

Image 1

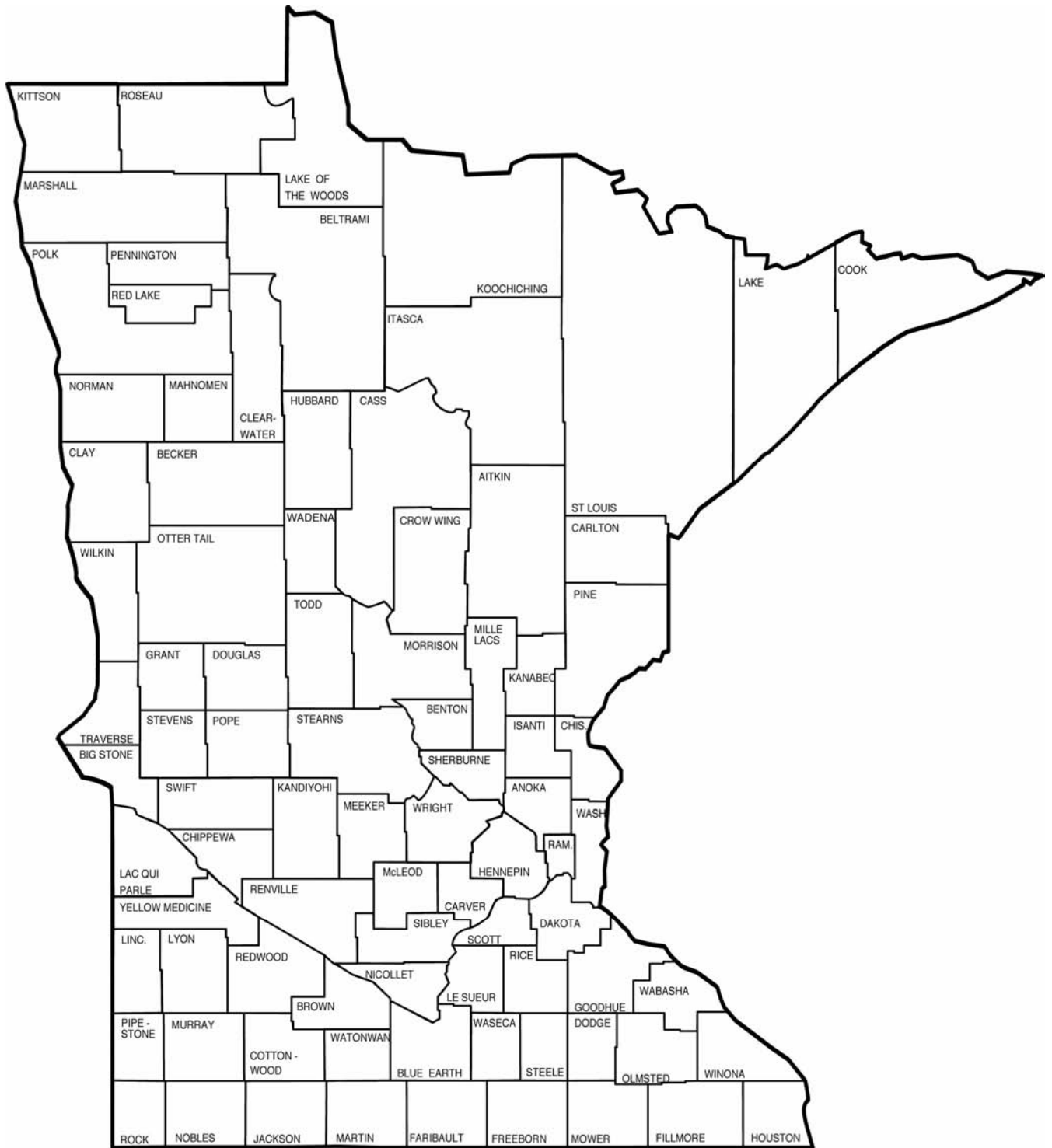


## Definition of Wildfire:

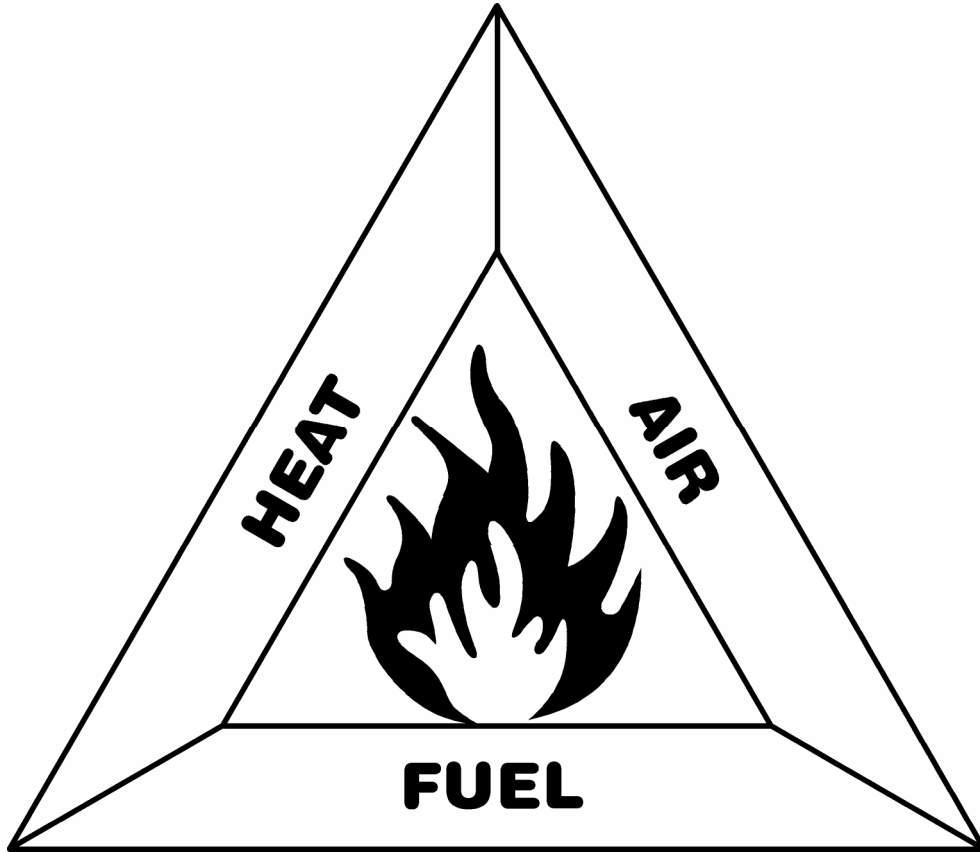
An unplanned and uncontrolled fire spreading through vegetative fuels, at times involving structures.

Source: Firewise Glossary

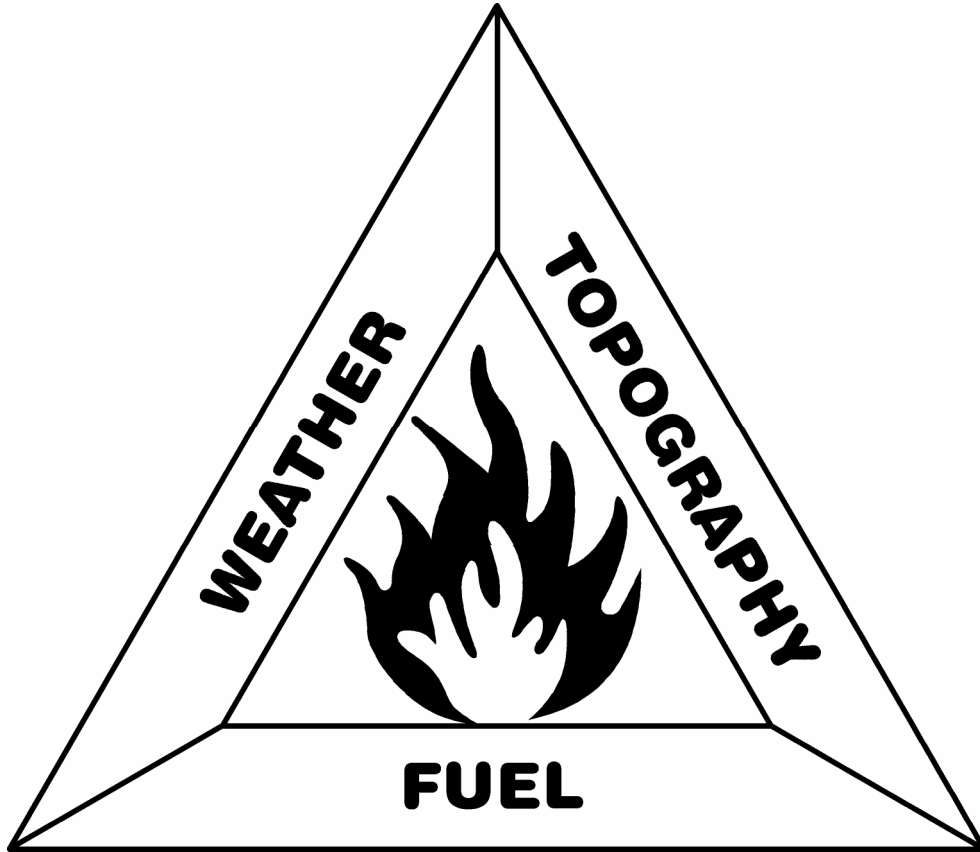
Image 2  
Minnesota Map



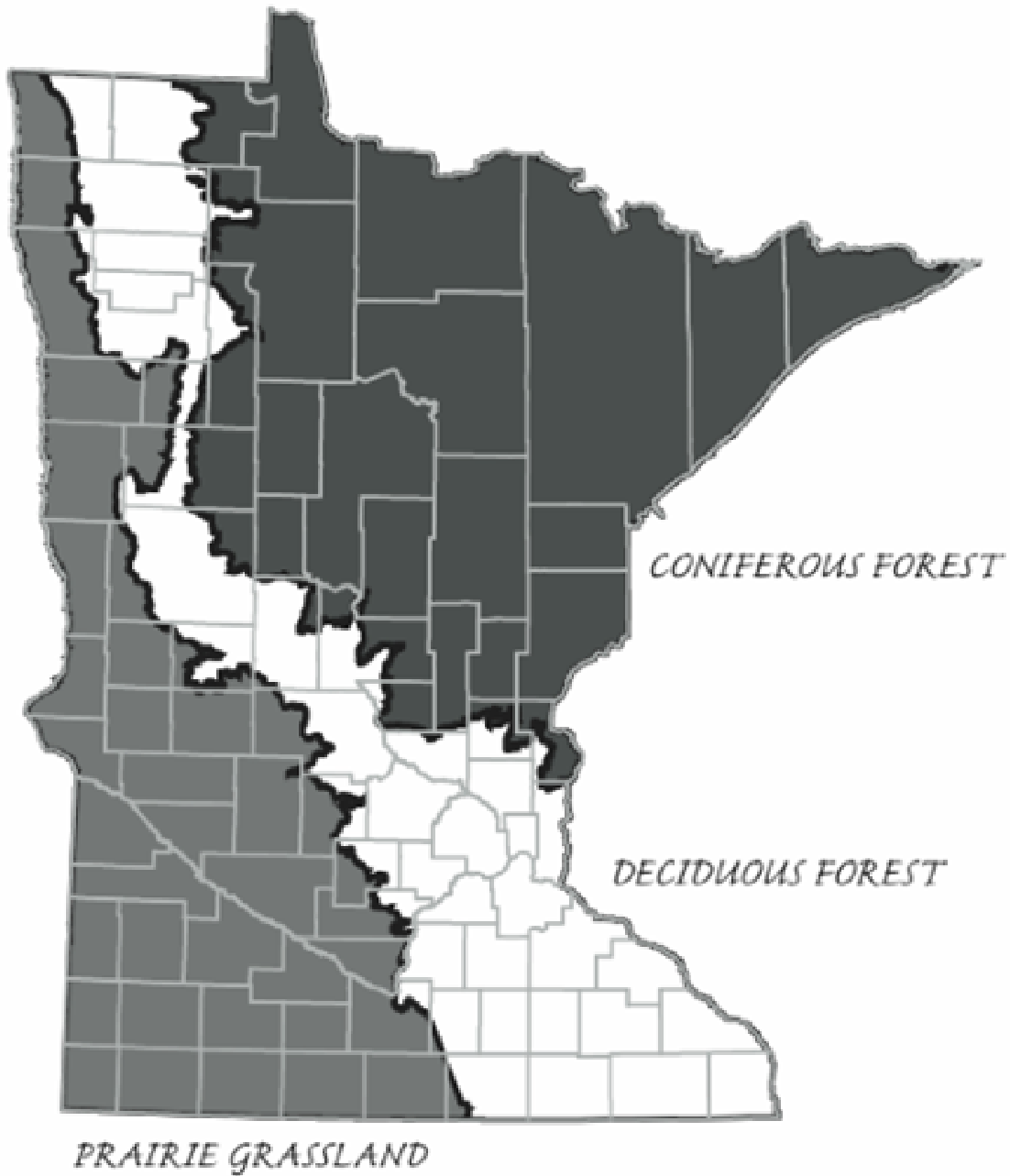
# Fire Triangle



# Fire Behavior Triangle



# Minnesota Biome Map



## Image 6

### U.S. Public Land Survey System



## Public Land Survey Background

*Note:* This page deals with the U. S. Public Land Survey system at the township and range level. A more detailed discussion, including smaller subdivisions of the system, is available in Adobe PDF format from the U.S. Geological Survey's [Rocky Mountain Mapping Center](#). The freely downloadable [Adobe Acrobat Reader](#) is required to view the document.

The Public Land Survey (PLS) system was established in 1787 by the Continental Congress for purposes of land division. Beginning in the late 1840s, the federal government began surveying Minnesota as part of the PLS. The survey system typically divides the land into 6-mile-square *townships*, which are further subdivided into 1-mile-square *sections*. In most of the U.S., PLS designations are employed for legal land descriptions, transactions and adjudications, and also as location references for geographic data.

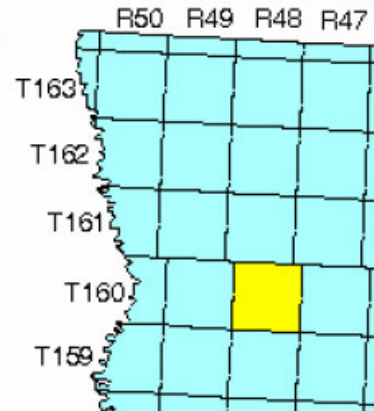
The map at right illustrates the *township and range* numbering system in the northwest corner of Minnesota. *Township lines* form tiers running east-west across the state, while *range lines* form columns running north-south. The squares formed by the intersection of these tiers and columns are typically referred to simply as *townships*, and are identified by the combination of the township tier number and range column number. In the map, the highlighted township would be identified as *Township 160 North, Range 48 West*, or T160R48 for short.



Minnesota falls into two township numbering zones. Townships in the west and south are numbered from the 5th Principal Meridian of the U.S. PLS system, and those in the northeast from the 4th Principal Meridian.

The two zones, whose main dividing line in Minnesota is

the Mississippi River, are shown in the map at left. In practice, the distinction is easy to recognize: in Minnesota it happens that all 5th P.M. township numbers are above 100, and all 4th P.M. township numbers are below 100. A subtler complication arises from the fact that the 4th Principal Meridian (unlike the 5th) actually passes through the state, intersecting its northeastern tip as shown at left. Unlike the 5th P.M. ranges, all of which are numbered westwards in Minnesota, a small number of 4th P.M. ranges are numbered *eastwards* from their meridian.



### Principal Meridians and Base Lines

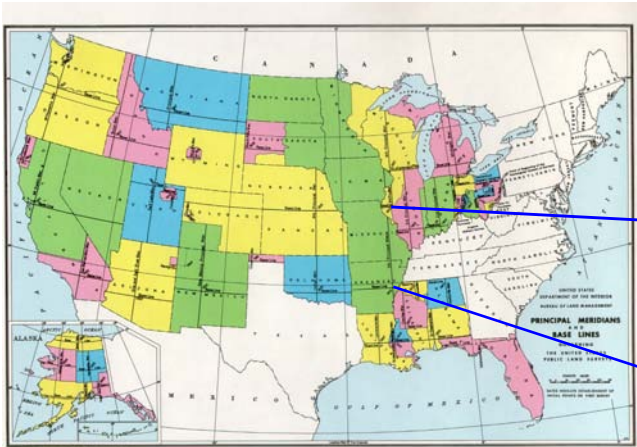
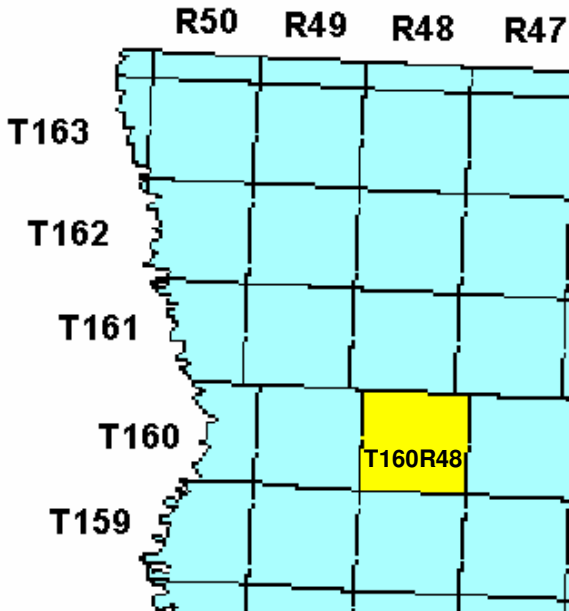


Image 7

U.S. Public Land Survey System

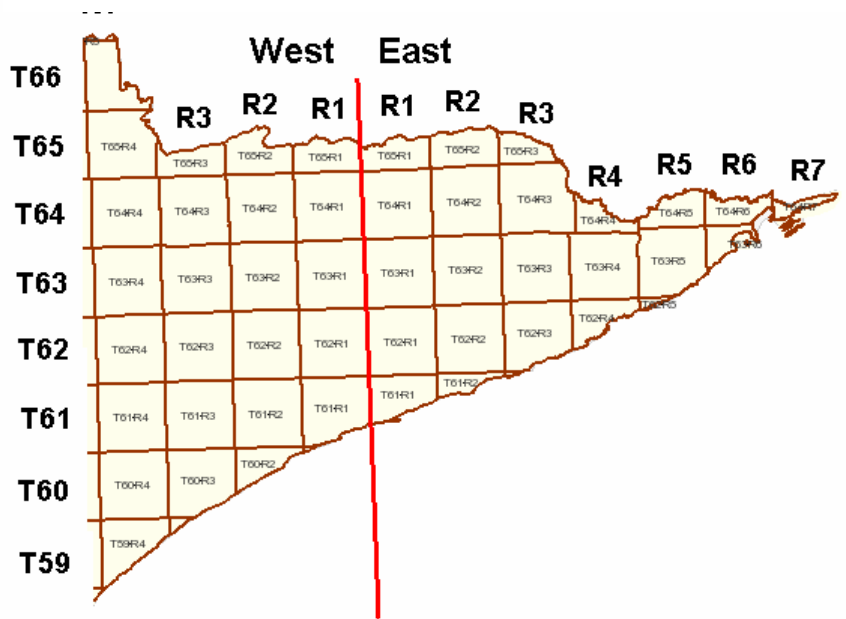
Examples of Minnesota Townships

NW corner of Minnesota



Minnesota Townships based on the 5<sup>th</sup> Principal Meridian

NE corner of Minnesota



4<sup>th</sup> Principal Meridian

A Minnesota PLSS Township Divided into 36 Sections (1 mile by 1 mile)

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Sample Township

# Firewise Home Rating Classification System

**You will be classifying each home as:**

- 1 – No Risk:** Structure is “in the clear”. No trees or very few trees anywhere near the structure.
- 2 – Low Risk:** Structure has trees nearby, but they are at least 30 feet from the structure. Note: 30 feet is the width of a typical house.
- 3 – Moderate Risk:** Structure has trees within 30 feet.
- 4 – High Risk:** Structure has trees within 30 feet and trees are so close to the structure that your view of the structure is obscured on at least one side by the tree canopy.
- 5 – Extreme Risk:** Structure has trees within 30 feet and trees are so close to the structure that your view of the structure is obscured on the south or west sides or multiple sides by the tree canopy. (Home is “buried in the trees”.)