

Town of Packwaukee Community Wildfire Protection Plan

AN ACTION PLAN FOR WILDFIRE RISK REDUCTION 2018-2022

Adopted: January 9, 2018



Prepared by: Amy Luebke, DNR



RESOLUTION NO. ____

**ADOPTION OF THE
TOWN OF PACKWAUKEE COMMUNITY WILDFIRE PROTECTION PLAN (2018-2022)**

WHEREAS, the Healthy Forest Restoration Act of 2003 was created in order to reduce the threat of destructive wildfires while upholding environmental standards and encouraging early public input during review and planning processes, and

WHEREAS, The Town of Packwaukee has been identified as a Community of Concern in the Wisconsin Communities-at-Risk Assessment, and

WHEREAS, a Community Wildfire Protection Plan should be developed in any community that is listed as an at risk community in a federal or state risk assessment, and

WHEREAS, The Town of Packwaukee has worked cooperatively with other stakeholders to develop a Community Wildfire Protection Plan, and

WHEREAS, the intent of the plan is to help fire protection agencies, community leaders, natural resource professionals, and homeowners be better prepared for wildfire, and

WHEREAS, adoption of a Community Wildfire Protection Plan will earn priority consideration for funding hazardous fuels reduction projects carried out under the auspices of the Healthy Forest Restoration Act of 2003, and

WHEREAS, the Town of Packwaukee Board of Supervisors has reviewed the draft of the *Town of Packwaukee Community Wildfire Protection Plan* and concurs with the final plan content.

NOW, THEREFORE BE IT RESOLVED that the Town of Packwaukee Board of Supervisors hereby adopts the *Town of Packwaukee Community Wildfire Protection Plan (2018-2022)*.

Dated this 9 day of Jan., 2018.

Resolution introduced and adoption moved by Joe Cravetz

Motion for adoption seconded by Vikki Trimble

Voting Aye: 5 Nay: 0

APPROVED:

[Signature]
Name

Town Chairman
Title

ATTEST:

[Signature]
Name

Town Clerk
Title

Introduction

The Town of Packwaukee is designated as a community at very high risk to wildfire due to several factors, some of which include the vegetation of the area, housing density and fire occurrence. The Division of Forestry is committed to offering resources and expertise in planning, preparing and preventing wildfires to at risk towns and municipalities through the creation of a Community Wildfire Protection Plan (CWPP).

Community Wildfire Protection Plans

A Community Wildfire Protection Plan (CWPP) is a document collaboratively created at the township level. Community Wildfire Protection Plans may address issues such as wildfire response, fuels reduction, community preparedness and structure ignitability. The Wildfire Risk Reduction Action Plan, or the list of the projects that the town intends to pursue, is the key component of the Plan. The minimum requirements for a CWPP are collaboration, prioritized fuels reduction and treatment of structural ignitability. The final contents of a CWPP must be mutually agreed upon by the local government (town board), the local fire department, and the state entity responsible for forest management (DNR).

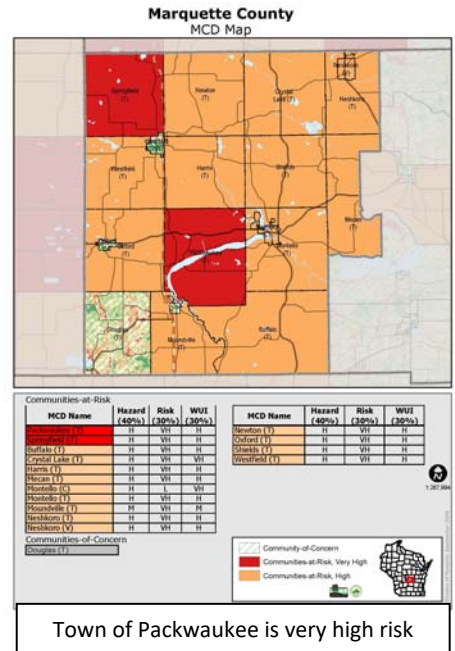
Goal

The goal of this CWPP is to set clear priorities for the implementation of wildfire risk reduction projects in the Town of Packwaukee.

Planning Process

Developing a CWPP takes several steps as described below.

- On September 12, 2017, the Town agreed to participate in the CWPP planning process and passed a *Resolution to Participate*. Three planning meetings were held and took place on October 13, 2017, November 10, 2017, and December 15, 2017.
- A Driving Tour of the Town took place on October 27, 2017 to build shared understanding of specific issues in the Town. The tour resulted in a better understanding of the complexity and scope of issues related to wildfire risk. Some sites visited included: Williams Lake, Buffalo Shores Estates and stops at various homes to look at recommendations for the home ignition zone and driveway access. We finished with a guided tour of the



DNR Montello Ranger Station and the Montello Fire Department. Participants reported liking the driving tour because it helped them see every day things with new eyes and made them more aware of the risks. They learned specific recommendations for homeowners and it was an opportunity to hear stories about local fires from firefighters who were also on the tour. Participants were surprised to learn how the actions of neighbors can impact them and valued the opportunity to see firsthand how our small mini coach bus for the tour was challenged driving down driveways. It was helpful to see a contrast between various driveways and to learn about specific recommendations on how to make homes more Firewise.



Firefighting equipment at Montello Ranger Station

- After reviewing the draft plan, the Town Board passed a Resolution to Adopt the CWPP on January 9, 2018.
- Once adopted, the Work Group will begin project implementation according to the Wildfire Risk Reduction Action Plan. Wildfire risk reduction funds are available through the Department of Natural Resources. Towns with CWPPs are given priority consideration for funding.

CWPP Planning Committee

The following report is a collaborative effort between various participants. The representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the Plan's contents.

Name	Organization	Mtg #1 10/13/17	Tour 10/27/17	Mtg #2 11/10/17	Mtg #3 12/15/17
Al Rosenthal	Chairman, Town of Packwaukee	X	X	X	X
Chet Trimble	Resident, Town of Packwaukee	X	X		X
John Ellinger	Resident, Town of Packwaukee		X	X	X
Linda Huggett	Resident, Town of Packwaukee	X	X	X	X
Doug Slama	Resident, Town of Packwaukee		X		
Amy Luebke	Wildland Urban Interface Specialist, DNR	X	X	X	X
Sarah Finger	Forester Ranger, DNR	X	X	X	
Aaron Williams	Emergency Management, Marquette Co.	X	X		
Glen Bubolz	Chief, Montello Fire Department	X	X		X
		7	16*	5	6

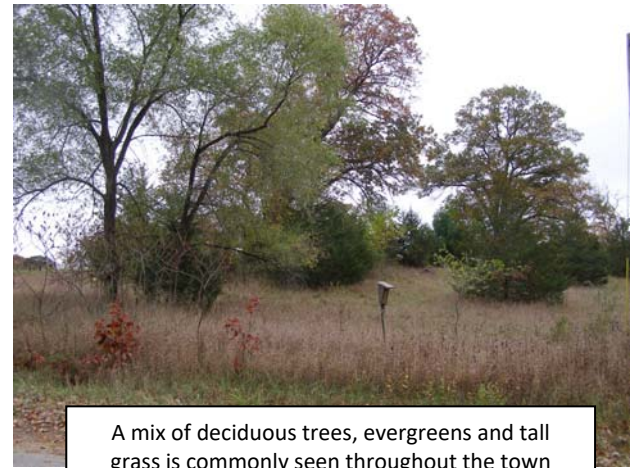
*Also in attendance at Driving Tour: Carolyn Rosenthal, Denise Ellinger, Victor Trimble, Joe & Jane Oravetz, Gary Anderson, Jim Sanders

Community Background

The Town of Packwaukee is located in Marquette County, Wisconsin. The population was 1,416 according to the 2010 census and is roughly 41 square miles in size. Marquette County is a popular destination due to its many lakes and recreational opportunities. Approximately 50% of Town of Packwaukee property owners do not live there year-round.

Wildfire Risk, Fire Behavior and Fire History

Fire intensity and rate of spread depend on fuels, topography and weather conditions. Weather conditions are dynamic which means fire behavior can vary significantly, even during the course of the day. There is a mix of oak, white pine, and aspen trees. White pine is common in the understory and there are scattered pine plantations throughout the area. Certainly the fuels in the area will carry wildfire. There is rolling terrain and some low marshy areas that will also burn. There are also large agricultural fields mixed in throughout the town, which provide a break in fuel type and could help with fire suppression.

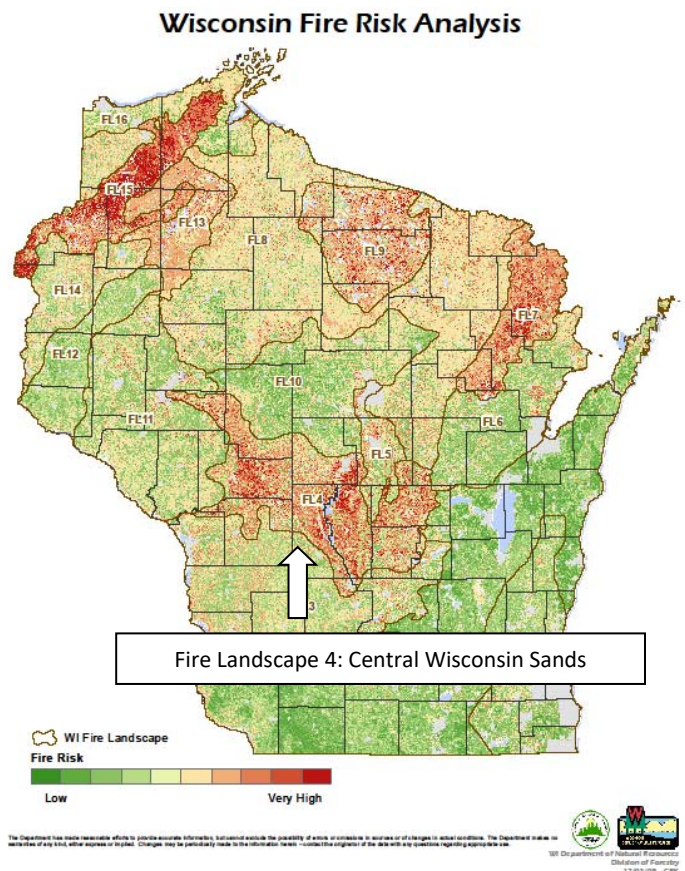


A mix of deciduous trees, evergreens and tall grass is commonly seen throughout the town

The Town falls within *Fire Landscape 4: Central Wisconsin Sands* which is described as containing extensive areas of jack and red pine, with dry, sandy and organic soils. This is one of the highest wildfire risk landscapes in Wisconsin, with a notable wildfire history and potential for a 10,000-acre fire. Since 1975, there have been four wildfires greater than 2,500 acres in size in Central Wisconsin:

FIRE NAME	YEAR	SIZE
Brockway Fire	1977	15,471 acres
Saratoga Fire	1977	6,159 acres
Lyndon Station Fire	1988	3,177 acres
Cottonville Fire	2005	3,410 acres

Fire Landscape 15 in northwest Wisconsin has similar soils and forest cover type to Central Wisconsin. There was a 7,000 + acre fire called the Germann Road Fire which occurred more recently in 2013. The conditions in Central Wisconsin would definitely support a significant wildfire.



Between 2007-2016, there were 31 wildfires in the Town of Packwaukee burning a total of 33 acres. Out of those 31 wildfires, 23 were less than one acre in size. Eight fires were larger than 1 acre in size with the largest fire being the nearly 6 acre Lakewood Fire of unknown cause which occurred in October 2010. A total of 19 structures were saved due to suppression efforts; 4 structures were lost. The four structures lost occurred on 3 different wildfires. The cause of each of these three fires was debris burning.



Railroad tracks in southern half of town

Overall the leading cause of wildfires was debris burning (49%), followed by equipment (19%), which follows statewide trends. The majority of the fires occurred during the traditional spring fire season months of March, April and May.

Risk Assessment

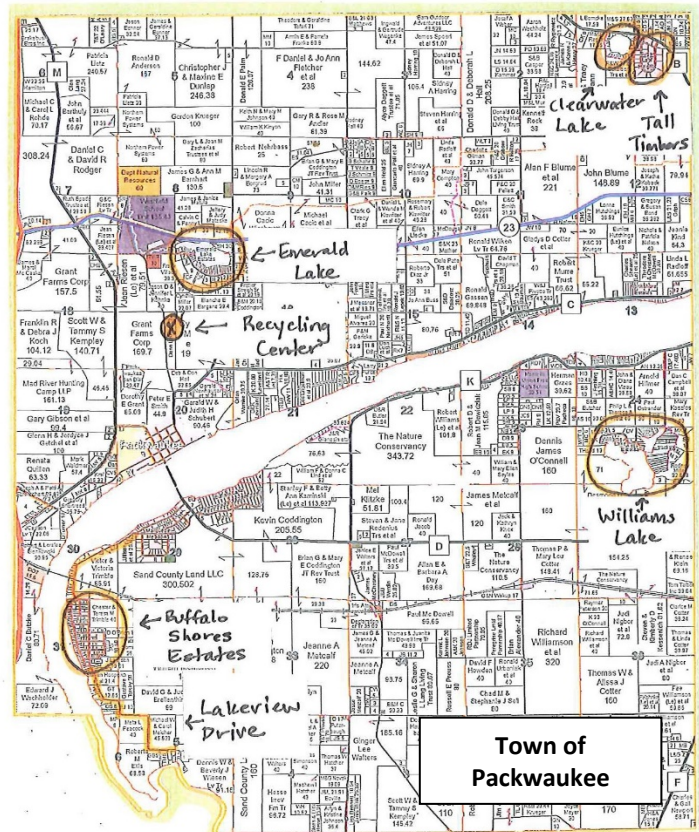
The Town of Packwaukee is considered to be at very high risk to loss from wildfires. There is flammable vegetation throughout the Town and many homes are located on wooded lots. There are some specific areas of concern identified by the planning committee:

- Interstate 39 runs along the western border of the Town and is a source of ignition from roadside starts caused by vehicle accidents or sparks from equipment.



Lakeview Road

- A set of railroad tracks run west to east across the southern part of the town which is also a source of potential wildfire ignition.
- There are several higher density residential areas that are of concern: Emery Lake, Clearwater Lake, Tall Timbers area, Buffalo Shores Estates and Williams Lake. See Appendix 2 for additional details about each area. In general, each one is characterized by homes in close proximity to one another in a very wooded area. Driveways can be long and have inadequate access. In some cases, the ability to evacuate safely could be a concern.
- Lakeview Drive is a town road with access from County Road D. There is only one way in and one way out for most of the



property owners along this road (the one-way portion starts after the junction of Freedom Road and Lakeview Drive). Lakeview Drive runs south along Buffalo Lake through Buffalo Shores Estates and past the Call of the Wild Campground. As the road continues it becomes more narrow. It becomes a one-lane, unpaved road. The right of ways are not cleared out so even though the sides of the road are flat, there wouldn't be much room for two-way traffic. The road dead ends in a driveway so turning around a large fire vehicle could be difficult. The homes in this area are very remote. They cannot be seen from the road and many of them have gated driveways. The concern is that emergency vehicles may have trouble reaching these homes to do structure protection and also that evacuation of people from the area could be slow with approximately 130 people having only way of escape at the same time multiple emergency vehicles are trying to enter the area.

DESCRIPTION OF WILDFIRE RISKS

With all community wildfire protection plans, there are generally five risk areas that are addressed: hazardous fuels, structural ignitability, wildfire awareness, wildfire prevention and emergency response.

WILDFIRE RISK #1: Fuels

Any kind of vegetation, whether living or dead, as well as non-vegetative objects like cars, campers or homes can be fuel for a wildfire. In a wooded area, there will be some risk associated with just living in the woods. Two areas where homeowners can reduce the fuels around their homes are removing dead trees and brush and following sound forestry management practices for pine plantations.

Property owners should avoid having dead trees and brush within 100 feet of their homes. Brush piles can be a concern because once ignited, they can burn for a long time, must be monitored until extinguished, take a lot of resources to put out and can be a source of embers to ignite homes. When firefighters are forced to concentrate on these areas, it can mean fewer resources to focus on containing the wildfire. The buildup of dead fuels on the forest floor can also act as a fuel "ladder" which provides a path for a surface fire to get up into the crowns of trees where it becomes more difficult to suppress.

Pine plantations can also be a concern because of their ability to support fast-moving crown fires. Evergreen trees, in general, are more of a concern than deciduous trees when it comes to wildfire. They burn quickly and intensely. The structure of a pine plantation, with the continuity of the tree canopy, means that once ignited, a fire can travel great distances from crown to crown, even apart from a surface fire that could be burning on the forest floor. When dealing with a crown fire, firefighters must often disengage from direct attack for



Limit evergreens within 30 feet of buildings



Pine plantation can mean fast-moving crown fires

safety reasons and look for opportunities to indirectly engage the fire.

It is important to maintain the proper stocking level in plantations. When pine plantations become overstocked, tree health suffers. As tree vigor decreases, trees become susceptible to disease and insect attacks. As trees die, they dry out and become more of a liability. Also, when a home is in a pine plantation, the home ignition zone extends out to 200 feet to address the additional risk.

The most important area where homeowners should concentrate their fuels reduction efforts is the home ignition zone, or within 100-200 feet of the home. Consider how to make fuels reduction feasible for homeowners while discouraging debris burning, which is the number one cause of wildfires in Wisconsin.

WILDFIRE RISK #2: Structural Ignitability

While it is not possible to completely eliminate wildfire from the landscape, a homeowner can influence the intensity of an approaching wildfire by managing the home ignition zone. In fact, when adequately prepared, a house can withstand a wildfire even without the intervention of the fire service.

In the Town there are many homes that are not Firewise. If homes are not accessible to fire trucks, it is even more critical that the house be Firewise so that it can survive on its own. A brief summary on firewise recommendations is included here with more information in the appendix of this report.

All homes in fire-prone areas are encouraged to follow firewise recommendations for:

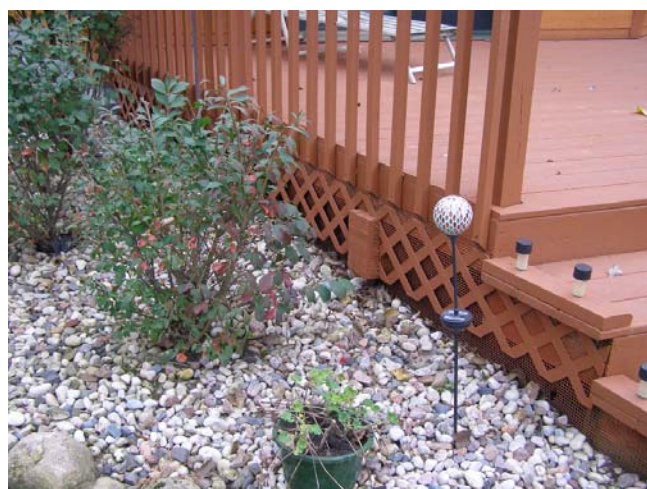
- construction (roof, siding, windows)
- landscaping (rock mulch instead of wood mulch)
- maintenance (pine needles cleaned out of gutters)
- distance to flammables (firewood stored 30 feet away from buildings)

Construction

Fire resistant construction includes roofing (asphalt or metal), siding (log construction or vinyl) and gutter materials (metal) as well as issues related to windows and vents. Most homes in the Town of Packwaukee have fire resistant roofing materials like asphalt, as is common throughout Wisconsin. There are some homes with wood siding; vinyl siding is more common.



Metal gutter guards reduce maintenance



A thin wire mesh behind the lattice keeps leaves from blowing under the deck and reduces maintenance

There are even some homes with non-flammable cement siding.

Landscaping

Landscaping of homes in the Town is variable. Most homes have at least some amount of mowed grass which provides a fuel break around a home. Wood mulch is fairly common. Special attention to what kinds of plants and materials are placed in the zone within 5 feet of the home can be critical to home survival. It is recommended that plants near homes be deciduous, well-maintained and with space between them.

Maintenance

Even a home that is Firewise requires regular maintenance to reduce vulnerability to windblown embers which can travel on wind currents over a mile from a wildfire. Anywhere you notice leaves and pine needles accumulating, like gutters and on or under decks, are places where windblown embers will likely accumulate in the event of a fire. Regular maintenance will reduce these risks. There are many seasonal homes in the Town of Packwaukee, which often means less attention to yard maintenance.

Distance to Flammables

Seeing a stack of firewood on a wood deck is a fairly common occurrence in Wisconsin. Flammables like firewood, fence materials or other scrap wood are best stored 30 feet away from buildings. It is best if propane tanks are also 30 feet from buildings. If they are closer than that, they should be cleared of flammables out to 10 feet. Ideally outbuildings would also be 30 feet from homes. If they are not, it is important that they also be firewise.

Overlapping Home Ignition Zones

In some cases, especially around lakes or when lots sizes are smaller, home ignition zones can overlap, making a person vulnerable to the choices of their neighbors. Education, open communication and collaboration are methods for addressing this issue.



Propane tanks and firewood should be located
30 feet from buildings

WILDFIRE RISK #3: Wildfire Risk Awareness

Without a true understanding of the wildfire risk of the area, people may think that a wildfire is unlikely to affect them. When people don't understand the real potential to start a large and costly wildfire they may not feel a sense of urgency to prepare for evacuation or be cautious with fire in the outdoors. It is likely that a majority of property owners in the Town are not aware of the true fire risk in the Town.

WILDFIRE RISK #4: Wildfire Prevention

The public should be made aware of the wildfire risk of the area and keep it in mind as they introduce fire into the outdoors by means of fireworks, campfires or debris burning. The number one cause of wildfires

in Wisconsin is debris burning.

From January 1st to May 31st, a free annual burning permit is required by the DNR to burn when the ground is not completely snow-covered. Once a person has obtained a burning permit, it is their responsibility to check the burning restrictions daily after 11:00 a.m. on any day they wish to burn. Burning restrictions can be checked over the internet at dnr.wi.gov, keyword “fire” or by phone at 1-888-WIS-BURN (947-2876). Cooking and warming fires do not require burning permits. In the Town of Packwaukee, a DNR burning permit is NOT required from June 1st to December 31st except when emergency burning restrictions are in effect. During this time frame, burning is allowed any time of the day. Even so, if a burn will produce significant smoke, the local sheriff’s office should be notified to prevent unnecessary emergency response. People should still be aware of the weather conditions so that they are choosing to burn at the safest times.

DNR fire staff respond to burning complaints. A burning complaint is when someone burns outdoors contrary to burning restrictions. Burning without a permit is a citable offense. Failure to extinguish a burn pile or a campfire is also a citable offense. This is somewhat common as people return home after a weekend of recreation and fail to completely extinguish their fires. Embers can remain hot for days or even weeks, even when the fire is not producing any visible flames or smoke.

The leading cause of wildfires in the Town of Packwaukee was debris burning (49%) followed by equipment (19%). This follows statewide trends. For additional information on local fire history, see Appendix 1.



WILDFIRE RISK #5: Emergency Response

Fire Protection: The DNR out of the Montello Ranger Station and the Montello Fire Department provide wildland fire suppression for the Town. The Montello Fire Department had 169 incidents in the Town of Packwaukee over the last 4 years including gas leaks, vehicle accidents, fires and medical calls.

Distance from Fire Stations

In rural areas, it takes time for firefighters to arrive on the scene of a fire. Not only does it take time for volunteers to respond to the fire station, it takes time for them to then travel to the scene. Homes might need to be able to survive on their own for a time, which makes following Firewise recommendations even more critical. It takes 10-20 minutes for the fire department to arrive on scene in the Town of Packwaukee, depending on the time of day. It’s a volunteer department, so most people have full-time jobs during the day and some work out of town and are unable to respond during the work day. Response from the DNR can take 10-12 minutes across the township when they are staffing for wildfire and are available (best case scenario). Outside of times when DNR is staffing for fire, response time can be variable depending on availability.

Fire Detection:

To avoid extending the response time even more, it is critical that the public call 9-1-1 immediately when

a wildfire is detected. Firefighters recommend that people stop and call for help rather than trying to extinguish a fire on their own. Civilian casualties and fatalities have occurred on fires when people try to put the fire out themselves. For example, lives have been lost due to a heart attack brought on by vigorous physical work and the stress of the situation.

Water Sources

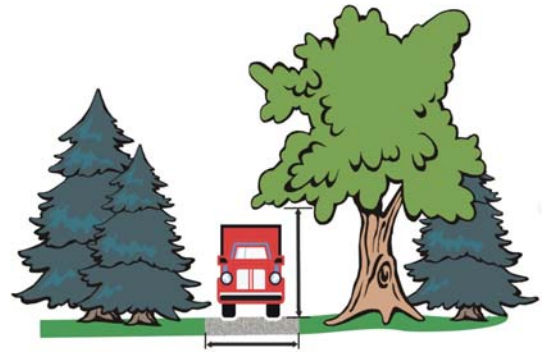
In a large wildfire situation, many homes and buildings can be threatened at the same time. Having an adequate supply of water is critical to fire suppression and structural protection. In most rural areas, fire hydrants are not available. Fire departments identify water points ahead of time and can request mutual aid from surrounding departments for use of their water tenders to ensure a steady and reliable source of water. The Town and Fire Department are currently working on installing a dry hydrant in Buffalo Lake so that the Fire Department can fill from the bridge on the causeway. They expect to have it installed in 2018.



Future location of dry hydrant –
west side of bridge

Driveway Access

If firefighters cannot safely drive a fire truck to a home, they will come up with an alternate plan to help. No matter what that plan is, such as parking the truck on the street and dragging hose down the driveway or sending a smaller truck down the driveway to scout out the situation, the alternative can cost precious time. As you can imagine, the faster a fire is extinguished, the lower the risk of damage.



Fire trucks need clearance from vegetation both
vertically and horizontally to reach your home

The Town does not have a driveway ordinance but the Montello Fire Department has a list of guidelines which is available to the public (see Appendix 3). In the Town of Packwaukee, many homes have long driveways with structures that are not visible from the road. Many driveways do not have adequate clearance from vegetation to allow a fire truck, or even an ambulance in some cases, access to the property. Inadequate road and driveway access can result in slowed emergency response, unsafe working conditions for firefighters and dangerous conditions during evacuations. Single lane roads should have pullouts to allow emergency vehicles to pass one another or get turned around.

Road Access: There are many gravel and sand private roads maintained by property owner associations or other private individuals (approximately 25% of the roads in the Town). Many private roads lead to multiple homes. Private roads can limit access of firefighters. They should meet the same recommendations as driveways.



Fire trucks need a firm surface, clearance
from vegetation and space to turn around

Address signage

Address signs should be visible from both directions of travel so as not to slow emergency response. Being visible means trimming vegetation away from the sign, address numbers should be written on both sides of the sign and the numbers should be large and reflective to make it easier for responders to locate properties after dark. The Town has red and white address signs which are adequately visible at night. Although all of the address signs are on the road, some homes are lacking a secondary address sign to distinguish driveways from each other so that firefighters know where to go.

Project Identification Process

For each risk identified above, the planning committee determined what their desired end state or objective would be for addressing each risk. For every objective, the committee brainstormed a list of possible projects to address each one. In brainstorming solutions, they considered these existing opportunities for outreach:

Existing Opportunities

- Lake Districts: Williams Lake, Emery Lake, Buffalo Shores Estates, Clearwater Lake
 - email lists
 - information boards/kiosks
 - websites
 - presentations at annual meetings
- Campgrounds
 - Call of the Wild Campground
 - Ox-Bow Campground
- Recycling Center/Dump: there is an attendant, information board, lots of people pass through
 - Saturday 9-3
 - Wednesday 1-4 (April-October)
 - 1st and 3rd Wednesday 1-4 (Nov-March)
- Places to post information:
 - Dump/Recycling Center
 - Town Hall/Library
 - Post Office
 - Boat Landings
- Town website (but no town newsletter)
- Town Facebook page is in progress
- Tax bill
- Town annual meeting in April (usually low attendance)
- Marquette County Lakes Association - June & September meetings (35-40 people attend)



Town-owned boat landing with info board



Town Hall bulletin board for wildfire information



The Recycling Center for wildfire information

Once we had a list of potential projects, each member of the planning committee individually ranked each of the potential projects in an exercise in which each strategy was scored along a priority scale as described below.

- High (3) =** I feel this project should be a **high** priority. It is feasible, it will be effective in our town and it is worthwhile to pursue. **17 projects were ranked as high priority (scores of 2.4 - 3.0)**
- Medium (2) =** This project is a **medium** priority. It may be feasible; it may be effective; it may be worthwhile to pursue if time allows. **14 projects were ranked as medium priority (scores of 2.0 - 2.3)**
- Low (1) =** This project is a **low** priority. I don't think it's feasible or it may not be effective. There are other projects I would rather emphasize right now. **19 projects were ranked as low priority (scores less than 2.0)**

What follows is each objective along with a list of potential projects. Only those projects that were ranked as being a medium priority project or a high priority project are shown here.

Wildfire Risks, Objectives, Possible Projects (high and medium projects shown)

WILDFIRE RISK #1: FUELS
<p>Objective 1: People will reduce fuels within 100 feet of their homes.</p> <p>P2: Town make a town brush drop off site available (2.7 high).</p> <p>P3: Town make a leaf compost site available (2.4 high).</p> <p>P1: Organize spring clean ups of fuels along roads. The Town has had roadside clean-ups in the past (2.0 med).</p> <p>P5: Offer brush pick-up or chipping to identified high risk subdivisions (2.0 med).</p>
WILDFIRE RISK #2: STRUCTURAL IGNITABILITY
<p>Objective 2: Homeowners will be aware of what actions they can take to better prepare their homes for wildfire.</p> <p>P12: Hand out the Home Ignition Zone Self-Assessment flyer (FR-474) at the Recycling Center during Wisconsin's spring fire season (late March, April, May) (2.9 high).</p> <p>P11: Put a link to the DNR wildfire videos on the Town's website and encourage lake districts to do the same (2.7 high).</p> <p>P17: Work with lake districts to include firewise flyers in their fee invoice letters (2.7 high).</p> <p>P10: Presentations on Firewise recommendations to lake districts and other groups at their annual meetings, including the Marquette County Lakes Association which meets in June and September (2.6 high).</p> <p>P18: Offer home ignition zone assessments (2.4 high).</p> <p>P9: Hold a town hall meeting/workshop focused on how homeowners can prepare their homes for wildfire. Advertise through local snowmobile club, ATV club and chambers (2.3 high).</p> <p>P13: Train local volunteers on how to conduct home ignition zone assessments so they can educate their neighbors (2.0 med)</p>

P21: Identify Firewise demonstration homes that people could drive by (2.0 med).
WILDFIRE RISK #3: WILDFIRE AWARENESS
Objective 3: People will be aware that we have wildfires in Wisconsin and the risk level in the town where they live or own property.
P23: Include wildfire flyers in with tax bills (3.0 high).
P22: Posters posted in key community spots (dump, town hall, post office) (2.9 high).
P24: DNR and Montello Fire Department participate in local parades (2.4 high).
P25: Put Wisconsin's Wildfires graphics on town website and change based on anniversary date (2.4 high).
P27: Host a wildfire booth at the town festival (2.4 high).
P26: Post wildfire awareness signs at boat launches (2.3 med)
WILDFIRE RISK #4: FIRE PREVENTION
Objective 4: Burning Permits: People will get a DNR burning permit as required and check the daily restrictions every day before they burn.
P29: Post metal wildfire prevention signs and/or Smokey Bear signs on fence at dump (2.9 high).
P31: Provide the library with Debris Burning flyer (FR-613) and ask them to hand them out with burning permits (2.7 high).
P33: Link to daily burning restrictions on Town's website (2.3 med).
P35: Pass out Smokey Bear tipping cards during Heritage Days Parade (2.3 med).
P34: Check Before You Burn magnets on counters of local businesses during spring fire season (2.1 med).
Objective 5: Campfires: People will extinguish their campfires before leaving their property.
P+: Post metal signs or posters at information boards and at campgrounds.
P+: Since not all visitors would frequent these locations, send this information out as a tax bill insert.
Objective 6: Fireworks: People will understand that fireworks can cause wildfires and that the safest way to enjoy fireworks is by attending a professional show.
P36: Provide fire prevention brochure with fireworks permits (2.0 med).
WILDFIRE RISK #5: EMERGENCY RESPONSE
Objective 7: Driveway: People will be educated on why inadequate driveway access is a concern and will know the driveway recommendations as published by the Montello Fire Department.

P41: Put the Driveway Access flyer (FR-571) in the tax bill (2.4 high).

P46: Offer driveway assessments (2.0 med).

P49: Fire Department take fire trucks out in the community to check driveway access (2.0 med).

Objective 8: Address Signs: Homes on private roads will be adequately signed to support emergency response. Where there are multiple homes off a private road, there will be a secondary sign at the driveway to each home.

P45: When there are multiple homes on one driveway or private road, promote having an address number at the road as well as at the fork to the individual homes (2.4 high).

Objective 9: Evacuation: People will be aware that evacuation could be an issue for them and also what they can do to reduce their personal risk.

P40: Send a letter to those in targeted areas where there is only one way in and out. Focus on pre-planning for evacuation and leaving early (2.4 high).

P42: Hang a sign on the train trestle or near the road where the train passes over the road which reads "You Are Entering a Wildfire Risk Area" (2.1 med).

Objective 10: Water Supply: There will be an adequate water supply for suppression.

P+: Install dry hydrants as necessary to support fire suppression.

Wildfire Risk Reduction Action Plan

The overall rankings for each project, taken from an average of all the individual responses, were used to support the development of the Action Plan. The projects with the highest scores were addressed first.

PACKWAUKEE WILDFIRE RISK REDUCTION ACTION PLAN 2018-2022

PROJECT	PROJECT NOTES	LEAD
ANNUAL PROJECTS		
Tax Bill Flyer	<p>Include a flyer in with the tax bill. Topics identified include:</p> <p>Driveway Access (FR-571) – mailed out in 2017 Home Ignition Zone (FR-611) – planned for 2018 Burning Permits (FR-613) Safe Campfires (need to create) - citation for failure to extinguish</p> <p>DNR will supply the selected flyer to the Town by the 3rd week in November. Quantity needed is 1,200. Work Group can help prepare the mailing.</p>	Town
Info Boards	<p>Post information throughout the town in high use areas. Use posters or metal signs as appropriate. DNR will supply the resources; Town will post the information. Discuss the content annually over the winter.</p> <p>Locations could include:</p> <ol style="list-style-type: none"> 1. Dump/Recycling Center 2. Town Hall (bulletin board in hallway; metal sign outside) 3. Williams Lake Boat Landing 4. Lake Emery Boat Landing 5. Buffalo Lake Boat Landing on C 6. Buffalo Lake Boat Landing on Lakeshore 7. Buffalo Lake Boat Landing on Freedom 8. Moon Lake Boat Landing 	Town
Facebook Posts	The Town and Buffalo Lake Protection & Rehabilitation have Facebook pages. Post information during spring fire season. DNR will supply content. Also, Williams Lake can forward content via their email distribution list.	Town
Website	The Town, Williams Lake and Buffalo Lake have websites. Post key links year round and additional information and graphics during spring fire season. We could post Wisconsin Wildfire graphics for anniversaries. DNR will supply links and content.	Town
Flyer at Library	The library is an Emergency Fire Warden. Ask that the Burning Permit flyer (FR-613) be handed out with burning permits when they are issued. Check their supply of flyers each year over the winter.	Montello DNR
Spring Outreach Item	Wildfire Prevention Week occurs every year the 3 rd full week of April. Have an outreach item available for pick up at the library with a burning permit and also at the Dump/Recycling Center.	Montello DNR
Parade	Heritage Days Parade and picnic occurs the last weekend in July. Seek approval for a DNR heavy unit to participate in the parade to raise awareness of fire risk. We could have an information table. We could plan for a hand-out item appropriate for children. We could also hand out Smokey Bear tipping cards for adults.	Montello DNR
Fire Engine Banner	Montello Fire District can borrow a fire engine banner from the DNR for use at community events. Banner reads: "Will this fire truck fit down your driveway when you need it most?"	Fire Department

2018 PROJECTS		
Annual Projects	<ul style="list-style-type: none"> • Tax bill flyer • Information Boards • Facebook Posts • Websites • Flyer at Library • Spring Outreach Item • Parade • Fire Engine Banner 	See above
Safe Campfires Flyer	Find or create a 1/3 sheet flyer that provides information on how to properly extinguish a campfire and the penalties for failing to do so. Create it in 2018 for use as a tax bill insert in a future year.	
Info Boards	Establish information boards. Then it becomes an annual project to update the information. Work Group will determine content and DNR will supply posters and signs.	Town
Magnets	In 2018, all property owners will need to pick up a Recycling Center sticker. When they do, also give them a Check Before You Burn magnet (quantity needed: 1,000). DNR will supply.	Town
Library	Montello DNR has a box of rain gauges that they will drop off at the library for handout with burn permits for spring 2018.	MON RGR
Sign	Put up some sort of wildfire awareness sign at the entrance to Buffalo Shores Estates at the train overpass. This is one way in and one way out. Work Group will determine messages and DNR will assist with production of the sign if necessary.	Town
Dry Hydrant	Install dry hydrant by the bridge near the causeway. The Town has all the parts and expect it to be installed in 2018 after the final details are decided.	Town
Brush Site	A spot for brush drop off at the Recycling Center is expected to be functional by spring 2018. Vegetation will need to be removed to create space for the pile. Pursue Wildfire Risk Reduction funds available through DNR.	Town
2019 PROJECTS		
Annual Projects	<ul style="list-style-type: none"> • Tax bill flyer • Information Boards • Facebook Posts • Websites • Flyer at Library • Spring Outreach Item • Parade • Fire Engine Banner 	See above
Home Visits	Offer home ignition zone assessments to targeted areas of the Town. Details to be determined. Could consider training Fire Department members and volunteers so they can assist. Consider offering driveway assessment at the same time and the possibility of bringing a fire truck to each home as a visual.	DNR
Evacuation Meeting	Buffalo Shores Estates is a neighborhood that has only one way in and one way out. Hold a meeting to inform homeowners of the issue and teach homeowners how they can prepare. It could be during a	Emergency Management

Town of Packwaukee Community Wildfire Protection Plan 2018-2022

	Saturday morning in April, lunch provided, perhaps at the Call of the Wild campground. Would advertise it by mailing a letter. It would be a combined Work Group effort.	
Dry Hydrants	Analyze the need for any additional dry hydrants. Possibilities would be Williams Lake and Emery Lake.	Town & Fire Department
2020 PROJECTS		
Annual Projects	<ul style="list-style-type: none"> • Tax bill flyer • Information Boards • Facebook Posts • Websites • Flyer at Library • Spring Outreach Item • Parade • Fire Engine Banner 	See above
Address Signs	Where there are multiple homes on a shared driveway or private road, install a secondary address sign where a home splits off from the road or drive to help emergency responders locate homes. Signs cost \$65 each. Consider applying for funds to support cost sharing with homeowners. Need to do an analysis of where this is needed. The Town is willing to provide the labor to install the signs.	Town
Spring Clean-Up	Offer spring curbside chipping in high risk areas such as Emery Lake, Williams Lake, Buffalo Shores Estates and the Tall Timbers area. Hire a contractor that has a truck with a clam for efficient pick up. This project is straightforward on town roads; curbside chipping on county roads or private roads may require pre-work agreements.	Town
2021 PROJECTS		
Annual Projects	<ul style="list-style-type: none"> • See above 	See above
2022 PROJECTS		
Annual Projects	<ul style="list-style-type: none"> • See above 	See above

PACKWAUKEE CWPP ANNUAL TIMELINE

Winter Dec-Jan-Feb	Spring March, April, May	Summer June, July, August	Fall Sept-Oct-Nov
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Update info boards • Refresh websites • Restock library • Deliver outreach item 	<ul style="list-style-type: none"> • Heritage Days Parade - July • CWPP meeting to plan for next year's funding request (due in October) • Plan content for next year's info boards 	<ul style="list-style-type: none"> • Tax bill flyers in Nov

APPENDIX #1: Town of Packwaukee Wildfires 2007-2016

- There were 31 wildfires in the Town of Packwaukee burning a total of 33.32 acres. (I counted 17 Spit Fires as 1 fire. Each fire was very small. They were caused by car exhaust.)
- Out of those 31 wildfires, 23 fires were less than one acre in size; 8 wildfires were larger than 1 acre in size.
- The largest fire was a 5.92-acre Lakewood Fire of unknown cause which occurred in October 2010.
- A total of 19 structures were saved due to suppression efforts; 4 structures were lost. The four structures lost occurred on 3 different wildfires. The cause of each of these three fires was debris burning.
- The leading cause of wildfires was debris burning (49%), followed by equipment (19%).
- 17 of the fires (55%) occurred during the months of March, April and May.
- Out of the 31 fires, 19 fires or 61% were human-caused and therefore could have been prevented.

Number of Fires 2007-2016

	# Fires	Acres	Notes
2007	2	0.5	
2008	2	3.29	
2009	2	5.88	
2010	4	7.17	
2011	1	0.3	
2012	10	8.21	Drought
2013	4	.028	
2014	3	5.7	All larger than 1 acre
2015	3*	1.99	
2016	0	0	
TOTAL	31	33.32	

*counted 17 Spit Fires as 1 fire



Wildfire Causes 2007-2016

	#	%	Preventable?
Debris Burning	15	49%	Yes
Equipment	6	19%	No
Miscellaneous: Other	3	10%	Not sure
Misc: Power Line	3	10%	No
Incendiary (excite, pest)	2	6%	Yes
Misc: Ash Disposal	1	3%	Yes
Misc: Fireworks	1	3%	Yes
Misc: Experimenting with Fire			Yes
Lightning			No
Campfire			Yes
Railroad			Yes
Smoking			Yes
Misc: Structure Fire			No
Misc: Playing with Matches			Yes
TOTAL	31 fires	100%	

Wildfires By Season 2007-2016

Season	Number	Percentage
Winter: Dec, Jan, Feb	1	3%
Spring: Mar, April, May	17	55%
Summer: June, July, Aug	5	16%
Fall: Sept, Oct, Nov	8	26%
TOTAL	fires	100%

APPENDIX #2: Residential Areas

Area	Description	# Lots Approx	Web site	Social Media	Assoc-iation
Buffalo Shores Estates	There are many homes in this area. The driveways are long. The roads are paved and two lanes. Many of the homes are fire prone. This subdivision is located past the train trestle. There is only one way in and out of this area. The surrounding area is wooded. 80% are non-resident. There is no annual meeting. Website is: http://buffalolakedistrict.org/	90	Yes	No	No
Emery Lake	There is a big sign at the entrance on the north side of the lake and an information board at the public boat landing owned by the Town. There is only way in and out. It is a short road. The homes are not very close together. It's a very wooded area and some long driveways. They have a P & R District. 	48			Yes
Williams Lake	There are about 60 lots around the lake. There are approximately 9 year round residents. The private road to the east, Deer Run Road, is unpaved although it is wide enough to support a fire truck. The unpaved road dead ends into a driveway with no easy turnaround. There are about 15 homes with plenty of space between them and long driveways. In most cases, homes can't be seen from the road. The road to the west, Williams Drive, is paved and the homes are mostly Firewise. The road ends in a small cul de sac. 	51	Yes	No	Yes
Clearwater Lake	There are about 20 homes tucked around this small lake. There is a one-lane, unpaved very narrow private road that leads back to the homes off of County Road B. It is difficult for a fire truck to access this area. It can be done however with multiple trucks responding to an incident, it can be challenging to access the area. There are two big farm fields south of the area which provide a fuel break. There is only way in/out of the area except that there looks to be a possible evacuation route leading into Tall Timbers.	21			
Tall Timbers	This small subdivision is one circle road off of B. The road is paved and double lane. Homes are newer with more space between them. The subdivision perches on the top of a hill. It is very wooded with tall grasses and native vegetation throughout.	16			

APPENDIX #3: Driveway & Road Access Information

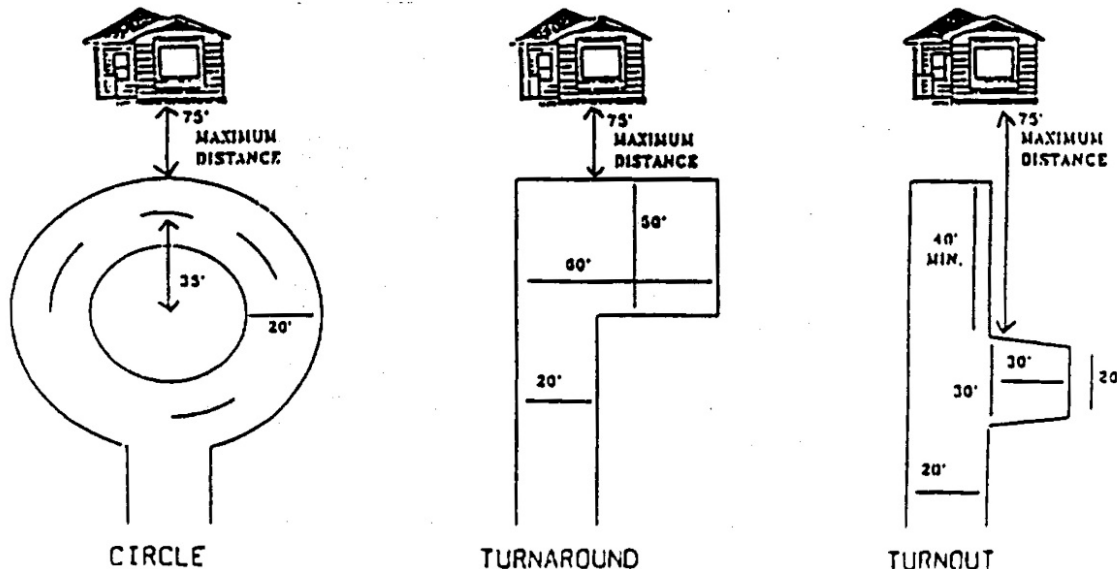
MONTELLO JOINT FIRE DISTRICT PRIVATE ROAD AND DRIVEWAY RECOMMENDATION

Private roads are described as those serving more than one residential or commercial building. All persons constructing private roads serving multiple buildings are advised to construct the road at a minimum of two rods.

Driveways are described as serving only one residential or commercial building. All driveways, which serve new residential or commercial buildings, that are greater than 75 feet from a public or private road are advised to meet the following:

1. Driveways should have a minimum clearance width of 20 feet. Any curves in driveways should not be less than a 100-foot radius.
2. Overhead clearance should be established at a minimum height of 13 feet.
3. Driveways exceeding 150 feet in length should provide an adequate turnaround area that will accommodate a 30-foot long fire truck. The turnaround space can be provided by one of the following methods and should be within 75 feet of the principal building:
 - a. If a circle drive is constructed, it should have a radius of no less than 35 feet to the centerline (or)
 - b. A turnaround space free of trees and other obstructions may be provided if it has the dimensions of not less than 60 feet by 50 feet (or)
 - c. A turnout may be provided with the following dimensions: the length should be a minimum of 30 feet. The width at the entrance should also be a minimum of 30 feet. The turnout may be trapezoidal in shape, thereby tapering down to a minimum of 20 feet at the rear. In addition, a minimum of 40 feet of driveway should be provided between the building and the turnout to allow enough room to back a 30-foot fire truck into the turnout.

Further, in the interest of public safety and better delivery of emergency services, the Montello Joint Fire District encourages and recommends that existing driveways be upgraded to these minimum standards.



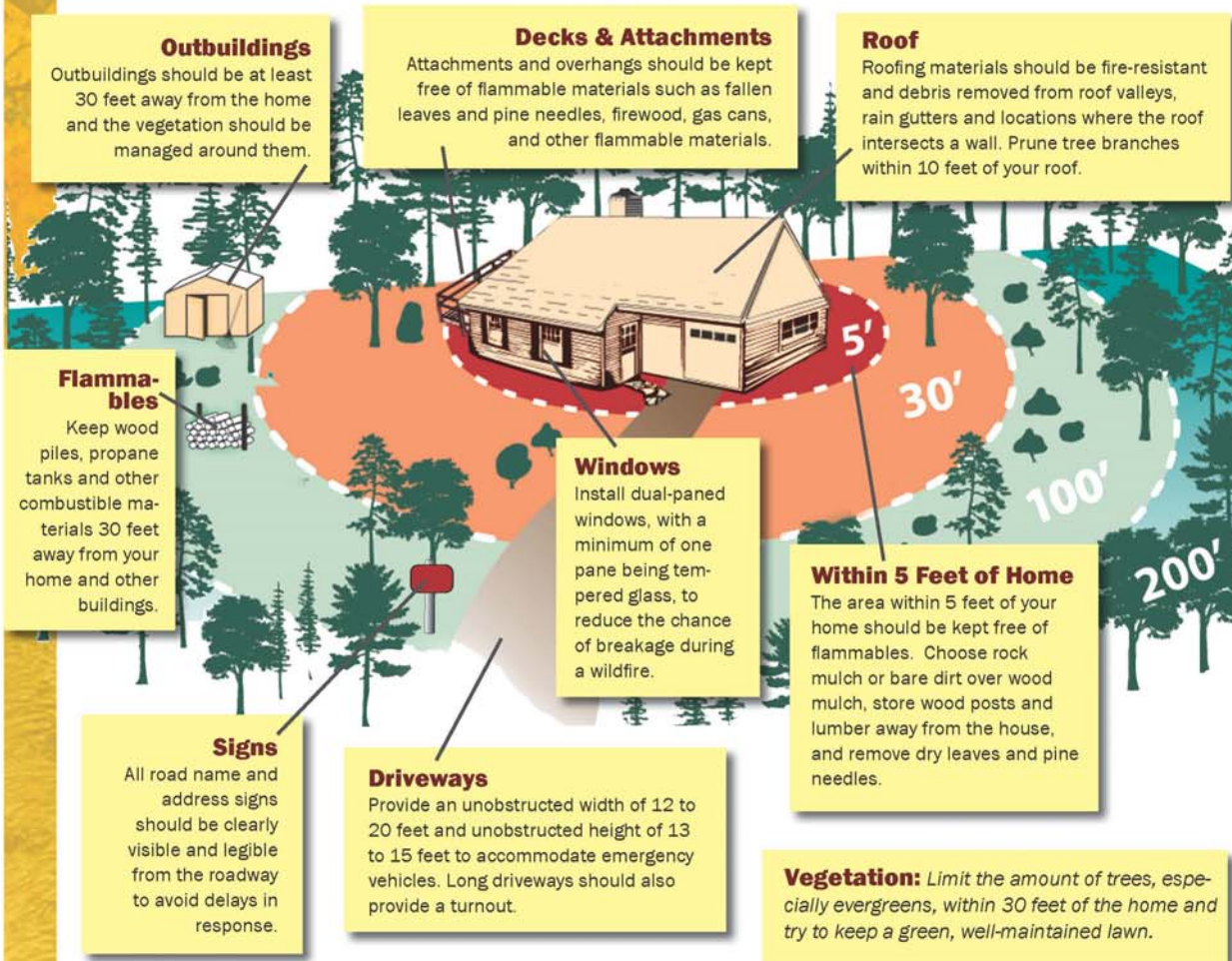
APPENDIX 4: Firewise Recommendations

Reduce the ignitability of your structure and be Firewise

Small steps are the key to a Firewise home!

Improving your home's chance of surviving a wildfire can seem like an overwhelming task – one that you may feel is impossible to achieve. Not necessarily so! Research shows that flying embers (firebrands) and creeping surface fire are significant contributors to the loss of homes to wildfires...

sometimes hours after the fire has passed. To begin making your home and property "Firewise," start with the structures on your property and move out as time allows. Keep in mind that anything attached to a structure (deck, fence, overhangs, etc.) is part of the structure.



The home ignition zone is your home and its surroundings out to 100-200 feet. In this area, vegetation and personal property should be managed and maintained to reduce the wildfire threat and improve the likelihood of your home surviving with little or no assistance from firefighters.

APPENDIX 5: Map of Town of Packwaukee

