



An “Insider’s Guide” to the Firewise Communities Exercise: Falls County/USA

Instructions for Group Facilitators
and Computer Operators at National
Firewise Communities Workshops



Insider’s Guide

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Overview and Background

Objectives of the Exercise

The basic and driving objectives of the exercises are to share knowledge and expertise; build trust and confidence among Firewise Communities Workshop participants; and to open eyes and minds to the fact that fire protection in the wildland/urban interface (WUI) must be a shared responsibility. Many disciplines created the WUI fire problem. A logical means of addressing the complex issues it presents is one in which the same interests are called upon to solve problems cooperatively.



Rapid migration to the suburbs and rural communities without adequately considering the eventuality of wildland fire has challenged land and resource managers, emergency service agencies and community planners for decades. Increasing encroachment of development around watersheds and open spaces has forced land and resource managers to divert key management resources from watershed protection into interface management. Growing populations have stretched emergency response resources of small fire districts and rural communities beyond their capabilities. Large conflagrations and smaller fires have resulted in large fiscal outlays for suppression, recovery and rehabilitation. In all cases, the lack of comprehensive fire planning has been identified as a major problem.

This exercise allows the Workshop participants to plan proactively in addressing fire issues. Lessons learned can be shared with their home communities so they can deal with these and other challenges including the preservation of green space and/or open space management within and adjacent to urban areas. Successful integration of fire management into land use planning is a task requiring the expertise of all the community and government leaders gathered as participants at this workshop.

Origin of the Falls County Exercise

The concept behind the exercise resulted from several years of working with communities involved in fire protection planning. A similar exercise has been used to familiarize students with the interdisciplinary approach to single community planning through Western and Eastern Oregon Universities' Fire Administration degree program. Data was developed for Westville, a fictional city of 125,000 located in a corner of a county that serves as a transportation and industrial center. The city presents challenges of transportation, aging structures, antiquated fire alarm systems, inadequate fire inspections and codes, and many of the typical problems facing communities with rapid growth and old traditions. Data used in creating Westville was gathered from two communities and adjusted for the exercise. Data and fire protection issues (historical development, socio-economic data, zoning, and fire management areas) were displayed by combining paper maps and acetate overlays – a method often used for planning and teaching planning in the 1970's.



In an effort to expand the scope of the planning exercise to include fire departments, a companion set of laminated paper maps and acetate overlays was developed by an expert group of consultants and practitioners for a mythical Falls County. The data set and accompanying exercise was directed at developing a practical means of consolidating services---if not fire protection delivery services, common needs (such as vehicle maintenance, training, communications)---in an effort to reduce the overhead expenses for small community and volunteer fire departments.

Using the concept of regional planning, Falls County was re-created to incorporate WUI issues, i.e., community growth, wildland fire, topography, land use planning, threatened and endangered species, soil stability, flood plain management, transportation, recreation and visual resources.

Rationale of the Exercise

The exercise includes opportunities to discuss the three tasks in the Participant Workbook, in addition to issues that the participants face in their own communities. Active communication is encouraged within the parameters of the exercise.

Firewise CD Volume 2

Falls County Data

Participants often identify with all or portions of Falls County's problems, growth challenges and even its topographical features. It is sufficient to say that the data, for the most part, is real and comes from a location with many of the problems faced by Falls County. Some data was created specifically for Falls County to answer questions raised by participants in prior workshops. Other data was borrowed from alternative sources in order to add realism to the process.

What the Firewise Communities CD Set Contains

The four-CD set is available only to workshop participants. Updates of information and materials on the CDs will be announced and made available on-line at www.firewise.org.

Volume 1 is an interactive tour of an interface area. By visiting the library, fire station, weather station, government offices, and other areas, the user can gather information on the multiple aspects of the challenge of living in or near forests and grassy areas – including the pleasures and dangers associated with "getting back to nature."



Volume 2 is divided into two parts. Information Resources contains brochures and publications from the US Fire Administration/FEMA, the Institute for Business & Home Safety, the American Red Cross, ESRI, NFPA and others. Information is divided into subject categories and is printable by the user.

The second section contains the information essential to conducting a Firewise Communities Workshop in a local setting, like a single community or a group of small communities. This section includes the Firewise Communities Participant Workbook, the video presentations, the Powerpoint presentations used in the introductory portions of the workshop and many other materials.

Volume 3 is the Falls County training exercise. This CD contains all the data for Falls County and its environs. The display and analysis software is ArcPublisher,

a runtime version of ArcView. In all aspects, ArcPublisher looks and acts like ArcView in the use of themes, zooming, data tables, and other analysis tools. The major difference is that the user can neither create a new project nor save changes to the Falls County data. There is additional information on this CD later in this booklet.

A CAUTION is offered to those wanting to take their experience and enthusiasm back to their communities and offer a Firewise Communities Workshop based on local data rather than the fictional data from Falls County. In most cases, the needed levels of trust and understanding of the diverse disciplines around the table have not been established. It's often difficult to get cooperation and agreement on a fictional county's problems, much less on real data in which people can recognize their own streets and homes. Therefore, it is recommended that the full Falls County exercise be used to introduce local participants to the issues and to each other before tackling actual data and issues.

Volume 4 is a compilation of previous workshop presentations, photos, participant lists and other extra materials. It will be issued in two versions---one in the fall of 2002 to capture the 1999-2001 workshops and the second at the beginning of 2004 to include information from the workshops from 2002-2003. Volume 4 will be sent to all Workshop participants.

System requirements for the CD-Roms

- Volumes 1, 2 and 4 may run on either a Windows 95/98/2000 platform or the Macintosh Apple OS. Volume 1 requires Quicktime to view the videos.
- Set your computer's display panel settings to a resolution to of 1024 x 640 pixels.

Facilitator Instructions

Facilitator Information

The most critical component of a good breakout session is the skill of the facilitator. People interested in facilitating a local workshop should familiarize themselves completely with the exercise prior to assuming this role. Several agencies and organizations have sent potential facilitators and/or operators to national workshops prior to sponsoring a local workshop. Other organizations have developed local resources providing facilitator training courses.

Computer operators familiar with GIS are sufficiently skilled to handle the needed tasks. As facilitation skills are just as important as familiarity with the data set, familiarity with GIS is equally strong. Knowledge of facilitation and GIS is optimal.

Orientation

- Read this guide thoroughly.
- Read Everyone's Responsibility and watch the accompanying video, if available.
- Become familiar with the Firewise Communities Workbook.
- Understand the Firewise concepts and what Firewise is/is not.
- For reference use NFPA 299: Standard for the Protection of Life and Property from Wildfire

Your role in the group

You are the facilitator. Your main role is to allow the group to make decisions, not to guide them or make decisions for them. The facilitator is also responsible for encouraging participation by all members of the group, and similarly must insure respect and fair play by all members of the group. Your role is essential to their successful understanding of the many facets of the wildland/urban interface fire problem. The facilitator can also be effective in assisting group members to better understand the mind set other group members bring to the training and to help develop better communication abilities during discussion and negotiations.

Assisting you will be a computer operator. The job of the computer operator is to display the ArcView GIS maps and data for use by the groups.

Facilitating a small work group

Basic information

1. Room setup: The room should contain sufficient chairs around a table for the group. A U-shaped arrangement of multiple tables seems to work effectively. The room should have a projection screen, a computer loaded with the Firewise exercise data and a data projector. One copy of NFPA 299 (adapted as the hazard assessment form in the Participant Workbook) should be available to each group.
2. Set an enthusiastic tone: Your enthusiasm is as important to the group as your knowledge. If you're excited about what's about to happen, the group will be, too -- and the exercise will be more fun and educational.

3. **Introducing people:** Let each member introduce him/herself but limit introduction times and direct specify information is to be shared. Some may see this as an opportunity to tell too much about themselves or their projects or jobs. More appropriate comments to the group, in addition to names and agency positions, are what they hope to contribute to the group effort. For example, a planner might contribute insight on the planning and public approval processes; a builder will provide information on the housing market, pricing, and the involvement of contractors; and so on.
4. **Ground rules:** Establish the ground rules early. Be sure that your role and that of the computer operator is clear to the participants. You are there to help them, not to do their work, make decisions or present their findings and recommendations. Let the group select the spokesperson to represent them in the presentations and the person who will record important decisions and assumptions. A designated time keeper is sometimes beneficial.

They're in the small groups for a reason!

Based on the principle that the solution to fire in the WUI does not lie solely with the fire agency but requires a multi-faceted approach, each discipline holds key information that is can be, for the most part, unfamiliar to the other disciplines around the table. Members have been assigned to your group with the intent of achieving a good mix of knowledge and backgrounds. One of your roles as a Facilitator is to keep them on track. Some may have friends or co-workers that they came with and may wander off to join another group or simply want to chat with others outside the group. Try to schedule breaks that will accommodate the group but also complete the assigned tasks.

Group Composition

The ideal group will not be dominated by any single discipline but have at least one of each key representatives at the table. These include:

- Structural fire departments (paid or volunteer)
- Wildland fire or land management staff (state or federal lands)
- Planning professional (urban or regional land use)
- Homeowner association member
- Builder/Developer
- Elected official
- Insurance representative
- Emergency manager

Additional members may include emergency management, educators, bankers, representatives from private non-profit groups (e.g., The Nature Conservancy, Audubon Society), realtors and media representatives.

Simulation Exercise - Task 1

Assessing the WUI Hazard in Bear Heights

The Problem:

As presented to the full group during the workshop, Falls County has experienced a dramatic wildland/urban interface fire loss at Caston Heights and River Bend. The county commissioners are being sued for failure to plan. Workshop participants are called on to serve as consultants to the county in helping make Bear Heights – a particularly vulnerable subdivision in an unincorporated area of the county – Firewise. The incremental development of the Bear Heights subdivision without an effective land use planning process has resulted in a neighborhood with numerous fire protection issues and concerns. Over time all wildland fuel will burn. As development increases, the need for fire protection is increased and typically the natural fire regime of the surrounding vegetation is altered. This commonly leads to increased accumulations of fuel surrounding developments or subdivisions. The introduction of non-native or urban vegetation within the subdivision often connects and intermixes with wildland fuels creating a ‘unique’ fuel complex where more extreme fire behavior may occur. Neglect of vegetation maintenance further exacerbates the problem.

***Falls County
Commissioner
Nancy Smith
charges workshop
participants with
Firewise planning
tasks.***

**The Objective:**

Falls County Commissioner Nancy Smith has tasked workshop participants to help develop Firewise plans for an existing subdivision, Bear Heights. The identification of the wildland/urban fire protection issue and hazard severity is the initial step in developing a community fire protection plan. Input from various disciplines will be required to develop an approach that reflects the local community values. In this exercise, fire management experts can share their knowledge with representatives from other disciplines involved in the design and management of the community. This can be an opportunity for members of the group to learn not only fundamental fire information, but also some important basics about how structural fire and wildfire agencies respond to emergencies.

Insider Information:

The vegetation types are mixed. Don't try to make too much sense out of the close proximity of Ponderosa pine and palmetto. The fact is that most people won't notice the species, nor should they concentrate on these discrepancies. The density of any vegetation is generally a key consideration. As many participants are not familiar with wildland fire hazard assessment, it is important to discuss the roles that ladder fuels, understory vegetation and different types of fuel models play in this process.

As fuels and topography are the dominant features in the hazard assessment process, a discussion on the role of topography as it relates to wildland fire spread and intensity is important. Since some participants are not highly skilled at utilizing contour lines to assess slope, an additional color-coded slope classification theme was added that graphically depicts the different slope percentages. The key to this theme, as well as many other FIREWISE data themes, is in the fold-out back cover of the participant workbook.

Land ownership within the Bear Heights subdivision varies from individual lot ownership to private ownership of the undeveloped portions. The ownership of adjacent lands includes county ownership to the north, private landowners to the east, and the Knotty Pine Timber Company to the south and east.

Facilitators must use the background information and scenarios provided in the Participant Workbook; however, there may be some gaps of information concerning Falls County. In those instances, the Facilitator should use his/her discretion to provide logical "facts" or supplemental information that would contribute to a successful exercise for the group.

A Falls County Resident's Unofficial "History" of Bear Heights:

"Well, I'm not really clear on some of these points, since I've only lived in here for six years or so. But here's what I've able to pick up from some of the 'old timers'.



*James Brooks
residence,
Bear Heights*

In the early 1940s, the area now known as Bear Heights was pretty remote from the small town of River Bend (1940 census population: 12,300), and, of course, Pine Valley was pretty much only a couple of small stores.

John Brooks owned the area and ran a successful logging business along with a fairly big farm to the southwest of what is now Pine Valley. Over the next couple

***The old Hicks
residence,
Bear Heights***

of generations, the old Brooks' farm was broken up and all but disappeared as he sold a few hundred acres here and there over five or six years, you know, to developers who built subdivisions for families whose main work was located mostly in River Bend. That's when things really began to change around here, I guess.

John Brooks' grandson, James, took over the family estate in the late 1950s. James lived and worked in River Bend. He would use the Bear Heights area for family recreation while keeping a modest logging business in the family. I hear that the first permanent structure in the Bear Heights area was the old Brooks family hunting cabin located at the top of the hill, just off the main road, which was only a logging road at that time.

It only took a few years for James to realize that River Bend was growing so rapidly and for him to "escape" the city pressures, he would just enlarge the cabin and move his family to the hills. This first residence is now 3605 Bear Ridge Road. Of course, James and his family moved out a few years ago before I moved in, selling the house to some new family, and retired to - well, I don't recall where they moved to. Anyway...

A year or two after the Brooks moved up there, James' best friend and River Bend business partner, John Hicks, made James an offer for some land so that he could establish his residence on the hill down the road. They would share in the maintenance of the road and other costs necessary to develop the area. The old Hicks' residence is 3635 Bear Ridge. They're gone, too. Somewhere in Utah, I think.

Over the next three decades, 1960 –1990, Brooks and Hicks continued to develop the property, selling lots and expanding the roads and infrastructure to the west. Because of the rapid growth of Falls County and River Bend, they received cooperation from the County in development issues.



Well, the point is that the homes that you folks are looking at start off older at the east end of Bear Heights Road than they are at the west end. I guess they change quite a bit to in appearance and style since they were built over span of 30 years or more, and I guess in materials, too, since there have been several new building codes passed in that period as well.

Well, that's about all I can tell you. If you need any other background, I'd ask that facilitator person there with you. I'll bet they've got a lot more insight into the situation than I do."

Analyzing the WUI Problem(s) in Bear Heights

A systematic approach is recommended for analyzing WUI fire severity and risk. The group should consider the different viewpoints represented by the various disciplines involved (or will likely be involved) in the decision-making process.

The following is a list of tasks designed to develop a list of problem statements that profile the WUI issues in Bear Heights. It will ultimately lead to the assignment of a wildland fire risk and hazard severity rating for the subdivision, using the form in the Participant Workbook (after page 21). As an aid to facilitators, the following discussion questions may enhance the process of understanding and filling out the wildland fire risk and hazard severity assessment form.

Examine the Historical Developments of Bear Heights

Read or summarize the resident's account of the growth of the subdivision. Ask the computer operator to show the group the capabilities of the software by providing a brief overview of the GIS layers available for the Bear Heights exercise. Examine the photos of several structures and note the specific characteristics of each.

Discussion questions:

1. Does it appear that a relationship exists between the style and building materials of structures at the east end of the subdivision and the west end?
2. What does this say about the age of the structures?
3. Does it appear that a relationship exists between wildland fire risk and hazard severity and the age of structures in the development?
4. Does it appear that the need for fire protection services will intensify or diminish in the future?
5. To what extent are homeowners responsible for fire protection?
6. What are some (likely) life-style characteristics of the residents of Bear heights?

Examine the Transportation and Access to Bear Heights

The transportation themes illustrate the general accessibility of all parts of Bear Heights to both local traffic and fire apparatus. Note that some streets are dead ends due to subdivision boundaries (land ownership) and topography.

Discussion questions:

1. Does the road network in Bear Heights present a problem in terms of emergency services vehicle response? In answering this question, consideration should be given to the current location and response areas of fire stations, shown in themes 4A and 4C.
2. What are the alternatives to access deficiencies in the subdivision?
3. What will impede the effective evacuation of the subdivision?

Examine the Land Use Information of Bear Heights

Locate and identify the different land use patterns in and around the subdivision and the portion of the area devoted to open space, residential lots, roadways and so on. Examine the vegetation categories (Theme 5A).

Discussion questions:

1. What is the relationship between the vegetation and the lots?
2. Are the open spaces maintained or neglected?
3. What relationship does community planning have with the existing layout and design of the Bear Heights subdivision?
4. Does the existing land ownership pattern within and surrounding the Bear Heights community compound the assessment of personal or shared responsibilities?
5. Does the disparity between tax assessments within the community reflect a level of fiscal responsibility for addressing fire protection issues? What fiscal balance between public and private entities should be sought?

Examine the Fire Protection Capabilities

Examine themes 4A and 4C - the area color-coded for each of the identified fire station coverage areas. Each designated area represents the current fire management response area (FMRA) for its respective fire stations. Fire management areas should be examined for unusual coverage characteristics.

Fire protection concerns include street width and adequate turnarounds, spacing of fire hydrants (between each other and from structures), availability of areas that could be used for staging apparatus and personnel, water supply and response times to various parts of the subdivision.

Discussion questions:

1. What type of fire response can be expected in terms of equipment, skills and personnel?
2. In general, how do fire injuries and deaths relate to FMRAs?
3. Which FMRAs need to be re-aligned?
4. What would be some ways to adjust their coverage?
5. What resistance might be met with FMRA realignment?
6. What about more remote fire suppression resources (aircraft, helicopters)?
7. What about the staffing and equipment in the stations that are designated to respond to Bear Heights?
8. If the agreed-upon goal is to make Bear Heights a Firewise community (review the Firewise vision statement), how do fire suppression measures like street signs and water supplies contribute to achieving this?

Current Assessment of the Problem

At this point in the planning process, the group should be ready to complete the hazard assessment form. If time allows, suggest that the group develop a series of statements concerning the scope and nature of the current and projected WUI fire issue(s) in the Bear Heights subdivision. This will prepare them for their

eventual presentation to the other participants. Special attention should be given to the pertinent facts outlined in the Participant Workbook.

Discussion questions:

1. Can the public and private fire protection features in Pine Valley and Falls County adequately cope with the identified problems?
2. Is the current level of risk for wildland fire incident events and severity acceptable to the community?
3. Does the current level of fire and emergency service meet the expectations of the community?
4. Do the fire management areas provide adequate protection to the community?
5. Will they continue to do so?
6. Create a laundry list of the fire, infrastructure and land use problems within Bear Heights.

Hazard Assessment Form from participant workbook

Using the Hazard Assessment Form

The current version of the hazard assessment form, which appears following page 21 in the Participant Workbook, has been taken from a draft of NFPA 299, Appendix A for the 2002 edition. For the exercise, several columns will allow for recording information

Note that some of the information required will apply to the entire subdivision. This information is:

- Section A. Means of Access
- Section D. Additional Rating Factors (parts of this section)
- Section H. Placement of Utilities

The remaining sections apply to individual homes and must be completed as the group proceeds:

- Section B. Vegetation
- Section C. Topography

- Section D. Additional Rating Factors (parts of this section)
- Section E. Roofing Assembly
- Section F. Building Construction
- Section G. Available Fire Protection (parts of this section).

Note that Section F. Building Construction is used to determine a rating for an individual structure and also to rate an entire subdivision based on its predominate construction material and style.

Hazard Rating Methods

Different interpretations of the hazard assessment form result in varying methods of evaluating the WUI fire hazard. Although each of the groups will be rating the same community, the numbers will vary among groups. There is no "right" or "correct" score for the assessment of Bear Heights. This illustrates the importance of using relative values to identify which components contributed the most while not comparing values from different groups.

The selection of methods is typically the most difficult task facing the group in Task 1. The most common method of evaluating the community in previous workshops has been the combination method, wherein the entire subdivision is rated for common features such as access and utilities and individual homes are selected for more site-specific issues. Typically a couple of homes are rated and their totals averaged to establish a community rating. This method is effective in identifying both the variance between individual homes and the community rating. However, this process increases the weighted values of the site-specific features of the selected homes. While two homes may both be rated high, averaging causes a higher weight on their common features and neutralizes their differences. This can significantly impact the priority setting in Task 2.

Some groups have used the combination approach. However, they have tried to establish a weighted average for each component that reflects the entire community. This approach requires a more detailed search of the database for relevant information. Once again, averaging the occurrence of lower with higher-rated features neutralizes the differences and highlights the most common features.

A different approach involves the rating of worst-case scenarios to establish a community rating. This process can be effective in identifying the highest rated hazard components. When individual homes are used for rating in this process, their features will determine the community rating. If each component is rated individually, the occurrence of lower-rated components is understated.

Another approach is to focus on the components of the hazard assessment form that are assigned the highest values. This is effective in moving the group quickly to an approximate rating and minimizes long, deadlocked discussions over low-rated components.

While different approaches are commonly used, the overall ratings assigned to the Bear Heights subdivision typically replicate a bell curve where the highest occurrence is near the median value and few ratings vary greatly from the average. The most common reason for more extreme values is the utilization of the worst-case or best-case (safest) homes.

No matter which approach or combination of approaches is used, the group needs to discuss how closely the assigned rating reflects the community as a whole. For each of the rating components, what proportion of the homes comprise the higher and lower-rated features? What features have the highest occurrence?

Simulation Exercise - Task 2

Reducing the Hazard Rating in Bear Heights

The Problem:

Significant hazards and fire protection issues identified within and adjacent to the Bear Heights subdivision in Task 1 present a difficult challenge for the group. As the existing layout of the subdivision and topography has been predetermined, fire agencies typically focus on fuel management, prevention, education and the establishment of survivable space. This approach, which focuses primarily on mitigation or abatement of fuel hazards, is often in conflict with other community values like the use of trees and shrubs for energy efficiency, visual screening and habitat management. In addition, if the financial resources of the development are low, cost will be a significant constraint.

The Objective:

As directed by the Falls County Commissioners, the group is challenged to reduce the overall hazard rating of the Bear Heights Subdivision to a moderate level while addressing the above-mentioned concerns. Its plan should identify both short-term and long-term solutions.

Discussion Questions:

1. Must all hazards be mitigated?
2. Should the older structures be required to meet the current (higher) standards of the newer structures?
3. What community values would be affected by wildland fire?
4. What community values are affected by the recommended solutions?
5. What is available to minimize potential impacts?
6. Do alternatives to the recommended solutions exist that are less costly or have lower impact on other community values?
7. Do solutions exist that, although not reflected in a reduction in the hazard assessment form, will also reduce the overall hazard assessment at Bear Heights?
8. Are there creative alternatives that might increase both the economic and aesthetic values of the community while reducing risk factors?
9. Should the existing homeowners bear the entire financial responsibility for addressing the fire hazard and risk?
10. If the subdivision pays a local property tax assessment, is the financial responsibility equitable with the individuals' contribution to the problem? Should it be?
11. How much monetary responsibility should the county, adjacent landowner fire agencies or local entities like utilities assume? Is fiscal assistance appropriate?
12. Would residents of Bear Heights be more likely to accept regulatory measures and pay for mitigation given the loss of life and property that accompanied the Great Bend Fire six months ago?
13. What types of positive incentives can be used to invite homeowner compliance?

Reporting Preparation: Approximately half of the breakout groups typically report their Task 1 and Task 2 findings to the entire group. They should be prepared to discuss their findings for approximately five minutes. The dataset will be available for projection during their discussion. The focus of the presentation should be on your group's discussions, not on numerical ratings. Groups presenting last should focus on how their discussions differed from earlier presentations.

Reporting session preparation:

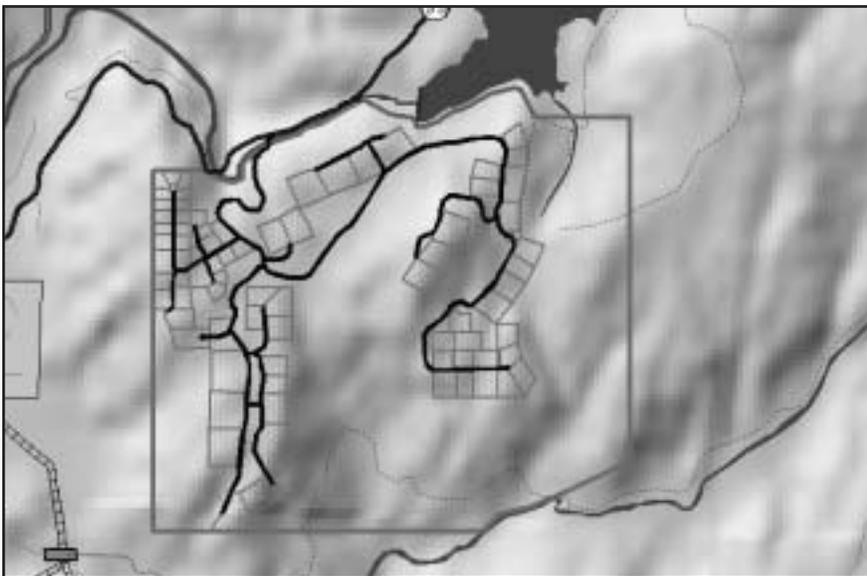
- What were the major discussions during the group process?
- What were the major issues that arose and how they were resolved: e.g.: funding sources, project responsibility, etc.?
- What did the group find most difficult to deal with?
- What were communications like between group members?
How were communications improved?
- How did group members think they would utilize the Firewise framework after the workshop?
- Did the need to form any outside partnerships arise?
If so, with who and why?
- Who did the group need at the discussion table to make decisions and implementation easier?
- What were the most creative solutions your group came up with for your communities?
- What did you learn as a group?

Simulation Exercise - Task 3A

Lake Heights

The Problem:

In keeping with the overall mission assigned to the workshop participants, the groups now must examine a proposed subdivision design for Firewise characteristics. Mid State Engineering, representing the Knotty Pine Timber Company, has submitted its proposed subdivision for review. The firm has spent many months and financial resources evaluating the site conditions and designing the subdivision. The county planning staff has placed great emphasis on the preservation of green space adjacent to designated scenic areas, in addition to protecting threatened and endangered species and cultural resources. The development company has conducted numerous studies of the area to identify and map these resources. In addition, soil stability and resulting erosion and storm runoff is a significant concern for the county planning staff. The proposed plan has been significantly altered through extensive discussions with county planning staff concerning these issues and minimizing impact on the visual resources of the area. A significant breakthrough was made when the county was promised the remainder of the undeveloped portions of the property pending completion of the project.



*Proposed
Lake Heights
subdivision*

The Objective:

Currently the wildland fire protection responsibilities of the property belong to the state Department of Natural Resources. No structural responsibilities have been assigned to the area. For this reason the Falls County Board of Commissioners has asked that your group review the proposed plan and make recommendations. A representative of the Mid-State Engineering has been invited to participate in this review to assist you in understanding the design concepts of the plan. The Great Bend Fire destroyed numerous homes in the Caston Heights community. The development company participated in the design of the community and its representative is participating with you to learn about making the proposed development Firewise. The company wishes to address marketing concerns that have surfaced in rural portions of Falls County.

Suggested Approach/Discussion Questions:

Task 3 is intended to be a proactive process to work with the development company on subdivision design. In many states and counties, the submittal of the design plan for subdivision review locks existing state and county codes in place at the time of submittal.

Some fire agencies have recently become involved in the design review process. However, generally fire management input will not be sought until the entire approval process for the subdivision is complete. Limitations of planning staff in fire agencies require emphasis to be placed on projects that are near approval.

Your group has the unique opportunity of making Firewise recommendations earlier in the design process than usual. In prior workshops, several groups have been confrontational with the developer. In one extreme case, the developer sat on one side of the room with the entire group on the other demanding considerations. In reality, fire management is fortunate if it has a single representative at the design table and must learn to integrate with other equally significant planning concerns. A confrontational approach alienates other participants and results in the dismissal of fire management expertise from the process.

Having the codes frozen in the exercise should not be an obstacle to the planning process. The intent is to balance the scales for all. If the group tries to implement a process heavy in conditions, codes, regulations and changes, the developer can challenge these actions by using existing codes to justify his proposal. However, in this scenario, the developer realizes that the community is sensitive to the fire hazard because of the Great Bend Fire, which may impact the overall approval process and marketability of the proposed development. The facilitators should try to maintain this balance. Since this development is within an area designated as "high value recreation/scenic," prospects are good that other developments will be proposed, perhaps by the same developer.

A laundry list of conditions is not the goal of the exercise. The primary objective is to facilitate a process of synergy, compromise, communication and understanding of the entire level of constraints facing the developer and providing cost effective, low-impact solutions to produce the highest level of fire protection. If the developer leaves the workshop with the belief that the integration of fire expertise is critical to the planning process, Firewise Communities will be a success. If the developer leaves thinking the incorporation of Firewise principles will make the development more valuable to potential residents, future success can be almost assured.

The facilitator should focus on helping the group use what they learned in Exercise #1 and Exercise #2, on bringing out each participant's expertise in addressing fire management concerns and finding solutions. If a proper balance is maintained, all participants will contribute something to the process. The balance should foster a cooperative effort--not a community united against a developer.

The facilitator should also focus the group. In some cases, groups have attempted to redesign the subdivision to address a particular issue like habitat management or unstable soils. Typically grading plans and/or site preparation will address unstable soil areas. However, it is common for counties to restrict the extent or percentage of unstable soils impacted. Accept the proposed design as a reflection of tradeoffs and planning discussions that have already addressed these issues. Recommendations from the group should deal with these constraints.

A group member can serve as a monitor as well as play the role of the developer's attorney. In this way, the monitor can observe the discussion and assist the facilitator in maintaining the proper balance. Many times this involves creating additional constraints or challenges for the group or providing information that helps to break up deadlocked discussions. The monitor will become familiar with your style in Task 1 and Task 2. The facilitator and monitor will attempt not to disrupt the group's dynamics.

Additional Information Often Provided by the Attorney Includes:

- The property north of the subdivision is owned by the local water utility.
- The water utility has sold ingress rights to the property to the development company.
- The county has recently acquired the property east of the subdivision.
- The county has designated the land to the east as dedicated open space.
- The land to the southeast is owned by the railroad.
- The county has recently purchased land surrounding the creek to the south of the property.
- Both the railroad and county would be vocal opposition to any roads to the south.
- The land to the east is owned by the Knotty Pine Timber Company and is logged periodically.

If your group lacks members from diverse disciplines, you may need or want to assign roles for several of the members to play. If you choose to do so, you will find some suggestions in the Appendix at the end of this document for the players to use as they act out their assigned roles. These fictitious roles should not be adversarial, but provide additional depth to the considerations of various mitigation strategies. The assumption of these roles often provides the participants with a safe means to understand the thought process and motivational issues of other community members.

Simulation Exercise - Task 3B

Lake Heights

The Problem:

In an adjunct to the Lake Heights scenario, the developer agrees to donate land for a church camp at Lake Buckhorn. Land is often dedicated or given to local governments or non-profit organizations to support an objective or initiative. Often the receiving entity is unaware of the short and long-term fire management implications that result. The church addresses the county's desire to provide a retreat or remote recreational facility for children, enhancing their awareness of the natural resource values that exist in Falls County. Tri-State Engineering Company and the county have developed a working understanding of each other's needs through their discussions on the proposed subdivision, opening the door to this opportunity.

The Objective:

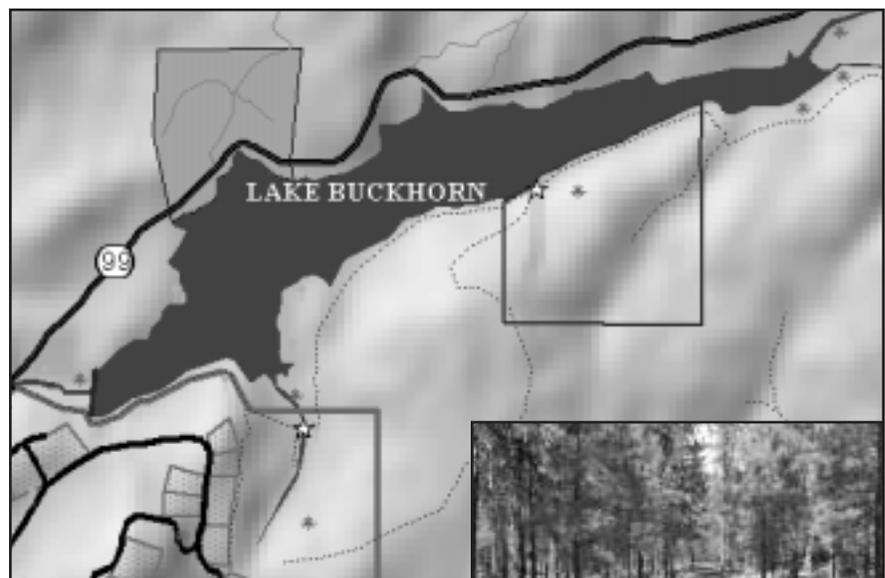
Participants in your group must review the additional challenges posed by this new information and make recommendations for Firewise planning and development.

Suggested Approach/Discussion Questions

As we are near the end of a long day, some groups have interpreted this offer as a bribe so that it can be rejected without consideration. Some serious fire management issues can be discussed concerning this type of issue:

- Safe and rapid ingress of emergency services equipment
- Safe egress of property versus the concept of sheltering in place
- Diversion of fire suppression resources for protection of life during wildland fire event
- Transportation for large number of people (buses, vans, cars)
- Design of the facilities and camp
- Proactive wildland and watershed fire management

Proposed church camp at Lake Buckhorn (perimeter shown on south lakeshore)



Logging trail along Lake Buckhorn

Computer Operator Information

Your role as computer operator

Although ArcView experience is desirable, it is not required. Operators do not need to be proficient in the operation of ArcView or ArcPublisher. Usually a brief training session to become familiar with the basic operation of the training set is sufficient.

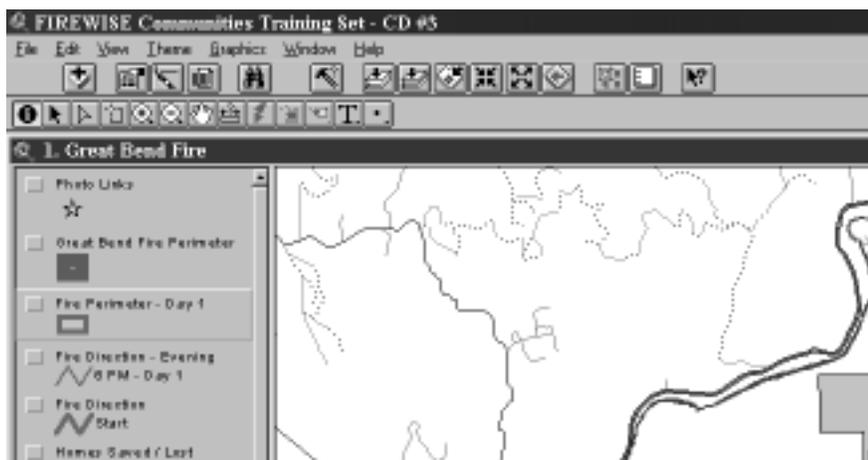
Generally, a person who has never operated ArcView can become comfortable with its operation in about one 1 hour. Most of the exercise requires clicking themes on and off, locating tabular data (2 toolbar buttons), zooming in and out, activating hyperlinks to photos and changing views (drop down menu). Like many computer programs, the pull-down menus offer alternative methods to using the toolbar buttons.

It is critical to the cohesiveness of the group that the operator works cooperatively with the facilitator. The computer operator plays a key role in encouraging dialogue among participants by continually projecting the most recent and key issues of the group's discussion. The best operators allow the discussion to determine which themes to project. Unless the group discussion warrants it, Computer Operators should bring up themes as requested by the facilitator or by members of the group and must avoid randomly changing the projected themes while discussion is underway. (It is suggested that before the actual group begins, the computer operator review how adding or deleting data layers effects the image and how distracting it can be.)

Installation of Firewise Communities training set (Volume 3)

- Insert CD#3 into the CD-ROM drive on your computer.
- Open the CD folder and find the SETUP application icon.
- DOUBLE CLICK the icon.
- The installer program will install everything you need to run the exercise.
- When a SELECT COMPONENTS window appears, be sure to check both boxes that read "Firewise Training Set program files" and "Firewise Training Set data files."
- Notice that the entire set of program and data requires 227539k of storage.

Hints for running presentation



Views

A view is one of a series of maps that is included in the Firewise Training set. You have several views that will be used for the tasks and some that provide additional information.

- Great Bend Fire
- Falls County
- Bear Heights
- Lake Heights

Two additional views, River Bend and Pine Valley allow for specific geo-spatial inquiries relating to those two communities.

Table of Contents

Located on the left hand side of the opened view containing a long list of individual themes. Themes can be moved up or down in the Table of Contents. However they have been arranged as point themes on top, line themes and then polygon themes. Themes on top in the Table of Contents will cover up lower themes. Please take care in turning off unused themes.

Themes

What are Themes? Themes represent data that is displayed in a graphic or spatial format while providing an organizational structure for referencing information relating to feature. Themes are in points, lines or polygon format. Feature that look like points or lines in a polygon theme are actually polygons.

Theme Measurements. Measurements are distinct for each format. Distances or buffers from a point, line or polygon can be calculated in all formats. However, area for a feature can only be calculated in the polygon format, while segment length of a line can be calculated in the line format.

Turning themes on and off. Displays the theme within the displayed view. Position the pointer-cursor over the check box in the theme you wish to turn on and click the right mouse button. A check appears in the box and the data appears.

Making theme active. Allows access to tabular data and allows selected items in the theme to assume the zoom control functions of the toolbar buttons discussed under Commands. Position the pointer-cursor over the theme name or legend you wish to turn make active and click the right mouse button. You will notice that the theme will appear raised in the Table of Contents and the theme is now active.

Tabular Data (Data behind the themes)

Can be activated using the Open Theme Table button described under Commands. Provides supporting information in reference to each point, line or polygon in the active theme.

Photo Link Theme

The photo link theme displays linked photos associated with the points displayed when turning on this theme. The theme must be active and turned on with the lightning bolt command button on for the photo link process to work.

 Example: In the VIEW Bear Heights, the Photo Links THEME depicts a series of white stars representing photo locations within the Bear Heights property. These locations can be displayed by turning the theme on (click in box), and then making sure the theme is active (click on theme name or legend). A lightning box icon will become active on the command bar. Click on the lightning bolt from the command bar. The cursor becomes a lightning bolt, which is then moved over the photo point (white star). The photo is revealed when the left mouse button is clicked. Note the bottom tip of the lightning bolt must be near the center of the highlighted point (star) for the photo link feature to work.

Commands (buttons across the top)
Toolbar's Top Row (Highlighted buttons are used most often)

-  *Open Theme Table*
Provides access to tabular data of the active theme on the Table of Contents
-  *Zoom to Full Extent*
Will zoom view to its largest extent
-  *Zoom to Active Theme*
Will zoom to the widest extent of the active theme on the Table of Contents
-  *Zoom to Selected*
Zooms to the extent of highlighted features of the active theme on the Table of Contents. Features of the theme can be highlighted within the view or in the Tabular Data
-  *Zoom In*
Zooms in to the center of the view
-  *Zoom Out*
Zooms out equally in all directions. Center remains the same
-  *Zoom to Previous*
Serves as a back or return button to previous zooms in the view
-  *Clear Selected Features*
Clears all selected features of active theme on the Table of Contents
Clears highlighted features in the view and in the tabular data table



Note: Most of these features are also available in the pull down menu. More advanced users can utilize the Find and Query Builder buttons.

Toolbar's Bottom Row (Highlighted buttons are used most often)



Identify Button

Displays the attributes of features on a view by clicking on them with the mouse. Choose the Identify tool and click on any feature in the active theme(s) on your view to display its attributes. Attributes of all features located at the same point are displayed.



Select Feature Button

Highlights individual features within a theme. When active, a box can be drawn on the View display and all features of the active theme within or touching the box will be selected. Additional features can be selected without losing prior highlighted features by holding down the shift key.



Zoom In Button

Zooms in a determined percentage with center of view determined by position of cursor when clicking on the mouse. Holding down the left-click button allows the operator to draw a box outlining the desired extent of the view.



Zoom Out Button

Zooms out a determined percentage with center of view determined by position of cursor when clicking on the mouse. Holding down the left-click button allows the operator to draw a box altering the percentage of zoom. The smaller the box the greater the extent of the view when zoom out is completed.



Pan (Grab) Button

Allows operator to pull the view in any direction with the extent remaining the same.



Measure Button

Use the Measure tool to measure distance on a view. Use the mouse to draw a line defining the distance you want to measure. The measurements are displayed in the ArcView status bar, shown in the current distance units (default measure is feet) of the view.

Note: The text and label tool are available for more advanced ArcView operators.

Table Toolbar Bottom Row (Highlighted buttons are used most often)



Pointer Tool Button

Highlights individual features within a theme. Features will remain highlighted when return to the View. To select multiple features hold the shift key down while painting or clicking on multiple features. Clicking on the highlighted feature clears the selection.

Shape	ID	Conte	File type
Point	0	Railroad	Wildland
Point	0	Lightning	Wildland
Point	0	Lightning	Wildland
Point	0	Structure	Structure
Point	0	Electrical	Wildland
Point	0	Electrical	Wildland
Point	0	Structure	Structure
Point	0	Equipment	Wildland
Point	0	Lightning	Wildland
Point	0	Smoking	Wildland
Point	0	Smoking	Wildland
Point	0	Smoking	Wildland
Point	0	Smoking	Wildland
Point	0	Lightning	Wildland
Point	0	Vehicle	Wildland
Point	0	Structure	Structure
Point	0	Structure	Structure



Select All/Select None

The Select All Button selects all features in the table. The Select None clears all selected items.



Promote Button

Brings all selected items to the top of the table.

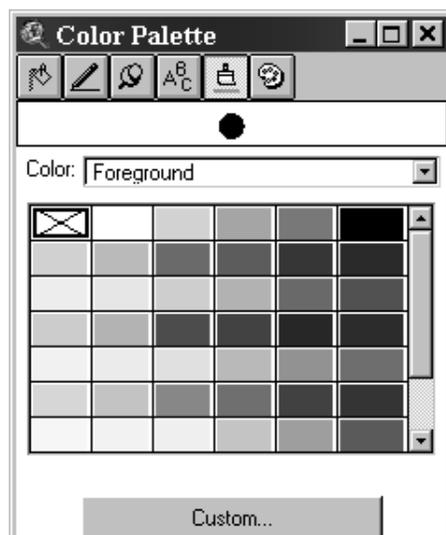
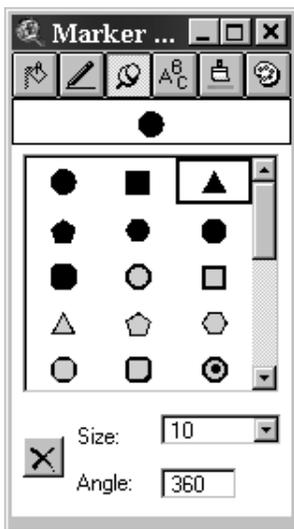
The Switch Selection button inverts the selected items.

Changing colors and symbols in legend

Double click on the theme legend where a color change is desired. The following box will appear.



Then double click on the desired feature in the symbol column. A marker palette will appear. Select the paintbrush button to find the color choices. More color variation is available by clicking the custom button.



Falls County Views and Themes

Refer the group members to the inside back cover and the tear-off reference sheet in the Participant workbook.

Tips:

Wait for the cues from the facilitator before exploring the maps, themes and data in Falls County. Changing themes, turning them on and off, and opening and closing tables is distracting and confusing.

When viewing photo links, they will remain open until they are actually closed. Photos remain in memory if they are just minimized. This can cause a system memory problem if several pictures remain open. Close out each photo after viewing.

At the end of the session

Closing the files: Pull down the FILE menu and EXIT. You won't be able to save or start a new project.

Role Play Guidance

This background information and guidance on community roles is intended to help participants explore as many community issues as possible during the simulation exercises. While working on the "new development" scenario for Lake Heights, it is especially important that diverse points of view are discussed. The facilitator may wish to assign these roles just ahead of the breakout session.

Banker

Overall: Your role is to provide financing for developers/builders and homeowners. The opportunity cost of these loans will be the value of cash and investments in other types of investment. As the banker, you want to maintain a high level of demand for loans. Therefore, you will be concerned about any significant restrictions on development and the production of new homes. Loans are evaluated based on the rate of return and the risk of the investment secured. The banker does not want any defaulted loans coming back from the developer or homeowner due to total loss of property to wildland fire.

Bear Heights: As the banker, your concerns relate directly to the demand for loans in the local community. Any measure that restricts growth would have a direct and negative impact on loan demand. Indirect negative impacts would include increased development costs, stricter building requirements and higher tax assessments. Requirement of Class A roofs may increase development costs. However, such a requirement also increases the demand for home improvement loans. Any measures that increase fire protection and help to meet community values may increase the demand for homes, helping to offset the negative impacts.

Lake Height: You will have similar concerns as with Bear Heights. In this scenario, however, the banker would be a fiscal partner with the developer (Knotty Pine Timber Company). Review the developer role for details. Any concerns that impact the project fiscal balance sheet would also be a direct concern to the lending institution.

Developer

Overall: Your role is to assess property and evaluate the local market for potential development, negotiate zoning changes (where necessary), secure loans and/or financing, purchase property, hire development design/planning team, clear permits, submit necessary environmental assessment reports and proposals to county or city planning department, participate in public scoping/hearings, secure review board approval and market property to builders.

Developers evaluate potential properties with the opportunity cost of developing other locations within or outside the local market. When the market is competitive (numerous builders/demand high) or tight (demand low), the developer will often lower the expectations (profit percentage). A common profit percentage is a return of 15 to 20 percent. Financing is typically secured by selling shares or by obtaining a building/development loan from banking institutions.

Bear Heights: As the developer and property owner of undeveloped land, you will be concerned primarily about the fate of the remaining undeveloped portions of the property. Most of the assessment of the area has been completed.

Developer concerns would include any restrictions on additional development, stricter building standards, higher rated hazard assessments, wider road requirements, and tax assessments on the undeveloped portions of the property.

However, you will accept some measures as the local market trend changes. The developer will support measures that expedite the approval process, improve the marketability of the property, or help address other constraints facing future development. (Often long-term or strategic fire and/or fuel management strategies can address environmental or forest management concerns).

Lake Heights: You will have similar concerns as with Bear Heights. However, as the developer for Lake Heights, (Knotty Pine Timber Company) you are more receptive to input at this stage of planning. Your company has incurred extensive costs for property site assessment, environmental study and planning/design. You would welcome productive or creative input that improves the marketability of the property and/or expedites the review process. You will also be more amenable to stricter requirements and improved fire protection measures if they were evaluated as expected building requirements in the local market during the property assessment. You will insist on a higher level of justification for input that results in extensive re-planning/design/assessment, increased development costs, and restrictions on type or amount of development.

You have owned the Lake Heights property long before the fire in Great Bend, where the current building requirements are similar to the western portion of Lake Heights. Most established and approved county development standards relate to road design (widths and grades), turnarounds, water storage, fire flow, and maintenance of the rural and visual quality. The current building setback requirement is 50 feet from the road.

Political Issue: The Chief of the local Pine Valley Fire Department has been a vocal advocate for wider road widths, lower road grades, secondary road access, defensible space, and Class A roofs requirements since the Great Bend Fire. As the developer, you are aware of this effort. However, the Lake Heights Property falls outside this jurisdiction. You are wary that the county may also be receptive to the Chief's concerns. The Lake Heights proposal is being submitted at this time to lock in the existing county building standards. This allows the developer to challenge any additional building requirements that the county may insist on during the review process.

Emergency Manager

Overall: You are concerned with overall awareness of disaster preparedness and level of response. You may serve as a community resource for grant funding and preparedness planning.

Bear Heights: Public awareness of fire danger is high due to significant structure losses in Caston Height during the recent Great Bend Fire. The lack of a second access to the property is the highest priority. However, the emergency manager is equally concerned about road grade, surfacing, widths and turnarounds, as well as the potential for other kinds of emergencies that may occur within the Bear Heights Area. You will insist on all-weather surfaces when possible to ensure year-round access.

Lake Heights: Like fire management staff, you, the emergency manager, are often consulted late in the development stage, if at all. You should insist on a second access (all-weather) to the property and/or looping of the proposed road network. You are also concerned about increased or concentrated runoff from the developed property and the destruction of the existing watershed near the recently mapped flood zones.

Homeowners

Overall: You are concerned about the potential risks to your property, but also will express a deep concern for local community values. What others term "hazardous fuels" may be what you see as security, rural setting, visual benefits, wildlife habitat and recreational values. The homeowners have limited financial resources to address water storage, road improvements, signing, enhanced fire protection resources and community fuel reduction projects. Many homeowners will have a difficult time explaining their expectations of fire protection and emergency response. Expectations for these services often far exceed existing capability. Community awareness typically peaks after large wildland fire conflagrations and gradually erodes over time as residents change and seasons pass without incident.

Bear Heights: Homeowner awareness is high due to significant structure losses in Caston Heights during the recent Great Bend Fire. As the Bear Heights homeowner, you will support the need for most fire protection measures that are not in direct conflict with local community values. Some homeowners may place community values higher than any perceived public safety values. Some homeowners will express concern that, despite their efforts, the lack of effort by some neighboring residents represents a significant risk to the entire community. An equal frustration may be voiced about the lack of fiscal support from local community providers (including the local fire department). Homeowners will be concerned about labeling the community as a high hazard area unless the local community and service providers assist financially in addressing these issues. Issues of fairness may emerge, as owners of properties with higher tax assessments may pay a higher share of the costs for protection. Some of the owners of newer homes may point out that many of their homes were built with stricter building codes and are less susceptible than the older homes.

Lake Heights: Future homeowners of Lake Heights are not represented at the table. Many homeowners that get involved at public meetings may be there to address local community value concerns. Many will advocate that the potential cost burden should be shifted to the developer/builder/future homeowners. Some concerns for the Lake Heights Area may include:

1. Pro-growth versus no-growth advocates.
2. Support or opposition for the County acquisition of land to protect open space, recreational activity, and scenic quality.
3. Support or opposition to measures dealing with the protection of endangered or threatened species or habitat.
4. Community employment opportunities.
5. Forest health.

Insurance

Overall: Your role is to provide insurance coverage for developers, builders and homeowners. The insurance company will be a willing participant in educating the public on potential for wildland fire ignitions, existing hazardous fuel accumulations and overall threat to property. The insurance company often includes brochures discussing fire prevention and fire protection techniques with its premium statements. After significant structure losses resulting from wildland/urban conflagrations, insurance companies may limit their local exposure (reduce the number of policies issued or renewed), thereby decreasing competition and increasing premiums for the affected area. Similar activities may occur when areas are mapped or designated as high hazard areas.

Bear Heights: As the insurance representative, you will serve as a very interested and involved participant in the Bear Heights hazard assessment process. You may reveal the fact that local underwriters have been concerned about issuing new or renewing existing policies since the Great Bend Fire. Local insurance agents and underwriters are looking for solutions to address the overall wildland fire threat to homes in Falls County. In fact, some insurance companies have been identifying (mapping) hazardous areas similar to Caston Heights.

When solutions for Bear Heights are discussed, you will support a more accurate hazard assessment process and measures that enhance emergency response, reduce the hazards or decrease the potential risk to community. You may volunteer assistance in distributing and/or developing educational and fire prevention materials. When pressed about offering rebates or reduced premiums for Bear Heights if enhanced fire protection measures are implemented, you may explain that the costs exceed the potential benefits to the insurance company. Structure loss/damage claims related to wildland fire are a small percentage of all claims processed. As insurance premiums are based primarily on replacement costs, the installation or replacement of Class A roofing will increase the replacement cost and total home value, more than offsetting the benefits accrued from the enhanced fire protection. You may also point out that even a Firewise home is likely to remain susceptible to insured damages such as structure fire or earthquake.

Lake Heights: You will have similar concerns as with Bear Heights. As the insurance representative (agent or underwriter), you will be a vocal advocate of stricter building codes, enhanced fire protection and education. These measures can significantly limit the potential risk from wildland fire. The insurance representative will agree that measures restricting growth or local development may be a fiscal and economic concern to the insurance and other local businesses.

Land Manager

Overall: You are concerned about the economic, social, political, legal and environmental impacts of land management decisions on the land that you manage. The land manager role can be played as a timber company, rancher, public watershed manager, parks and recreation director, utility district or as the local conservancy assigned to manage these lands. Regardless of which role you choose, you will take a long-term approach to land management decisions. You realize that decisions today can affect the land for many years into the future.

You feel personally responsible for the long-term stewardship of the land and hope that it will be in better shape when you pass this responsibility on to your successor. You feel a responsibility to protect, preserve and/or enhance natural, physical, cultural and historic resources. Some roles may favor one resource over another. You are constantly dealing with issues where management objectives and policy are in conflict with other issues. You understand that difficult choices must be made but trust the expertise within your staff to provide the necessary information to make effective decisions.

Facilitation is a key focus of your daily activities, as you must encourage your staff to effectively communicate management direction and to identify areas of concern for their discipline, yet work as an integrated team with all other disciplines to develop management strategies and policy.

You probably favor a more "holistic" approach to land management and would like to minimize negative impacts limiting the amount of disturbance to a specific area. You would favor a rotation of treatments or a landscape-based approach to minimize the potential for long-term impacts and maximize the lands sustainability.

Bear Heights: You feel that Bear Heights is an excellent example to show how the lack of planning can impact a wide variety of resources. While this development may already be in place, minimizing its impacts on the adjacent wildland areas is critical to your achieving your long-term management goals and objectives.

Codes are not your primary concern at Bear Heights. However, when they are discussed you would like to integrate concepts that are consistent with your land management goals. You are aware of the potential liability of a wildland fire that could spread across the land you manage and destroy homes or valued resources in this community.

The primary landowner surrounding the Bear Heights subdivision is the Knotty Pine Timber Company. However, this role could be played as a conservancy director or a county land manager. Other key landowners could be the water district or power company that may own or manage easements within or surrounding the development.

The Great Bend Fire has placed a lot of pressure on hazard reduction of all wildland areas in the county. While you want to minimize large scale or high intensity wildland fire spread throughout most of your lands, you are aware that the highest priority areas for treatment are those surrounding the interface or urban encroachment areas. You understand that these areas are more costly to treat and more politically sensitive than the other areas for which you are responsible.

You feel that if you commit to financing or providing resources to an individual community, you may be opening the door for other communities to insist on equal dedication to their area. You realize that while you can manage the forest health and fuel load, and minimize the potential for

Bear Heights (continued): high intensity wildland fire, these efforts are not effective unless similar efforts are taken within the community. You see the transfer of responsibilities to the individual or the community as a method to empower partnership building or effecting change on adjacent properties. History has proven that the more you do to address the problem, the more that the community expects and becomes reliant upon you.

Enhanced ingress/egress to the community may represent increased access to the resources you are trying to protect. Solving the fire access issue may create numerous management conflicts with your lands.

Lake Heights: You feel comfortable in planning meetings, realizing the opportunity to address some of your land management concerns. Facilitation and consensus-building are roles that you feel comfortable in providing.

You are concerned that development leads to urban encroachment into the wildland areas adjacent to lands for which you are responsible. Each new development places increased pressure on your land management responsibilities, resulting in a diversion of resources from your highest priority areas.

You are aware that land management is expensive, especially in those areas adjacent to development. You are a proponent in of a proactive approach to planning, but will insist on effecting change over the long-term. This development will create a permanent relationship, and you would like to address potential conflicts prior to their occurrence.

Wildland Fire Manager

Overall: You are concerned about the complexity of protecting forest resources located adjacent to urban or rural development. Developments are often sited on ridgetops or in the direct path of wildland fire spread, which significantly limit wildland fire suppression activities such as "burning out", aerial retardant drops, or control line construction. In addition, proactive or long-term fuel management activities near wildland/urban interface communities increase the costs of fire control and suppression approximately seven-fold.

Often as development increases, the fire responsibility areas shift to state or local fire agencies or districts. This shift may also result in a lack of awareness and expertise in the management of forest health and ecosystems.

Bear Heights: You will try to capitalize on the increased awareness for fire protection/management following the Great Bend Fire. Discuss the role of fire in maintaining a balance between forest health/ecosystem management and the accumulation of fuels where unnatural fire regimes result from effective fire suppression activities. You will support all activities that enhance the potential of Bear Heights to survive a wildland fire without the necessary intervention of the fire department.

The lack of a second access to the property is a high priority. However, you are equally concerned about fuel management, road grade, surfacing, widths and turnarounds. The wildland fire manager will support fuel management activities, which reduce the potential fire intensity of wildland fire spread as it approaches Bear Heights. You will also support strategic treatments, mechanical alternatives, and environmentally sensitive techniques despite the higher costs associated with treatments near interface communities.

Lake Heights: Fire and forest management staff are often consulted late in the development stage, if involved at all. Insist on a second access to the property and/or looping of the proposed road network.

The Pine Valley Fire Department or the River Bend Fire Department will assume structural fire protection responsibility for the Lake Heights development. The wildland fire manager will be concerned about the long-term management of the open space and adjacent wildland fuels. These areas represent a significant threat to the development, while the encroachment of new developments increase the complexity and costs of managing these wildland fuels. You are concerned about the skills and training of local structural fire departments when facing wildland fires.

Support all measures that ensure the protection of the Lake Heights development without the necessary intervention of the fire department. You will provide wildland fire assessment skill to the group and development planning team.



FIREWISE COMMUNITIES

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