly-by-night operators that don’t have insurance or workman’s compensation, and therefore can underbid them (E. and C. Delgado 2004).
References Cited


