

Interim High Risk Communities List Methodology Status of Oregon's *Communities At Risk* Assessment

August 8, 2005

Background:

In an effort to update Oregon's *Communities At Risk* assessment, a task group formed in February, 2004 to begin drafting a methodology that would provide a framework for the statewide assessment, and would also serve as an assessment tool for counties and communities engaged in community wildfire planning. The task group met March 1, 2005 to review progress and discuss issues concerning the statewide assessment. Valuable input from individuals and groups who had been using the methodology for local assessments and community wildfire planning has been used to improve the recommended methodology.

The Oregon Department of Forestry (ODF) recognized the need to identify communities associated with high risk areas as an initial filter for the 2006 Western States Fire Managers State Fire Assistance Grants prior to completion of the *Communities At Risk* assessment. ODF has generated an interim list using data gathered for the statewide assessment.

Status:

Data needed for the statewide assessment are complete for the initial assessment. We are now processing these data to assign a low, moderate, or high risk rating to each community for *Risk, Hazard, Protection Capability, Value, and Overall*. When completed later this summer, data and updated methodology will be made available for review and use by public and private stakeholders. Unlike the previous *Communities At Risk* list from 2001 (that was included in the federal register), this list will be dynamic and maintained by the Oregon Department of Forestry. Community and risk information will be updated as community wildfire protection plans are completed.

Interim List:

The following process was used to generate the **high risk areas** and the **interim** list:

- The acres classified as "High" *Overall Risk* from the current statewide data were assigned to each 6th field watershed in the state.
- Watersheds were then ranked based upon acres of "High" *Overall Risk* within the watershed. Assignment of Low, Moderate, and High were made based upon creating an equal area of each classification within the state. The "High" risk watersheds are considered **high risk areas** for the purpose of the interim list.
- Jurisdictions with population densities of 28 persons per square mile or one dwelling per 40 acres¹ within 8 kilometers² of a "High" risk watershed were included in the list of high risk communities. The community name is based upon the jurisdiction (municipality, federally recognized Indian reservation, fire district, national park, or county (no structural protection)). 226 of 573 identified communities (jurisdictions) are included on this list. **Any "community" within these 226 jurisdictions is considered in a high risk area.**

Below is a map illustrating **interim** high wildfire risk, populated areas and adjacent watersheds (community areas).

¹ Density requirement from the National Fire Plan and Healthy Forest Restoration Act

² The definition of "community" in Oregon's *Communities At Risk* Assessment is based upon a fire shed concept, and includes the geographic area within and surrounding populated areas (generally the portion of adjacent 6th field watersheds within 8 kilometers – the threat zone of large fire)

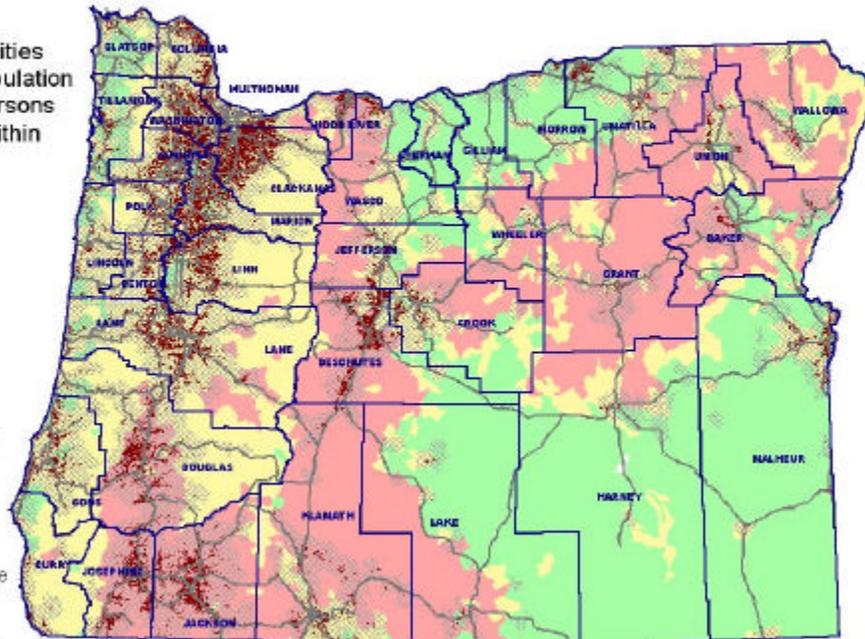
Oregon High Risk Areas (Interim)

High Risk Communities (Interim)

High risk communities are those with population densities of 28 persons per square mile within 8 kilometers of a high risk area (watershed)



As of July 29, 2005.
Data subject to change prior to completion of assessment
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Additional information about the assessment process, scale, and data:

The *Communities At Risk* assessment is being used to develop a statewide fuels strategy and to help set large-scale priorities across geographic areas (watersheds, multi-county coordination areas, etc). The methodology used was developed by the task group using national guidance. At this scale, data must be available consistently statewide for relative comparisons. Community and local priorities, including prioritization of projects, will be determined through community wildfire protection plans and associated local assessments using more refined local data, where they exist. Important factors that need to be considered in assessment of individual lots and neighborhoods, such as roof type, defensible space, and access, are not considered at the statewide scale.

Community names and boundaries: Community names are determined by jurisdiction – city, federally recognized Indian reservation, national park, and county (where none of the previous jurisdictions exist). These are planned to be updated as county and community wildfire plans (CWPP) are completed. The geographic area assigned to each community is based upon a “fire shed” concept, including the area surrounding the community where economic, social, cultural, and visual values important to the community exist, and where strategic fuel reduction planning needs to occur to protect the community from large catastrophic wildfires. It includes surrounding 6th field watersheds, not to exceed 8 km (see footnote 2 on page one). As communities determine their Wildland Urban Interface Boundaries through a CWPP, the state will adjust the statewide assessment boundary.

Limitations: The assessment task group developed some excellent data products that have not been available in the past. Every effort was made to use the best available data. However, in the process of evaluating data to find the best available, some data gaps have been exposed. The most significant gaps will be filled over the next two years. However, this assessment has some data limitations users need to be aware of:

- The population density data used to determine community locations and values is based upon 2000 census population, private ownership, and proximity to roads. Seasonal and resort communities (second homes) are largely overlooked by census data;
- Some of the vegetation and related fire-potential data used to determine fire characteristics are inferred from 1992-1996 satellite imagery using crosswalks developed through expert opinion. They have not been field verified in many locations. To compensate, burn severity data from large fires was used to “update” these vegetation data. Also, insect and disease maps developed from aerial surveys were used to help identify highest fire hazard;
- Protection response capability data are based upon existence of a protection agency, not the capability of the agency;
- Values are based upon population density, very significant municipal watersheds, and commercial forest values. Important local values - such as infrastructure, ecological values, and historical and cultural sites - while important locally, are not considered in the statewide assessment. These need to be addressed in local plans;
- Risk to wildfire may be exacerbated by socioeconomic conditions of communities and individuals. The statewide assessment does not include socioeconomic indicators of risk, but communities can include this in local plans; and
- The assessment uses boundaries for Federally Recognized Indian Reservations, but does not recognize areas with culturally significant and ancestral Tribal lands. Counties and communities that may have ancestral Tribal lands should coordinate with the Tribe in developing local plans.

Providing Feedback to ODF:

Questions concerning the interim assessment can be directed to Jim Wolf at jwolf@odf.state.or.us or 541-664-3328. A more formal feedback process will be used when the statewide *Communities At Risk Assessment* is completed later this summer.

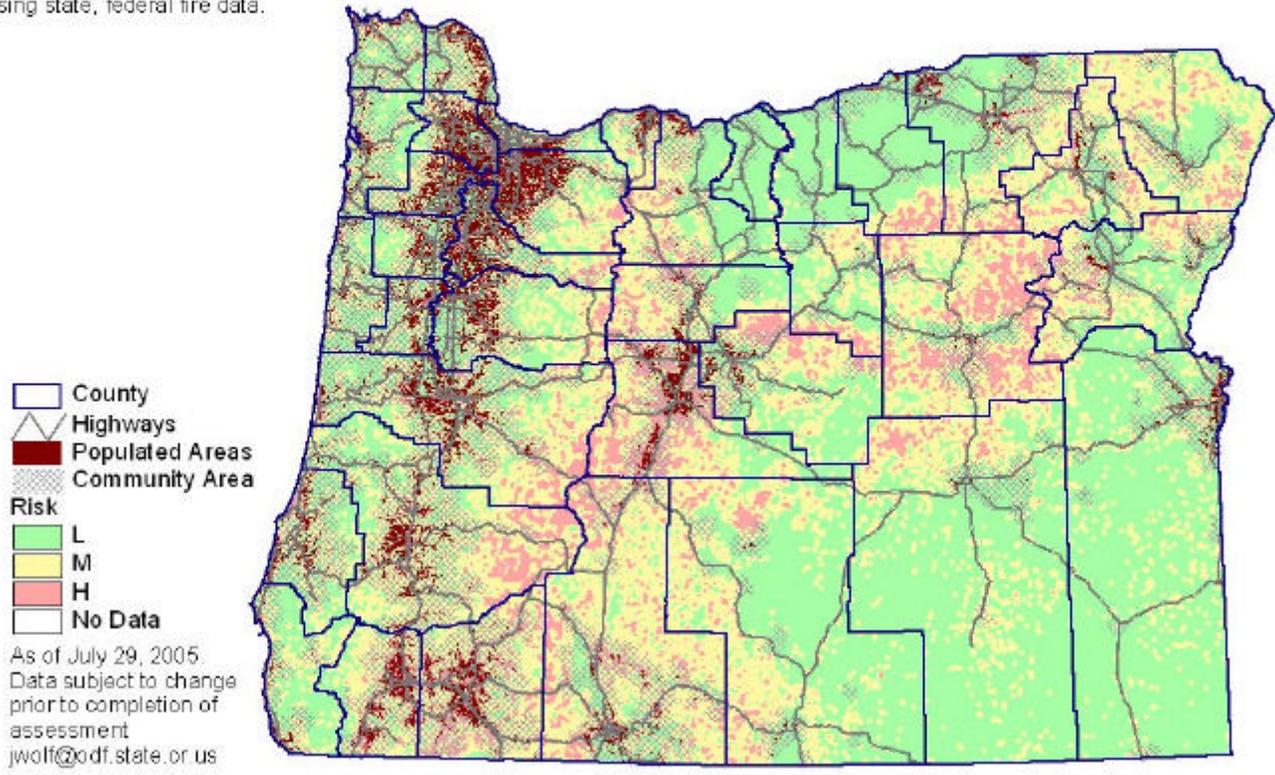
Draft *Communities At Risk* Maps:

A map for each rating factor as of July 29, 2005 follows. These data were used to develop the interim list, and will be used for the initial statewide assessment that will be completed this summer. The data and weighting of various factors have been modified from the “IDENTIFYING AND ASSESSMENT OF COMMUNITIES AT RISK IN OREGON”, Draft Version 4.0, dated October 18, 2004, <http://oregon.gov/ODF/FIRE/docs/WildfireRiskAssessment.pdf>, based upon feedback at the March 1, 2005 meeting. Documentation of data and weights will be included in the final version of that document due out by August 30, 2005.

Oregon Communities At Risk Assessment

Risk

The likelihood of a fire occurring,
based upon historic fire occurrence
using state, federal fire data.



Oregon Communities At Risk Assessment

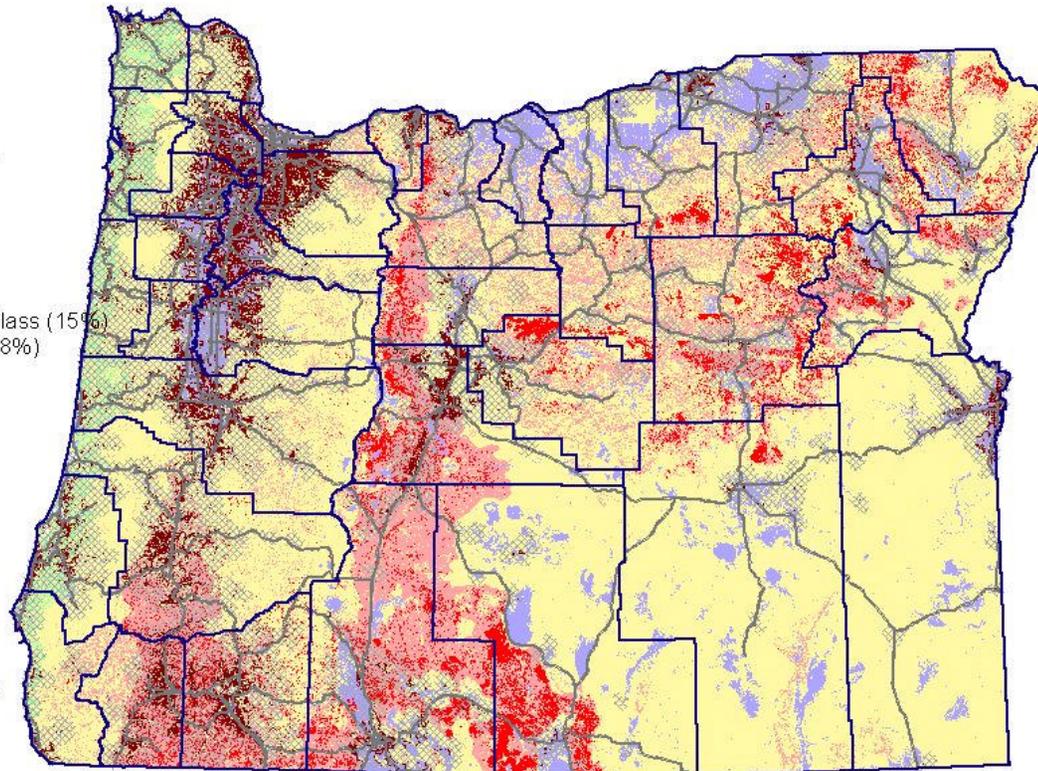
Hazard

Resistance to control once a wildfire starts, being the weather, topography and fuel that adversely affects suppression efforts.

Based upon the following factors (weight):
Weather Hazard (25%)
Slope (4%)
Aspect (6%)
Elevation (2%)
Fuel Model (30%)
Fire Regime Condition Class (15%)
Insect/Disease Activity (18%)



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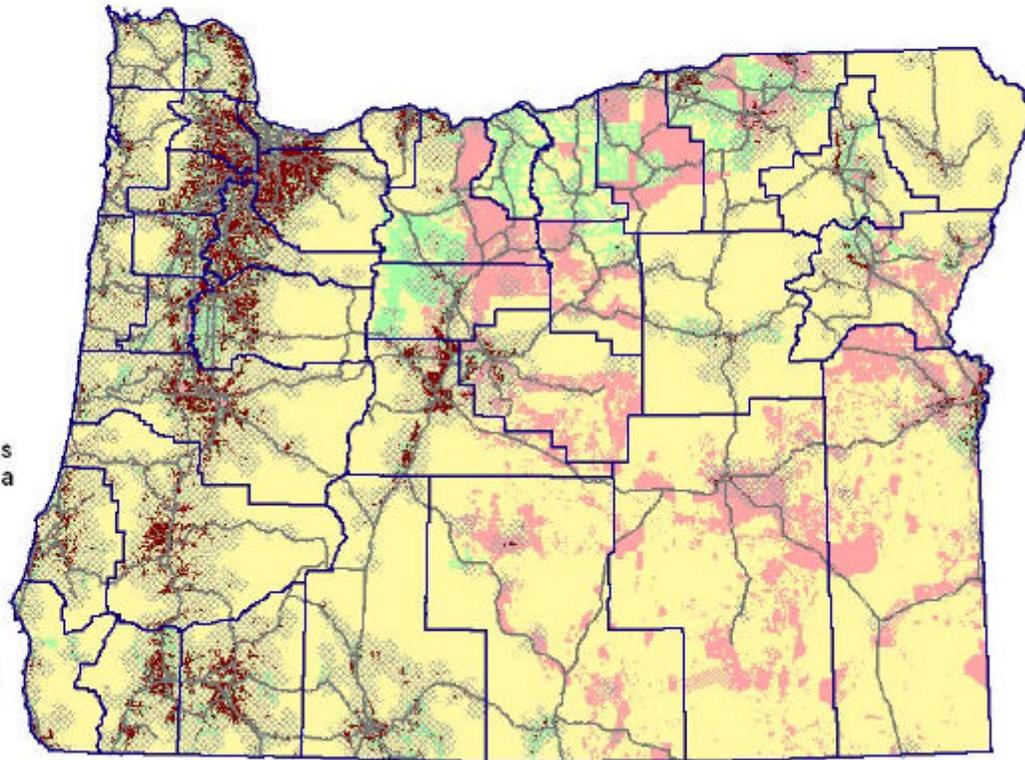
Protection Capability

Risks associated with inadequate wildfire protection capabilities, including capacity and resources to undertake fire prevention measures. Based upon existence of structural and/or wildland fire protection



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Oregon Communities At Risk Assessment



Oregon Communities At Risk Assessment

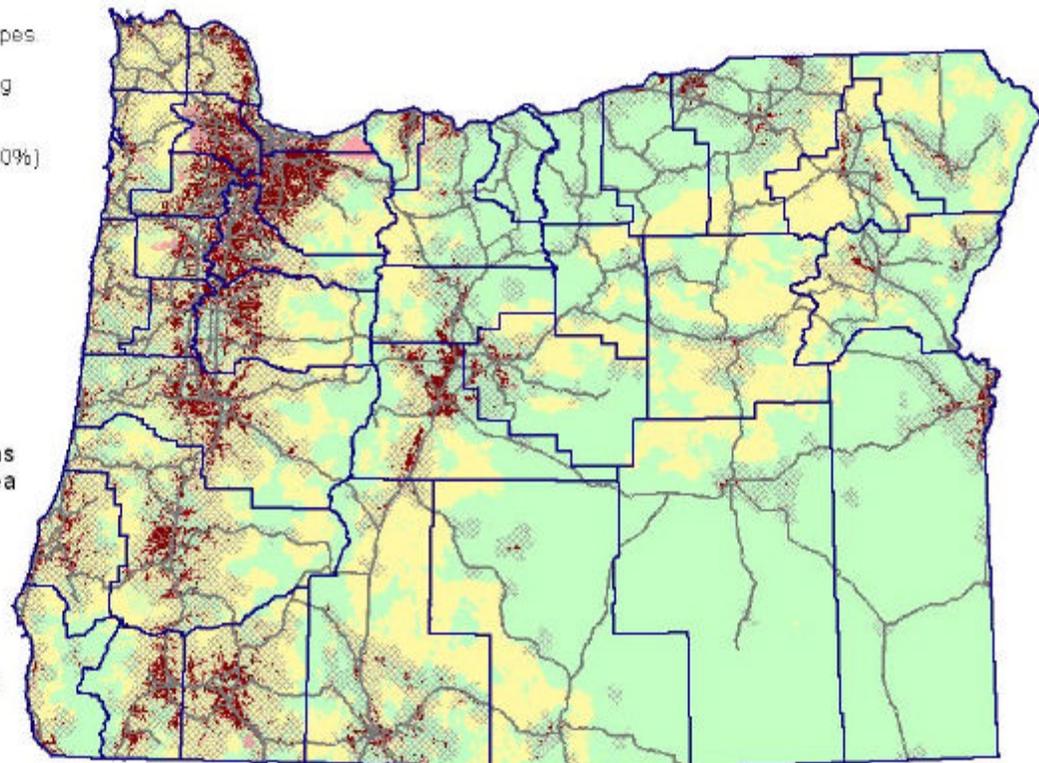
Value

Human and economic values associated with communities or landscapes.

Based upon the following factors (weights):
Life (50%)
Municipal Watershed (30%)
Forest (20%)

-  County
-  Highways
-  Populated Areas
-  Community Area
- Value**
-  L
-  M
-  H
-  No Data

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Oregon Communities At Risk Assessment

Overall Risk

Overall Risk
based upon the following
factors (weights):
Risk (14%)
Hazard (43%)
Protection (14%)
Value (29%)



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