

Firewise Community Assessment Project



Source: DNR-Forestry

Stillwater Area

Project Profile: Washington County

Guide to Using

Natural Resource Information

Minnesota Department of Natural Resources, 2003

SUMMARY

Stillwater Area High School students, Assisted by Minnesota Department of Natural Resources and the Stillwater Fire Department, used GIS software and conducted a ground assessment in order to determine the neighborhoods with the highest fire-risk in Stillwater Township.

Guide to Using Natural Resource Information

This Project Profile is part of the Guide, which is a useful resource to learn how to create and use natural resource information

The Guide illustrates:

- why natural resources are important
- how your community benefits from natural resources
- how to collect natural resource information, and
- how to use natural resource information to make environmentally sensitive and fiscally responsible local land use decisions

Contact the DNR at the numbers at the back of this Profile to order the Quick Guide Brochure or the whole Guide on CD

Involving Students

Stillwater and the surrounding area were considered a high risk area by the Minnesota Department of Natural Resources (MNDNR) Firewise Program. They decided to start a pilot project with a local high school teacher, Sara Damon, who was interested in incorporating "authentic" activities into her Human Geography classes.

The MNDNR visited the classrooms to explain the goals of the Firewise Program and the role students would play in the Firewise Community Assessment Project. Along with representatives from the MNDNR, the Stillwater Fire Chief also assisted students with the project.

In the fall of 2001 and 2002, Human Geography students at Stillwater Area High School analyzed urban and rural areas near Stillwater for fire-prone property by using GIS software backed up by ground assessments.

Two separate classes analyzed the towns of Stillwater, Bayport, Afton and Lakeland, portions of May and Grant and the surrounding rural areas.

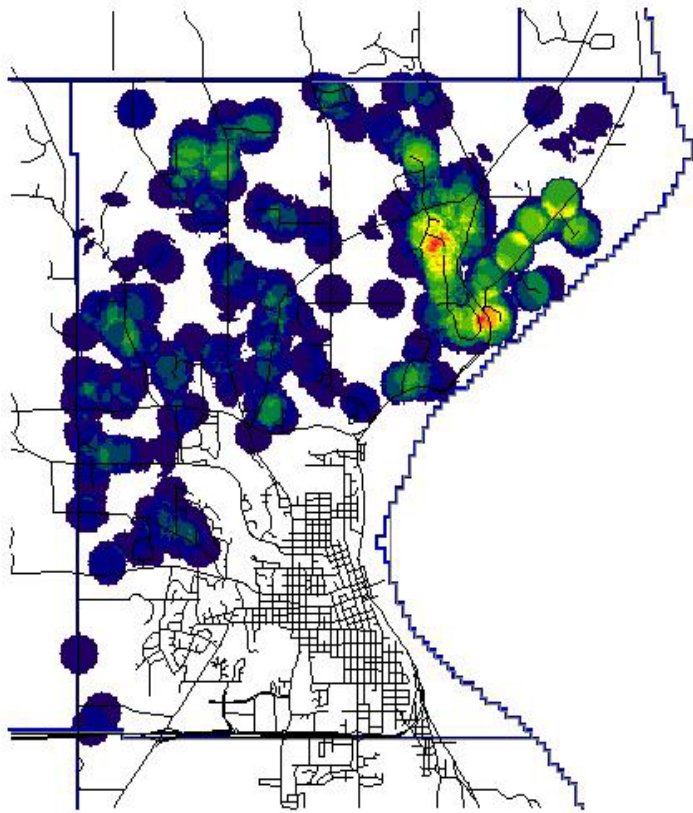
After completing their assessment, the students compiled a Community Report detailing their methods, results, conclusions, and recommendations. Several students presented their findings to the Stillwater Township Town Board in May of 2002.

The Next Step

Sara Damon has plans to formalize the lesson plans involved in this project and to hold a teacher training during the summer of 2004 for other instructors interested in initiating similar projects.

Natural Resource Inventory and Assessment

Aerial photos were analyzed using software from MN Planning (EPIC 2001). Individual homes were assigned a risk ranking of 1 to 5 based on the proximity of trees to the homes. An EPIC layer was then created to visualize the ranking data. Students also produced a Density Surface Model to identify clusters of high risk homes. The model showed that one neighborhood was at a particularly high risk for wildfires. Students took a field trip to collect Firewise ground assessment data in this neighborhood. The assessment involved collecting GPS waypoints and completing Forest Home Fire Risk Forms for each home.



Density Surface Model of Stillwater Township

Implementation

During their field trip to the highest fire-risk neighborhoods, students also left informational doorhangers at each of the homes that explained what factors make a home high risk and how to mitigate those factors. Once the assessment was completed, the students synthesized a Community Report which included methods, results, conclusions and recommendations. Several students presented their findings to the Stillwater Township Town Board in May of 2002.

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These Project Profiles were produced, written, and designed by the Dakota County Soil and Water Conservation District

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CONTACT INFORMATION

Visit Stillwater Area High School's website for more details.

<http://www.stillwater.k12.mn.us/~damons.saff.sahs/Firewise/index.htm>

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