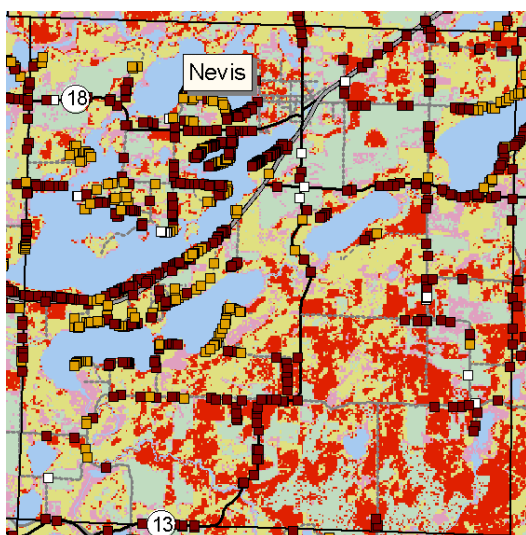




Firewise Assessment Technology

Minnesota Firewise Project Briefing

January 2003



The cornerstone of any community-based project is good information about conditions that affect the project specific to that community. When a community begins to participate, its information needs can be generalized and basic or focused and specific. Minnesota's Firewise program is able to provide NFDRS fuel models based on satellite data processed with GAP standards to any community. This information is processed in a GIS system and overlaid with other information as available for the community. This is a section of a fuels map from Hubbard County that has been overlaid with home locations from the county 911 system that have been coded relative to nearby fuels.

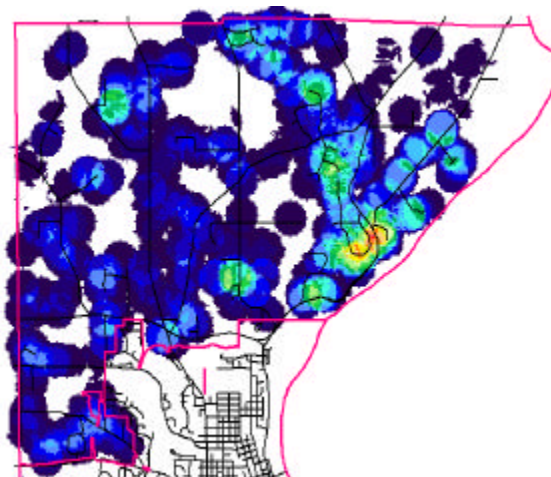


Level 1 Assessment

Communities without a pre-existing knowledge of where wildland fire risk exists can opt to undertake a broad area, extensive survey of their risk based on the amount of defensible space surrounding individual homes. In this case, aerial photographs (NAPP DOQ) are used as a backdrop in a

GIS. Each house is given a defensible space rating on a scale of 1 to 5 based on vegetative clearance around the home.

Ratings are then accumulated into a risk density surface. The Level 1 "house dots" can also be used in further risk analysis involving fuels for activities ranging from mitigation planning to suppression option evaluation.

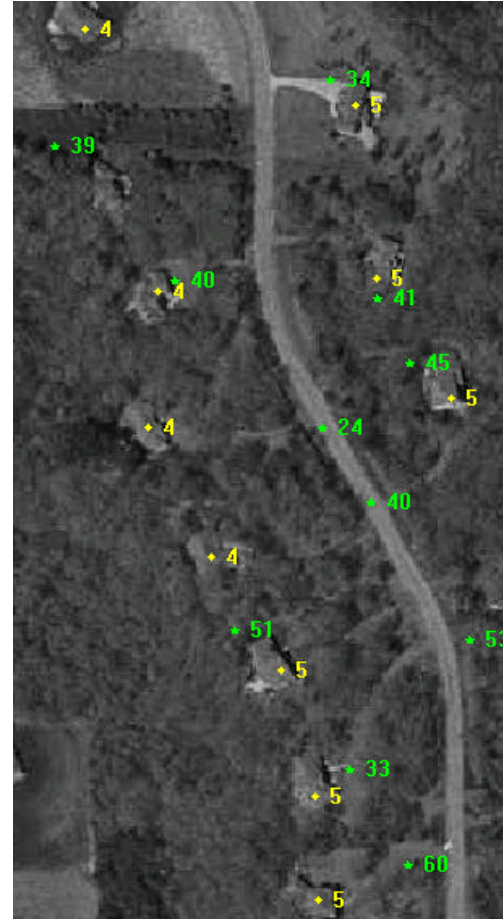




Level 2 Assessment

Once an area has been identified as having significant wildfire risk, an intensive survey focusing on several dozen criteria is undertaken. Called a “Level 2” assessment, it is undertaken on the ground by trained personnel. In addition to the information about the home, it is located using GPS.

All data are automated into a GIS system for analysis and map production. At the right, both L1 (yellow) and L2 (green) are plotted on a DOQ photo. In addition, assessment work effort can be used by the local community as “in kind” effort and used as part of the match by the community receiving a Fire Plan grant. Community assessment staff are trained by DNR Regional Firewise Specialists and can be community firefighters (above), students, or resident volunteers.



When the L2 assessment is completed, a door hanger is left on a main entrance door. It tells the owner what the assessment found, advises on some simple actions to improve the score, and has the phone number for the local fire department for more information. Commonly, Firewise literature is attached to the hanger.

The Minnesota Firewise Project is working with communities in passing federal Fire Plan funds through to local communities as grants for other “on-the-ground” activities including home owner mitigation education, home site assessment, access improvement, and dry hydrants. It involves community groups including fire and emergency services, local schools, city staff (ie. foresters, planners), and local interest groups.



Minnesota Department of Natural Resources
 Division of Forestry, Fire Management Section
 Wildland Urban Interface Project

Visit us at: www.dnr.state.mn.us/firewise