

Communities at Risk List Process

May 2004

The attached Field Guidance outlines national direction for identifying and prioritizing wildland urban interface communities at risk from wildland fire. It is the intent that the communities at Risk List be developed cooperatively at the local and state level. The purpose of the Communities at Risk List is to assist the land management agencies and other interested parties in determining the scope of the wildland urban interface challenge and to monitor progress in mitigating the hazards in these areas.

The following sections define and explain the standards that will be used in Utah to develop the Communities at Risk List.

Definitions.

Community: The definition of a community at the national level has been very broadly interpreted: a group of people living in the same locality and under the same government.

Communities define themselves by how they perceive themselves and those living adjacent or in close proximity to them. Specific issues can unite or divide people into larger or smaller units. Example: a group divided themselves into five different communities over the issue of water; however, on the issue of fire hazard/mitigation they may redefine themselves as a single community. In our efforts to identify communities we should look for the clustering of housing in largest units possible, but temper it with your knowledge of local issues, concerns, personalities and politics that may divide them into small groups. Be prepared to change your views on the communities as the communities define themselves.

Interface: Wildland urban interface does not lend itself to easy definition. In the broadest definition, wildland urban interface is when development of housing, recreation and/or associated supporting facilities occurs in wildland fuels, which does not alter the basic structure or character of the original fuel type (will the surrounding fuels carry a fire). Classifying an area as an interface zone is subjective decision; however, wildland fuels must be present to pose a threat to development.

Communities of Interest: NFPORS provides space for additional communities other than those originally listed in the Federal Registrar as Communities at Risk. These communities are ones that should have been on the original list but were somehow not included or are new communities that have developed since the list was compiled three years ago. We will undoubtedly continue to have to use the Communities of Interest category to list new "At Risk Communities" unless NFPORS is consistently updated with the new information you will be developing through this process. There is no need to develop a list of Communities of Interest as you are working on the List, as we expect all communities listed to be those considered "At Risk."

Categories of Risk. National direction requires that within various categories we classify interface areas into three levels of risk – Extreme, High and Moderate. The 1997 *Statewide Interagency Fire Assessment* used these relative hazards. For consistency, the standards established in the Assessment should be continued (Copies of this study are in the hands of the federal land management agencies and the State Forester's Office if it is needed for reference). In order to prevent duplication of assessments, a category of No Risk will also be added to create a record of No Risk Communities.

The following categories should be used in determining the levels of risk:

- **Fire Occurrence** Using historic fire occurrence records and other factors, assess the anticipated probability of a wildfire ignition in the vicinity of each community (or identified landscape) using the adjective rating system of Extreme, High, and moderate.

Fire occurrence was a major element in the 1997 *Statewide Interagency Fire Assessment*, and in order to maintain consistency, the standards established for these elements should be continued. The following standards were use in the Assessment:

Fire Occurrence:	No Risk	0 fire/township for 1986 to 1996
	Moderate	0 to 1 fire/township for 1986 to 1996
	High	2 to 14 fires/township for 1986 to 1996
	Extreme	Greater than 14 fires/township for 1986 to 1996

- **Fuel Hazard** Assess the fuel conditions of the landscape and surrounding the community using a GIS mid-level mapping tool (if available) or other similar process. Again, apply the adjective rating to each specific area.

Once again, the 1997 Assessment used this element, and in order to maintain consistency, the standards established for these elements should be continued. The following standards were used in the Assessment:

Extreme Description: High resistance to control, extreme intensity level resulting in almost complete combustion of vegetation and possible damage to soils and seed sources depending on slopes, wind speed, rate of spread and fuel loading.

Vegetation Types: Spruce-fir, Mountain fir/spruce-fir, mountain shrub, mountain fir/mountain shrub/ conifer/aspen, lodgepole pine, lodgepole pine/aspen, juniper, pinyon/juniper, pinyon/mountain mahogany/oak

High Description: High resistance to control, high to moderate intensity resulting in high to moderate damage to resources depending on slope, rate of spread, wind speed and fuel loading.

Vegetation Type: Maple, mountain shrubs, sagebrush, sagebrush/perennial grass, salt desert scrub, Black Brush, Creosote/Bursage and Greasewood.

Moderate Description: Moderate to low resistance to control, fire intensities would generally cause moderate damage to resources based on slope, wind speed and fuel.

Vegetation Types: Ponderosa pine/mountain shrub, grassland, alpine, dry meadow, desert grassland, Ponderosa pine, Aspen and mountain riparian.

No Risk

- **Values Protected.** Evaluate the human and economic values associated with the community or landscape, such as homes, businesses, community infrastructure (e.g. water systems, utilities, transportation systems, critical care facilities, schools, manufacturing and industrial sites, etc.) as well as high value commercial timber stands, municipal

watersheds, and areas of high historical, cultural, and spiritual significance. As with the other factors, apply the appropriate adjective rating to each community or identified landscape.

Interface developments are composed of a variety of human, economic, community and landscape values. Establishing a hierarchy of values among these is difficult because it is based on a value system. With this in mind, we must establish a hierarchy of values that reflects the relative value of the society as a whole. The highest values protected should be those that affect the whole community, followed by those that affect the largest number of people within the community and the lowest values are those which affect the fewest people within the community.

Communities are composed of a mixture of these values; however, the predominate values to be protected should be determined within each community. Once this has been established, the following rankings should be used in assessing values protected within the community:

Extreme Community infrastructure and community support: This would be water systems, utilities, transportation systems, critical care facilities, schools, manufacturing and industrial sites. It may also include valuable commercial timber stands, municipal watersheds and areas of high historical, cultural and/or spiritual significance which support and/or are critical to the well-being of the community.

High Primary Development: This would include primary residential housing, commercial and business areas.

Moderate Secondary Development: This would be seasonal or secondary housing and recreational facilities.

No Risk

- **Protection Capabilities.** Assess the wildland fire protection capabilities, including the capacity and resources to undertake fire prevention measures, of all agencies or organizations with the jurisdiction: federal, state, tribal, and local.

Trying to determine the overall capabilities of all fire protection organizations (local, state and federal) within a given community is difficult. A single appropriate rating adjective must be applied. For our purposes, the Insurance Services Organization (ISO) rating for the community will serve as an overall indicator of these protection capabilities. Please use the following in determining the fire protection capabilities of the communities:

Extreme ISO Rating 10

High ISO Rating 7 to 9

Moderate ISO Rating of 8 or lower

Numeric Rating. In order to assign an overall rating for each community, numeric values should be assigned to the levels of hazard (Extreme, High and Moderate, No Risk) for each of the four elements (fire occurrence, fuel hazard, values protected and protection capabilities). A value of three should be assigned to all Extreme rating, two to all ratings of High, one to the Moderate category, and zero to all No Risk ratings. This will produce gradations of relative hazard for each community from a low 4 to a high of 12.

	Fire Occurrence	Fuel Hazard	Values Protected	Fire Protection Capabilities	Overall Rating
No Risk	0	0	0	0	
Moderate	1	1	1	1	
High	2	2	2	2	
Extreme	3	3	3	3	
				Total	

Summary

The purpose in identifying the communities' risk is to assist the wildland fire manager and other interested parties in determining those communities that are at the greatest risk. In mitigation efforts, the degree of risk should be a major consideration in prioritizing which communities to engage.

Other factors such as the community's willingness to take action will determine which communities are selected to initiate mitigation projects.

The degree of risk should be used to determine which communities are targeted for information and education programs to prepare them for future mitigation activities.

Communities should be re-evaluated annually by May 15th to determine degree of risk and to track any progress that has been made in reducing the risk to the wildland urban interface communities of Utah.

Communities at Risk List and Overall Rating:

Overall Ratings for individual communities can be categorized as follows:

<u>Score</u>	<u>Rating</u>
4-7	Moderate
8-11	High
12	Extreme