

Severe Weather

Terminology

Severe Thunderstorm Watch:

Atmospheric conditions are favorable for the development of severe thunderstorms, producing at least 1 inch diameter hail and/or 50 knot (58 mph) or greater wind speeds.

Severe Thunderstorm Warning:

A Severe Thunderstorm Warning is issued by the National Weather Service when a severe thunderstorm is indicated on radar, or a spotter reports a thunderstorm producing hail one inch or larger in diameter and/or winds equal to or more than 58 miles an hour. Severe thunderstorms can produce tornadoes with little or no advance warning. A Severe Thunderstorm Warning is usually issued for a duration of one hour. They can be issued without a Severe Thunderstorm Watch being already in effect. People should immediately seek shelter.

Tornado:

A tornado is a violently rotating column of air extending from the base of a thunderstorm down to the ground. Tornado intensities are classified on the Fujita Scale with ratings between F0 (weakest) to F5 (strongest). They can destroy well-made structures, uprooting trees, and hurling objects through the air.

Tornado Warning:

A severe thunderstorm has developed and has either produced a tornado or radar has indicated intense low-level rotation in the presence of atmospheric conditions conducive to tornado development.

Tornado Watch:

Atmospheric conditions are favorable for the development of severe thunderstorms capable of producing tornados.

Preparation/Awareness:

Each person should be self-aware of changing conditions and potentially severe weather.

- This is done by weather forecasts – the evening news, the morning news.
- By personal observations – clouds, thunder, lightning, wind
- Radio – listen to local weather stations.
- Rave system- ensure you are signed up to receive alerts.
- Outdoor Warning Sirens
- NOAA Radio
- Local Television stations and reports
- Computers and local weather/radar
- Nothing replaces your own vigilance of being aware to impending conditions.

All buildings have limitations to protection and safety. No building should be viewed as absolutely safe in a storm. Families should pre-determine the safest facility and action upon report of a severe storm event. This information should be viewed as the best suggested guidance in the event of a storm event.

How are alerts transmitted and received?

- 1) RAVE: The RAVE Alert system uses IPAWS which will automatically forward National Weather service severe weather and tornado warnings to subscribed member cell phones in the form of text and emails. Your phone number must be listed in RAVE to receive alerts.
- 2) Outdoor Warning Sirens – These are activated by Allegan County Central Dispatch and/or Allegan County Emergency Management.

- 3) NOAA Weather Radio – It is highly suggested that you should have a NOAA weather Radio in your camping unit.
- 4) Monitoring Local Television and radio station reports.
- 5) Cell Phone applications to alert of severe weather can be downloaded from local news services.

What does it mean when I hear the outdoor warning sirens?

- 1) The Outdoor Weather Siren is tested monthly. This occurs on the fourth Friday of each month around 11:00 am. The test is activated by Allegan County Central Dispatch.
- 2) Other (additional) activation's mean that a Warning has been issued and the event is life threatening. **Seek shelter immediately.**
- 3) Outdoor weather alert sirens are intended for persons outdoors not for persons indoors.

How long will the warning sirens sound?

- 1) Typically, the siren will sound for 3 minutes. During a test about 1 ½ minutes.
- 2) The siren will not sound continuously during the event.
- 3) Just because the siren is not constantly sounding does not mean that the threat has ended.
- 4) Additional sounding of the warning siren after the original siren activation will indicate that a threat is still present.
- 5) Please stay sheltered until advised of an all clear

What should I do when I hear the Outdoor Warning Sirens?

- 1) You should immediately seek shelter!

What should I do when Radio, TV or other reliable media report severe storms or a Tornado?

- 1) You should seek shelter immediately.
- 2) Delays in activation of the weather sirens has happened in the past. When you hear or observe weather threats you should immediately seek shelter.

Best Practices in the event of a Tornado:

a. **You should:**

- Immediately seek shelter.
- Stay away from windows and glass doors.
- Put as many walls as possible between you and the outside when possible.
- Find an interior room without windows.
- Avoid large open rooms.
- Crouch as low as possible to the floor, facing down; and cover your head with your hands to protect against falling debris and flying objects in case the roof and ceiling fall.
- Time permitting and present weather conditions may allow you to go to a structure that provides more protection.
- Your plan may consider leaving the Park or evacuating to a safer place.

Shelter Areas:

Prior to a severe weather event members should develop a plan to determine the best shelter in each part of the park. Convenience Centers in phase 1,2,4,5,6 may provide better safety than a recreational unit, or large roof span building. Phase three has two engineered designed convenience facilities (CC# 5 & CC# 6) in the park to withstand severe storms and Tornadoic winds. The North Shore Center in Phase 4 is also designed as a storm shelter.

Criteria for shelter considerations:

- Lowest level of the building (basements are preferred)
- Most interior space of the building
- Do not shelter near skylights or windows

- Publicly accessible space – CC's or Storm Shelters

If notified of a tornado warning:

- Stop all activities and take the warning seriously. Get your family to safety.
- Proceed immediately to the nearest tornado shelter.
- Stay away from windows, glass, stairwells, and unsecured objects.
- Unless an emergency exists, DO NOT call 911 or Security.
- Remain in shelter until the "All Clear" message is given.
- If outdoors, lie in a low-lying ditch, culvert or at low land levels. Protect your face and head.
- If in a vehicle do not try to outrun the tornado. Try to seek a safe building structure. If unable to find a safe structure put your seatbelt on and get lower than the windows in your car.

Weather Awareness

Forecasts – local weather forecasts can provide the probability of severe weather for our area. As you start your day and makes plans it is advisable to be aware of potential weather threats or conditions. Local TV, radio, NOAA radio can provide insight into what to expect for the day.

Residents, visitors, and guests should be vigilant in monitoring the present conditions. Development of storm clouds, thunder or lightning should cause reason to check the current weather or impending conditions.

To protect you and your family several resources should be used to determine if a weather threat exists. It is encouraged that individuals are vigilant in monitoring more than one resource to determine potential threats. NOAA weather radio, alerts to your cell phone or device, local TV stations, local radio stations should be in your family plan to determine if a severe weather threat exists and to take immediate action. We suggest that you have a NOAA weather Radio in your camping unit. We also recommend that you subscribe to the Sandy Pines RAVE notifications to alert you and your family.

Salem Township has installed two Outdoor Warning Sirens within Sandy Pines. These are to alert people outside. Allegan County Central Dispatch and/or Allegan County Emergency management activates the Outdoor Warning Sirens located in Allegan County. As stated, prior multiple sources should be utilized to determine a threat to you and your family. Any reliable source or observation of weather threats should cause you and your family to seek immediate shelter. Do not wait to hear the Outdoor Weather Warning siren activation. Do not wait to be advised by local TV or radio to seek shelter. Upon notification of a reliable source, observations of weather threats or activation of the Outdoor Warning sirens, seek shelter immediately.

Sandy Pines, local weather channels, Salem Township and Allegan County Emergency Management can provide the means to alert you and your family. We cannot make the decision for you to take shelter. You must do this for yourself and your family. It is not uncommon for people to fail to seek shelter and become injured or perish. Please seek shelter. Recreational camping units fail poorly.

If you have disabilities, please plan and seek shelter during watches.

Where to Take Shelter

If time permits you and your family should go to a FEMA designed shelter. Three FEMA Shelters exist in the park. The North Shore Center in phase 4, CC# 5 in Phase 3 and CC# 6 in phase 3.

The second option is to shelter at the Convenience center (bathroom) within five minutes walking or driving distance that is near your campsite. Convenience Centers are thought to provide more protection than a Recreational Vehicle but are not designed as storm shelters.

The third option is to shelter in your recreational vehicle. Recreational vehicles fail poorly in severe storms, debris can penetrate walls, enter through windows, and the unit can be thrown around, pulled apart, tipped over or

crushed by trees. Sheltering in a recreational vehicle during a severe storm is a poor choice of protection. Your chances of injury or death greatly increases if you decide to shelter in a recreational vehicle and a tornado occurs. If you survive the damage to the recreational unit, you may be a victim of entrapment in the debris and wait a considerable time to be rescued. Be aware that rescue resources may be overwhelmed and will be limited after a catastrophic event. Your wait time may be significant for rescuers to find you. If you are a victim of trauma you may perish before found and rescued. Please seek appropriate shelter.

The Fourth option is to leave the park and go home to your residence in advance when severe weather is forecasted.

Taking Shelter

The shelter you select should be within ¼ mile or 5 minutes walking distance or within ½ mile driving distance. We encourage people to walk to the shelter rather than drive. Limited parking is available. If your campsite is less than five minutes from the shelter walking will reduce the potential of traffic congestion and potential delays. For campsites that are farther than five minutes' walking time we encourage you to drive to the facility for shelter. If you or a family member have a disability or are unable to walk the distance, please drive to the location.

Upon activation of the outdoor warning sirens the doors to the North shore Center will unlock for five minutes to assist in getting people into the facility. After five minutes you will have to use your access card to gain entrance. This is based on FEMA's 5-minute radius of walking or driving to the facility.

People have stated that they will not leave their pet in their recreational vehicle. People with pets may bring their leashed or pet carrier contained pets to the North Shore Center and utilize one of the meeting rooms on the lower level. Pet owners are responsible for their pet and any cleanup. Staying in a recreational unit during a storm increases your chances of injury and death.

With early warning devices and education, we encourage families to go to the facility upon observation of impending weather and immediately upon notification of a weather warning. With the intended population walking to the facility ingress will be constant.

Sheltering

Sheltering lasts for about an hour or less in most instances. You should plan for the temporary sheltering prior to the event. Think of medications, people on home oxygen, water and snacks for young children to mention a few items. The FEMA shelters have power back up and were built to a high confidence of safety. Once inside during the severe weather event the doors will be closed when populated and exiting will be restricted until after the event.

Smoking, use of alcohol or drugs will not be permitted in the facility. Pets may be present if contained in pet carriers and placed between and under your legs in CC's. At the North Shore Center please use one of the small rooms on the lower level.

All Clear

It is not uncommon for storms to continue to develop and pose a threat. If the storm continues to be a threat Allegan County Central Dispatch or Allegan County Emergency Management will activate the Outdoor Weather siren. Allegan County Central Dispatch or Allegan County Emergency Management will not activate an Outdoor Warning Siren as an ALL-CLEAR signal.

Upon notification staff will advise residents that the current weather threat has expired. The notification of an all clear may occur in the following methods:

- 1) By Rave notification to your cellphone by text, email or voice mail or any combination
- 2) By staff physically stopping at the facility in which you are presently sheltering.

3) Other personal means from local TV or Radio or NOAA radio.

Catastrophic Event of a Mass casualty event:

Tornados and other natural disasters may have the potential to injure more people than park resources or local resources can respond to. In the event of a catastrophic event a RAVE notification will be sent out and the lower level of the North Shore center will be utilized as a triage center. Injured persons should be transported to the lower level of the North Shore Center to be triaged, treated, and transported to a hospital based on severity of injury.

Lightning Safety:

When you hear thunder, lightning is close enough to strike; go inside or to a safe place immediately. During lightning, shelter in an enclosed building or an enclosed, metal-topped vehicle with windows up. All outdoor activities should be delayed when lightning is within 10 miles of Sandy Pines, thunder is heard, or lightning is observed.

If no safe place is nearby, the following actions may reduce your risk:

- Immediately get off elevated areas such as hills.
- Never lie flat on the ground.
- Never shelter under an isolated tree
- Immediately get out of and away from ponds, lakes, and other bodies of water.
- Seek shelter if on a watercraft upon reports of storms, hear thunder, or observe lightning. Do not use Watercraft during storms.
- Stay away from objects that conduct electricity.
- Golf carts provide little safety from lightning. Seek shelter in an enclosed building.
- Stop boating and other water activities and seek shelter immediately.

Wait a minimum of 30 minutes from the last observed lightning or thunder before resuming outdoor activities.

If someone is struck by lightning, they do not carry an electrical charge and are safe to assist. Provide first aid immediately if you are qualified to do so, and call Security and 911 for emergency assistance.

Weather, Pool & Amenity closings

Thunderstorms/Lightning

In the event of severe weather or approaching storms Sandy Pines empowers its staff to close pool facilities to prevent injury to patrons and pool staff.

The outdoor bathing/pool facilities will be closed during a thunderstorm.

The Recreation Department will monitor storm activities and suspend swimming activities when:

1. Storm Warnings are issued for the area.
2. Threatening or potentially severe weather is observed or forecasted.
3. Weather Siren is activated by Allegan County – (seek Shelter)
4. Lightning is visualized or thunder is heard in the vicinity.
5. Staff will wait until 30 minutes after lightning has been observed or thunder is heard before resuming water activities.

Rain – Outdoor Pools

The outdoor pools will not be opened during rainstorms and in the event of rain during operational hours will be closed. Light rain can have an impact on your ability to fully see and protect the assigned zone. When rain falls on the surface of the water in the pool, it creates a mild agitation, decreasing the visibility of the water below the surface.

Air Temperature

The outdoor pools will be closed for swimming if the air temperature is 68 degrees or below, or at the Recreation Manager's or Park's Administration's discretion based on inclement weather, low attendance, maintenance, or unusual circumstances.

Thunderstorms

Thunderstorms are dangerous and considered a weather-related emergency. Thunder and lightning, typically accompanied by heavy rain or hail, are more frequent in the summer months or in warmer climates. Lightning can strike from as far as 10 to 15 miles away and a single lightning strike can reach over five miles in length.

Once a weather warning is issued or a severe weather threat observed, the facility/activities will be stopped/closed.

Wind

Wind can agitate the water's surface enough to affect the ability to see the pool bottom. Wind gusts can be dangerous, resulting in flying objects like furniture, umbrellas, towels, water bottles, and other items that are not secured. Pools may be closed because of winds and wind speed/gusts that affect the ability of lifeguard's visibility or guest safety from flying objects.

Heat and Humidity

The Recreation manager, Maintenance Manager or Public Safety may close or limit the hours of operation of pools, or other amenities when conditions affect the health of patrons, staff and lifeguards.

Biohazard, Maintenance or Safety issues

A pool, recreational facility, equipment, beach, area, building, event, or amenity may be closed by the Maintenance Facilities Manager or Public Safety Manager or Director when it is determined that a safety or health issue is present.

Swim Lesson Severe Weather Policy

In case of inclement or severe weather swimming lessons policy

Notification System- Sandy Pines has a Facebook page that will provide cancellations for all events. Rave notifications may also be used via text or email.

Rain/Inclement Weather

Swimming lessons will be cancelled for inclement weather, during rain or stopped if it begins to rain during lessons. .

Cool Temperatures

If the air temperature is 68 degrees or below swim lessons will be cancelled.

Severe Thunderstorm Warning

Lessons will be canceled during a severe thunderstorm warning.

Tornado Watch and Warning

The levels during a tornado watch or warning will be canceled. If the tornado watch or warning expires during swimming lessons, the later levels may still be held.

Severe Thunderstorm Watch

Lessons will be held as scheduled during a severe thunderstorm watch.

Maintenance

Swimming lessons will be cancelled during events for maintenance, pool contaminants or unusual circumstances.

Severe Weather, Potential Threats, Safety Issues, or other circumstances

Sandy Pines reserves the right to cancel activities and scheduled events at its discretion for the safety of staff and patrons.