Village of Vernon Hills

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Community Development Department • Engineering Division

PRESCRIBED BURN MANAGEMENT

WHY BURN?
Burning is a natural process events of disturbance, such as fire, are a natural occurrence in many ecosystems. Research shows that before settlement, our native landscapes were shaped by and evolved with the presence of fire. Fires used to be frequent and unchecked in prairies, wetland and woodlands. They were caused by lightning or intentionally set by Native Americans who used fire to facilitate travel and hunting, and stimulate new growth for game. Today, in areas densely populated by people, fires are put out before they spread. These actions disrupt a natural process. By conducting prescribed burns in a planned and controlled manner, we are reintroducing a natural process. Benefits of burning Prescribed Burn Management are an efficient and economical tool that reduces the amount of pesticides that otherwise may be needed to control invasive plants. Fire helps to promote species diversity by controlling invasive woody shrubs and trees. Without fire, natural areas often become thickets of shrubs or weeds with little diversity. Fire burns off dead vegetation and stimulates new plant growth by allowing sunlight to warm the dark soil, encouraging germination. Fire also enriches the soil by returning nutrients back to the soil.

WHO IS INVOLVED?
Trained burn crews Professional, well-equipped, fully trained burn crews prepare burn prescription plans. They prepare maps showing areas targeted for burns, ignition patterns, and the location of firebreaks. A firebreak is anything that will stop a fire and contain it in a controlled area such as a road, a mowed path, or a burned strip of land. The crews specify ideal weather conditions, number of staff, and type of equipment needed. They also specify the ecological goals of the burn. On the day of the burn, the crews carry cell phones and two way radios. Ample portable water tanks and a water truck are also present the day of the burn. Notification The Village Engineer carefully assesses and determines which areas need to be burned. The Village Engineer then notifies the fire and police departments, neighborhood groups, and city officials in advance of the burn. Fire departments are called at the beginning and end of each burn.

ARE BURNS SAFE?
Plant and animal life, fire does not harm prairie plants because their root system extends far into the ground- - often more than twice the length of their foliage above ground. Most prairie grasses have buds that are located beneath the soil surface. Some trees such as oaks and hickories grow a thick bark that protects them from fire. Animals stay safe by retreating to burrows, flying away or simply moving to another area. Burns are also scheduled to occur before spring nesting occurs. Air pollution, prescribed burns produce some air pollutants; however, fewer emissions are produced from an annual prescribed burn than are produced from frequently mowing a comparable area of turf grass. In addition, a healthy landscape of fire-adapted prairie plants has a greater capacity to remove carbon dioxide from the atmosphere and produce oxygen than the same size area of turf grass.

WHEN DO BURNS OCCUR?
Burns are conducted in the early spring and late fall. To ensure safety and to minimize smoke blowing, trained crews carefully time the burn for a specific range of temperature, wind direction, wind strength, humidity, barometric pressure, and ground moisture conditions. The exact date and time is subject to change depending on whether or not optimal conditions for a safe yet effective burn are available.

HOW WILL THE AREA LOOK AFTER A BURN?

Recently burned sites green up very quickly in the spring. In the season following a prescribed burn, the vegetation is lusher, the flowers are more radiant, and the seed production is more plentiful.