# Operating an Outdoor Rink







#### **EMAIL AND PHONE**



519-747-8772 TTY 1-866-786-3941

#### **EMERGENCY AFTER-HOURS**

Immediate threat to property or person (e.g. uncontrollable water flow from hydrants)

After 4 p.m. Monday to Friday, weekends and holidays



519-886-2310

#### **LOCATIONS AND SCHEDULES**



waterloo.ca/outdoor-rinks

#### **ACCESSIBLE FORMATS**

This material is available in alternative accessible format upon request. Please contact us a minimum of 3-5 business days before it is required.

### Responsibilities of the rink committee

#### **ESTABLISH RINK COMMITEE**

Prior to confirming a rink location for the season, a rink committee of a minimum of six adults must be established to oversee and direct volunteer operations of the rink.

#### **APPOINT A CONVENOR**

Each rink committee requires a convenor, who will be the City of Waterloo's contact for information distribution regarding the rink. The convenor will oversee the rink operation, ensuring that all tasks are accomplished. They will relay information from the city to the committee and volunteers. They will maintain an updated list of all volunteers who assist with the rink operation and maintenance.

#### **UPDATE COMMITTEE ANNUALLY**

Each rink season, the committee needs to be updated to include current volunteers, new volunteers, and any other committee changes. This includes all members completing volunteer forms or training.

#### **SCHEDULES**

New committees will work with staff to determine a schedule for the rink. Where feasible, time should be equally allotted between both ice activities of skating and hockey. Activity schedules will be posted on the City's website and at the rink site. If there are changes to your rink site, such as a location with a new rink light, your schedule should be updated to reflect this. All ongoing rink locations will maintain the same schedule unless reasons for changes arise.

#### **SAFE PLAY**

Recreational hockey is permitted however, for the safety of all participants and surrounding neighbours, we recommend that pucks (rubber or soft plastic balls) and sticks remain on the ice surface. Slap shots are not permitted.

#### **RULES AND REGULATIONS**

The committee should determine some basic guidelines for volunteers and rink participants, including a way to notify residents of rink closures. Rules should be monitored by the committee to ensure a safe and enjoyable experience for all. Consider asking your local neighbourhood association to share the rules on social media or posting a rink rules sign at the park.

#### INCIDENTS/ACCIDENTS

Report and record all incidents/accidents at the rink, including incidents with participants, volunteers, and property damage through an accident/injury report. Copies are provided. For support contact waterloorinks@waterloo.ca.

#### **RINK EQUIPMENT**

The committee should ensure rink equipment is stored in the storage box at all times. Any additions to the list of supplies provided by the City of Waterloo are the responsibility of the rink committee and must be purchased and stored year-end by committee members.

#### **WATER HYDRANT**

Hydrants should remain locked at all times when not in use by volunteers flooding the rink. All locks are issued through City of Waterloo parks services. Private locks are not permitted and will be removed.

## Outdoor rink layout & equipment

#### STANDARD LAYOUT

- Each site is allowed one 84' x 48' standard boarded rink (22.2" x 10" x 12' spruce boards)
- Requests for a second rink on the same site
  will be considered after all rink sites have been
  accommodated, if adequate conditions allow at
  the rink site and are suitable for park maintenance.

#### **RINK MODIFICATIONS**

- You may inquire about an alternate layout prior to installation by emailing <u>waterloorinks@waterloo.ca</u> to discuss possible approval
- The alternate layout must not damage or create concerns within the park or its surrounding property
- Low boards are always installed to encourage safe play – city staff will not install high boards and will remove high boards if they are otherwise installed
- If you wish to make approved modifications as a rink committee, please let staff know in your request.
   Any household tools used must be supplied by the rink committee. Tool use is at the volunteer's own risk. Use should only be consider for adults over the age of 18 who feel confident in their operating abilities. Tool operating manual guidelines should be followed at all times when in use. Tools used should always be in proper working order.
- Acceptable tools include simple residential-grade tools such as hand tools (hammers, screwdriver, handsaws), power tools such as drills, power screwdrivers, and hand sanders that are intended for home use. Commercial grade equipment such as nail guns or screw guns are not permitted.
   Power saws and circular saws are not permitted

#### **BOARDLESS RINKS**

- Some rinks have been successfully installed without boards
- Sites granted a second rink are encouraged to pursue this option
- Approval is required by contacting waterloorinks@waterloo.ca prior to installation

#### TARPS / RINK LINER

#### **ELIGIBILITY**

• Rink locations on school property, turf sport fields, or areas with high spring water levels are not eligible for tarps. All other rink locations can request use of a tarp at the start of the rink season. City staff will notify rink convenors each fall with tarp request deadlines. Funding requests for tarp support can be made at this time to <a href="mailto:waterloorinks@waterloo.ca">waterloorinks@waterloo.ca</a>.

#### **USE AND SAFETY**

- To assist with and avoid safety risks, tarps should be no more than one rink board (10 inches) in height. Water should not exceed this height at any time.
- Rink volunteers are responsible for prompt tarp removal and storage/disposal at the end of the season. Rink committees are encouraged to reuse tarps when possible.





## Supplies & services provided by the City

### SET UP AND DISMANTLE RINK BOARDS

Board set up occurs seasonally starting around late November at the discretion of city staff. Board dismantle starts when rink committees are finished for the season or when the flooding deadline has passed at the end of the rink season, typically in mid-March.

### LIGHTING & WATER SERVICE ASSISTANCE

Facilitate maintenance and repairs for rink lighting and water hydrants. Lighting is conducive to recreational and leisure skating programs and surrounding resident comfort.

### THE CITY WILL SUPPLY EACH SITE WITH:

- a. Rink boards
- b. Pins or sand bags
- c. Two (2) shovels
- d. An appropriate length of 5/8" hose
- e. One (I) storage box
- f. One (I) hydrant lock
- g. Two (2) keys for water hydrant (provided to the rink committee convenor to be shared with committee volunteers)

#### **RINK PROMOTION**

Printing of flyers or bulletins to promote the rink and special events upon request

#### LIABILITY INSURANCE

Liability insurance for all volunteers assisting with the operation of the rink. Volunteers must sign up at <u>waterloo.ca/volunteer</u> or through the appropriate paper forms prior to rink installation.

### REPLACE VANDALIZED OR STOLEN SUPPLIES

Vandalized or stolen supplies will be replaced depending on availability of supplies. The original items supplied, plus all replacements remain the property of the City of Waterloo.

## Outdoor rink guidelines

#### **PUBLIC ACCESS**

- There are about 30 outdoor rinks across Waterloo and they are accessible to anyone who wishes to participate during the rink's posted hours.
- Access may be denied only if the behavior of the individual(s) is in direct conflict with the City of Waterloo's respectful behavior policy and/or guidelines of rink use.
- Parks close at II p.m. as per the city's parks by-law.
   Use of outdoor rinks after II p.m. is not permitted.

#### **SCHEDULES**

 Where feasible, time should be equally allotted between both ice activities of skating and hockey.
 The staff liaison will contact the convenor prior to the first season to arrange an appropriate schedule.

#### **ELECTRICAL SERVICES**

- Access to the electrical service box is not permitted, and is not to be used for the storage of tools or other personal items
- Portable heaters are not permitted

#### **SNOW REMOVAL**

- Rink committee volunteers are responsible for clearing snow from the rink
- Motorized tractors, vehicles or all-terrain vehicles with a plow are not permitted as snow removal items as per the city's parks by-laws
- If a rink committee wishes to use additional snow removal items to those supplied, these must be provided by the rink committee, including any associated costs. Snow blower use is at the volunteer's own risk and should only be considered for adults over the age of 18 that feel confident in their operating abilities. Snow blower operating manual guidelines should be followed at all times when in use. Equipment should always be in proper working order.

#### **LIGHTING**

- Lights are operated by a timer and are programmed to turn on at 5 p.m. and turn off at 11 p.m., as per the designated park closing time set out in the city's park by-law.
- Some rink locations also have an on/off button to help further conserve energy so lights are only used when community members or volunteers are present.
- Requests to have the lighting times adjusted can be made by email to <u>waterloorinks@waterloo.caa</u>

#### **TIDINESS**

- Please keep the park and outdoor rink clean by picking up debris
- Identify and remove hazards quickly to reduce the chance of injury
- Store all rink equipment in the storage box

#### **INSPECTIONS**

- City staff conduct inspections to proactively service hydrants, identify deficiencies, hazards and damages, as well as ensuring site cleanliness and security
- Questions or concerns that arise from these inspections will be discussed with the outdoor rink convenor

#### **HOSES AND HYDRANTS**

- Drain the hose away from park pathways to avoid ice buildup and potential injury
- Disconnect the hose from the hydrant after each flood to avoid freezing the equipment



## Building an outdoor rink

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#### STEP I - PREPARATION BEFORE SNOWFALL

- If possible, level out the designated area this will make it easier to build up a more level, thick ice surface
  - » An uneven ground surface will result in gaping areas between the boards and the ground
  - » If these gaps/holes are not filled, water will run off and make flooding more difficult
  - » Once it's cold and the temperature is consistently freezing, these gaps/holes should be filled in
- Spread a couple of inches of sawdust against the inside edge of the boards
- Moisten and pack the sawdust gently
- The sawdust will hold the moisture until it freezes and will create an excellent bond with the boards. This bond will act as a dam to hold the water within the rink when it is time to flood.



Anytime you are adding water, bubbles may form creating shell ice. If this happens:

- I. Break the above-layer of ice
- 2. Remove excess ice
- 3. Pack the hole with snow and water
- 4. Level with a shovel





### STEP 2 – WHEN THE TEMPERATURE IS BELOW ZERO



### WITH SNOW 💥

- When there is about 2" of snow, pack the area with shovels or scrapers
- Make it as level as possible to make flooding easier and quicker
- During the coldest time period (late evening), apply an even, thin coat of water with a fine spray (known as pebbling)
- The first coat should only dampen the surface
- · When the surface is completely frozen, continue to sprinkle fine coats of water until a bond is created between the boards and the frozen water
- Add snow and water where areas look uneven or channels have formed
- When a solid crust has formed and the bonding with the boards is firm, it's time to flood
- Flood only when the temperature is below freezing
- Set a flooding pattern to apply water to the complete surface of the rink without overlapping
- When the first layer is frozen, continue flooding until the rink is level and roughness has disappeared

#### WITHOUT SNOW

- Since there is no snow to absorb the water, make sure the sawdust is packed in place of all existing holes between the boards and the ground
- Do your best to level out the area, if possible (stone dust surface)
- Apply water only to the area where the boards meet the ground
- Apply several coats or primary sprinkling until there is a solid base between the boards, the ground and the layers of sawdust
- During the coldest time period (late evening), apply an even, thin coat of water with a fine spray
- The first coat should only dampen the surface
- When the surface is completely frozen, continue to sprinkle fine coats of water until a bond is created between the boards and the frozen water
- When a solid crust has formed and the bonding with the boards is firm, it's time to flood
- Flood only when the temperature is below freezing
- Set a flooding pattern to apply water to the complete surface of the rink without overlapping
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## Operating the hydrant



Rink hydrants are designed and installed to be self-draining, allowing them to operate in colder temperatures without freezing.

- Always operate the hydrant with the handle in a full upright ON position
- Always perform a drainage palm-test after each use
  - » Place the bare palm of your hand lightly over the hydrant discharge
  - » You should feel some degree of suction
  - » Pull your hand away you should hear a pop
  - » The degree of suction and pop depends on the hydrant's effectiveness at self-draining – the better the suction, the better the drainage
  - » If there is no suction, wait a few minutes, turn the hydrant on again, firmly close it, and redo the palm test
  - » The effectiveness of drainage is reduced each time you operate the hydrant and close it within a short period of time, so avoid more than two consecutive attempts – the drainage reservoir needs time to drain before it can accept more water

- If the results are unchanged, the hydrant is at high risk of freezing – monitor it closely, and report your concerns as soon as possible
- Lock the hydrant securely through the handle linkage when not in use
- It's important to stop water trickling from the hydrant once closed to avoid unnecessary freezing
- Trickling water is hard on the hydrant and leads to icy conditions in the park
- The hydrant must be firmly in the OFF position when not in use
  - » A successful palm test indicates a fully closed hydrant
- Hydrants should always be run under the supervision of rink committee volunteers. Please do not leave running water unattended at any time.
- · Lock operation
  - » Avoid getting water into an open lock
  - » Reduce the chances of breaking a key in the lock by not forcing a frozen lock to unlock with the key alone
  - » Use lock de-icer when necessary

#### **HOSES AND WATER DELIVERY**

Using the hose and equipment supplied by the City of Waterloo keeps the hydrant functioning the way it should and maintains an effective water pressure.

Outdoor rink hydrants are not designed to accept a larger diameter hose. A larger hose will require an adapter, which can prevent the hydrant from draining properly and can freeze the hose and the hydrant.

 Use the rubber hose and connectors provided by city staff

- Do not use nozzles, hose end valves or quick connects – they can prevent the hydrant from draining properly and can freeze the hose and the hydrant
- If you must cut off any of the connectors, please do so with as little damage to the hose as possible
- Drain the hose and disconnect it from the hydrant after each flood
- City staff do not provide additional tools to help with flooding (nozzles, sprinklers, etc.)

#### **FROZEN HYDRANTS**

Hydrants freeze when they cannot drain effectively. The most frequent causes of frozen hydrants include:

### I. HOSE LEFT CONNECTED TO HYDRANT AFTER FLOODING

- The hydrant is designed to back-drain only the water left in the standpipe
- It is not designed and installed to accommodate the water being back-drained from the hose
- Once the drain reservoir is full, any remaining water in the hydrant standpipe will freeze
- Disconnect the hose from the hydrant after each flooding to avoid freezing

#### 2. HYDRANT IS USED INCORRECTLY

- Hydrants must be operated full open, in the ON position, and then fully closed
- To prevent leaking, the hydrant lever must be fully closed, in the OFF position
- Lock the hydrant through the handle linkage and conduct a palm test to ensure the hydrant is closed and not leaking

#### 3. HYDRANT IS DAMAGED

- There may be internal or external damage preventing the hydrant from sealing and draining properly
- Look for leaking when the hydrant is closed, and always do a palm test
- If the palm test fails, the hydrant is not draining properly and will most likely freeze

#### 4. HYDRANT IS OVER-USED

- The effectiveness of drainage is reduced each time you operate the hydrant and close it within a short period of time
- The reservoir has a limited capacity before it fills and drainage becomes ineffective
- Without adequate drainage time, the hydrant will freeze
- Avoid more than two consecutive attempts the drainage reservoir needs time to drain before it can accept more water

#### **HYDRANT REPAIRS**

If you suspect the hydrant is frozen, damaged or inoperable:

- » Do not attempt to dismantle or repair it
- » Do not use a torch or heat source to thaw the hydrant
- » Do not strike the hydrant with a hammer or other object at any time
- » Please report leaks, deficiencies or operational concerns as soon as possible to avoid extended rink closures

Hydrant repairs and thawing may be delayed due to city-wide snow clearing priorities. Contact <a href="mailto:waterloo.ca">waterloo.ca</a> for concerns. Please be patient as we manage priorities as best we can. Please note that city staff will not respond to requests for hydrant repairs or thawing, or other outdoor rink problems after hours, weekends or holidays unless the concern is deemed an immediate hazard to person or property.



A fire hydrant is not an approved alternative to outdoor rink hydrants for water delivery. Unauthorized use of any fire hydrant is not permitted as outlined in the Water Use Bylaw.

## Accident/incident reports

#### WHEN SHOULD YOU COMPLETE A REPORT?

- · Anytime there is bleeding, pain from an injury or any kind of injury to the head
- In any situation where there is property damage

If you're ever in doubt, complete the form. Incidents such as these can turn into a concern if the proper process is not followed.

#### **HOW DO YOU SUBMIT THE COMPLETED REPORT?**

• Give the completed form to the rink convenor. The rink convenor will submit the form to city program staff at <a href="mailto:waterloo.ca">waterloo.ca</a>.

#### **AFTER-HOURS ACCIDENT REPORTING**

If a serious incident takes place after hours – after 4 p.m., Monday to Friday, weekends and holidays – contact 519-886-2301 and email <u>waterloorinks@waterloo.ca</u>. Be sure to call 911 if the situation warrants emergency services.

Note: A serious incident is defined as significant property damage, serious bodily injury or death.

## Thank you!

It is the enthusiasm and dedication of volunteers like you that makes Waterloo such a warm and welcoming place to live.

The outdoor rink program gives our citizens, young and old, a means to enjoy the winter months while incorporating fitness into their daily lives. For generations our volunteers have kept nearly 30 rinks throughout the city maintained for the enjoyment of all.

We commend you for all your hard work in both past and future winters, and wish you all the best with the current skating season.

