

## **WILDFIRE SPRINKLER SYSTEMS FREQUENTLY ASKED QUESTIONS (FAQs)**

- ***When, how long and who should run my sprinkler system?***

There are four situations when sprinkler systems should be run:

1. **Testing** – Systems should be run monthly during the fire season to ensure that all components are working properly. Testing should ensure that:

- there is adequate oil in the engine.
- the system will start consistently and stay running.
- the water inlet hose is adequately submerged in the lake.
- water lines leading to the sprinkler heads are not leaking.
- sprinkler heads are putting out enough flow and are rotating as needed to cover the intended area.
- branches are not impeding the functioning of the sprinkler heads.

The system only need be run long enough to test these aspects. The owner should perform this testing. If problems are discovered, they should be corrected either by the owner or by the sprinkler system provider.

2. **Heightened Wildfire Threat** – When wildfires present a threat to the area, owners (or their designates) should run their system to raise the moisture and humidity level of the sprinkled area. Run the system for 2-6 hours every 1-3 days depending on weather conditions and the current moisture level in the soil. It is best to run the systems in the evening to minimize loss of moisture through evaporation, however, run them whenever possible.

3. **Evacuation**- When asked to evacuate, systems should be started by the owner or their designate. Systems should be left running on the fuel source that will provide 6 hours of runtime (the 20 lb propane cylinder - see fuel question below). Do not start the system on the large (50 lb) propane cylinder unless there is an immediate wildfire threat (see below). The fire department's first priority in an evacuation is people, so until the evacuation is complete, they will not start systems, so it is the owner's responsibility to start the system in an evacuation.

4. **Immediate Wildfire Threat** – When the threat from fire is highly likely in the next few hours systems should be run utilizing the fuel source that will provide a longer runtime (50 lb propane cylinder – see fuel question below). Pending availability of resources, and if the safety of personnel is not compromised, the fire department will run the system in this situation as it is likely that the owner will already be evacuated when this occurs. However, fire situations are very dynamic and unpredictable, thus there are no guarantees that personnel will be able to get to your system, but best efforts will be made to do so.

- ***How much fuel should be maintained at my system pump and how should it be used.***

Systems should have the following filled propane cylinders stored at the system engine/pump unit:

1. 2- 20 lb cylinders – This is the cylinder typically used for gas grills. Each cylinder will provide 6 or more hours of runtime depending on the size and RPMs of the pump engine. Use of these cylinders should be for testing, in times of heightened wildfire threat and during evacuation.

Most systems are initially setup with 1- 20 lb cylinder, but 2 cylinders are recommended to always ensure availability of one full cylinder.

2. 1- 50 lb cylinder – These larger cylinders will provide up to 24 hours of runtime. These should be used only when there is an immediate wildfire threat (ie when fire is expected in the next few hours).

- ***Why shouldn't I start the system on the 50 lb cylinder when asked to evacuate?***

Evacuations may be ordered several days prior to the fire actually moving through an area. If the larger cylinder is used (resulting in 24 hours of runtime), then the system may not be running during the actual fire event, and there will be no propane reserve to start the system when it is actually needed just prior to this event.

- ***Where can I buy propane fuel for my system?***

Cylinders can be re-filled (or swapped out) at hardware stores and gas stations in Grand Marais as well Cross River Lodge (on Gunflint Lake) and Voyager Canoe Outfitters (on Sag Lake Trail).

- ***When should I change the oil in my system?***

Oil level and clarity should be checked regularly. Oil should be changed if the oil appears dark, milky and/or after 50-75 hours of runtime. 5W-30 full synthetic oil should be used.

- ***How do I know if there is a current wildfire threat that would dictate running my system?***

The US Forest Service maintains an Incident Information System online that describes current wildfires and their status. The link is: <https://inciweb.nwcg.gov/>. The US Forest Service – Superior National Forest also provides information on their Facebook page. The link is <https://www.facebook.com/SuperiorNF>.

- ***What action should be taken when a pre-evacuation is ordered?***

Systems should be run as indicated in the Heightened Wildfire Threat circumstance described above.

- ***What should I do if I'm not at my cabin when a wildfire threat is raised and/or an evacuation order is imminent?***

You should pre-identify a designated person who is in the vicinity of your cabin and is authorized to come on your property and start your system. Some homeowner organizations or neighborhoods have a plan that identifies specific individuals to serve in this role.

- ***Who are system providers in the area that can provide repair/maintenance services for my sprinkler system?***

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