



HALIFAX REGIONAL MUNICIPALITY COMMUNITY OUTDOOR RINK PROGRAM



HALIFAX



The Halifax Regional Municipality values the strong role that the community plays in the provision of recreation activities. The municipality's mandate highlights the importance of volunteerism and partnerships with community groups.

Outdoor rinks are often a focal point for community events. A dedicated community commitment to provide a local ice surface can ensure participation by all, accommodating everyone from toddlers to seniors. Non-profit groups are invited to apply for permission to build and operate an outdoor rink on municipal property for the winter season.

Purpose of the program

- To provide access to outdoor rinks in the municipality
- To reduce barriers to participation by providing funding for purchase of General Liability Insurance

The following requirements are needed to qualify for this program:

1. Must be a non-profit registered with the Nova Scotia Registry of Joint Stocks in good standing and enter into an agreement with the municipality
2. Must have a \$2 Million General Liability Insurance policy to cover spectator and users of the rink or the ability to obtain the insurance required
3. The proposed location of the rink must be on municipal land
4. Must have existing access to water

HOW TO BUILD AND MAINTAIN AN OUTDOOR ICE RINK

1. Rink Location

- Where is the water source?
- Is it easy to get a snowblower to clean the snow or shovels?
- Is the location on private or municipal property?
- Is there lighting?
- Orientation and shade

2. Snow & Access

- Where will you shovel or blow the snow?
- Do not pile snow onto fences
- Large snow clearing equipment such as Bobcats are not permitted
- Snow blowers are permitted

3. Permission

- It is important to check whose land you are on and get permission from the land owner
- This program provides a process for that permission on municipal property

4. Lighting

- Lighting can extend the time for people to enjoy the rink
- Many tennis courts have lighting which is activated by a timer

5. Orientation and Shade

- If the rink is located in the shade of trees or a building, the ice will be less prone to melting on mild days. However, the more shade, the cooler it will be for the users
- Orienting the rink north/south minimizes the exposure of boards to the sun and reduces the amount of heat absorbed and reflected to the ice, which will melt the ice next to the boards.

6. Size

- A full hockey rink is approximately 185' to 200' feet by 85'
- A 50' x 100' is adequate and can be used for 2 rinks sideways to accommodate more children
- Hockey and general skating should not occur on the same ice surface at the same time
- Start small. You can always expand the rink during the season by clearing an area and flooding it. Use snow for boards.
- Consider the natural elements of the area you plan to use. A natural depression holds water and will not leak which is a common issue with rinks on tennis courts.

7. Volunteer capacity

- How many volunteers are needed to maintain the ice surface?
- How many volunteers can you recruit from the neighbourhood?

8. Preparation for Flooding

Tennis Court

- Install boards when warm, normally before snow, seal with snow when it comes and wet snow lightly, so it freezes and forms a seal. This seal on the outside of the boards should be a 6" to 8" triangle. Wet and foot stamp.
- Put snow along the inside of the boards, but just a couple of inches. It will disappear under the ice as you flood and add water. Wet and foot stamp.
- Use of newspaper, plastic and spay can foam has been suggested by others for use when there is little snow or for leaks which are a common problem.
- Consider building a brim of snow around the outside of your boards to start, freeze it, and then start the flooding within the boards. All it can do is leak to the snow, but it is not lost. Also add some water to the course surface as a starter. If there is a little frost it may or may not stay. If there is snow on the ground compact it to 2" to 3".
- Sealcoat your rink. That is spraying a little water on and let it freeze. If it is very cold you can do two coats in one evening.
- Once sealed, it takes once or twice, flood as per the table below - this is a rule of thumb from experience. Try for a minimum of 8 inches. It is not necessary to remove small amounts of snow while starting your rink.



Temperature	Inches of Water	Comments
-1 to -7	½ "	Use water sparingly as it may not freeze before the next morning
-7 to -12	¾'	Scrape ice first as ridges will form from slush
-12 to -20	1'	Push slush to outside with hose pressure
Under -20	1" to 4"	Extra Caution required to maintain your hoses. Drain hoses immediately and monitor connections.
Do not flood more than 5 minutes in one spot with temperatures above -20		

- With lots of snow, DO NOT flood a foot of soft unpacked snow. The texture will become crusty and take too long to fill in and make ice. If it snows a foot while you are starting to flood, get out scoops and take off the top.
- Build up layers. If layers sperate, try thinner or thicker.
- Flooding for 5 minutes in one spot with a back and forth motion seems to work well for beginners.

Ground Rinks

- Install perimeter boards or brim. Once defined, consider making a brim of sand. Boards can be added on top of the ice and flooded in.
- Flatten snow, seal and flood right away.
- Consider a board-less rink; snow can be pushed off faster.

Flooding

Snow and flooding do not mix. Check the forecast prior to flooding.

- Seal coat. Apply light coat to seal the ground surface and perimeter to ensure no leaks.
- Next day, apply water in 2 meter to 4 meter strips from side to side working from one end to the other. This can be done with or without a nozzle.
- If temperature is below – 15 you may get ridges between strips.
- Make every effort to make ice when weather is suitable.
- Flood low spots and avoid the high spots to make surface smooth faster.
- Do not let the hose stay in one spot while making ice and it will melt into the ice quickly. Direct pressure without a nozzle can cut 1" into ice in 2 minutes.
- Check ice by walking on it before flooding again. Shell ice indicates a leak or water flowing to low points. Put a light coat in that area to seal the bottom under the shell ice. Check perimeter and pack down any wet areas. Refreeze leaks, add snow.
- Back flood – flood low areas and let water come around you before moving to next strip.

Maintenance

- Check the forecast.
- Clean ice before flooding. Snow and ice chips float and leave ridges of slush. Flooding end to end from middle out to sides can minimize these ridges.
- Flood in the evening after participants have left
- Do not allow skating while flooding
- Use a nozzle to reach far areas. Easier to use the hose without a nozzle for general flooding.
- Try back flooding – no nozzle, keep hose low and with slow back and forth motion to push water away until it comes even around you
- When it is very cold put down lots of water to avoid ridges between passes
- Spray the area around your rink with light spray of water after a snow to keep wind from blowing it onto the ice surface or forming drifts.

Volunteers

- Volunteers are your most important resource – handle well and with care.
- Try to recruit many volunteers. Many hands make light work.
- Schedule shifts and find out who is available for them, when not to call, when they can help and what they like to do. Some people do not like to shovel and other do not like to flood.
- Try to schedule volunteers to scrape the ice 30 minutes before flood time to make things easier for the volunteers flooding the ice.
- If you have hoses, be early. Five minutes may not seem like a long time, but it is if you're outside in the cold.
- If it is very cold, consider using a splitter valve and use two hoses to get the flooding down quicker.
- Set volunteer shifts for a reasonable time suitable to all
- Encourage volunteers to dress for the weather and bundle up.
- A large rink will burn out your volunteers. A 40' x 50' rink is a good start.

Extras

- Quick and easy construction works best if its sturdy
- Benches are great feature for people to change footwear and can be constructed from 2' x 10" lumber secured to the ground to prevent tipping.
- Clean ice with a scraper type shovel to remove chips and ice shavings.
- Flood from the farthest point back to your water source. Have an assistant pull the hose back as you flood.
- Be careful walking on wet ice
- Spray the edges to keep them sealed
- With a base of 8" to 12", once a week flooding of ½" is usually enough to maintain good ice.
- Ice evaporates, so monitor it regularly.
- Heavy use and reduce ice by ¼" to ½" per day.
- If ice is chipping off in layers, try flooding with thick or thicker layer of water and flood over the broken pieces.
- If holes develop, use a pail of water/slush to fill and smooth with a scraper. Cover with water.

