



Note from DCAO – If Council chooses to move forward with a Freezeway option, the following points should be considered:


- Lions park is the quicker option due to the availability of water on site and a Freezeway should be able to be built by early January 2021 – pending weather conditions.
- Rotary park has the additional challenge of needing external water trucks and may take longer to build.

CITY COUNCIL INFORMATION REQUEST

NUMBER: IR 19-2020

REQUESTED BY:	Mayor Cathy Heron
ORIGIN OF REQUEST:	Email
DATE OF REQUEST:	November 16, 2020

AUTHOR:	Anthony Lake/Diane Enger
DEPARTMENT:	Public Works & Transit/Recreation and Parks
DATE RESPONSE DUE:	December 16, 2020

DIRECTOR APPROVAL (if not author):	Anthony Lake Dec 11/2020
DEPUTY CAO APPROVAL:	Kerry Hilts, December 14, 2020
DIRECTOR OF FINANCE APPROVAL (if necessary):	
CAO APPROVAL:	 December 16, 2020

QUESTION:

How can Administration make it happen to allow skating on the river?

RESPONSE:

The Sturgeon River has always been a key feature that the City of St. Albert has supported and developed around over the decades. Social skating was allowed along Sturgeon River many years ago and represents a significant nostalgia for the community.

There is a desire from the public to skate on the river and this could create a unique experience to the region for skating opportunities. Skating on the river would draw public to the downtown core and support local businesses.

Skating on the river could be reintroduced if stability of the ice surface was addressed from an environmental and safety perspective. Administration would recommend an outside consultant who is certified in ice structures on natural ice surfaces be contracted to complete this work. Currently, there are no in-house expertise in this

area. The approximate cost for this work would be \$11,000 and the work would take place in 2021, for implementation for the 2021/2022 winter service provision.

Considerations that the feasibility report would look into include:

- The flow of water into the waterbody.
- The flow of water under the ice.
- The constituents within the waterbody.
- The ice design parameters for safe structure.
- Technical examination of locations that could provide for a safe ice surface.
- Cost modelling for the operation of suggested amenities.

Additional infrastructure (benches, garbage cans), ice maintenance/clearing parameters, food truck service, etc. could be added to the site to further enhance the experience for the public.

Safety Considerations

With the changes to Occupational Health and Safety requirements, ice must be thicker and tested more frequently than historically to permit equipment (Zambonis) and staff on the surface. Due to changing weather patterns, this requirement has been more challenging than used to be on natural ice surfaces like Lacombe Lake, including years, like 2019/20 when the lake never opened as it did not reach the required thickness to open for public use.

This unique skating opportunity may create opportunities for outdoor skating where users do not congregate on a small area, but rather continue to move while recreationally skating. However, it may cause some congregations during a time when social gathering is not permitted.

Environmental Considerations

Stormwater Outfalls

In the past two decades, more stormwater outfalls have been linked to the Sturgeon River to ensure appropriate drainage from surrounding communities. As the urban environment developed stormwater outfalls were installed to release conveyed drainage as a point source into the Sturgeon River. This water tends to have salt and minerals that can make the ice softer and increase safety challenges in creating necessary ice thickness.

Nutrient levels, including phosphorus and nitrogen are high within the Sturgeon River but remain consistent annually and are not uncommon for small prairie river systems. This nutrient loading coupled with the constant flow of water that is continually added to the river through the stormwater outfall systems along the shoreline creates challenges and risks to the stability of the ice when considering the ice as a recreational amenity.

Freezeway Options for Consideration of Council

Some municipalities across the region and the province instead have accommodated the desire to skate near a river with “freezeway” type options. A “freezeway” is a linear recreational skating trail that is flooded on land, typically in a park or more natural environment.

This type of amenity presents an alternative option for the public to enjoy outdoor social ice skating free of the safety concerns presented for river skating.

Administration has provided three options for freezeways are included below including maps, considerations, costs and timing for each scenario.

The maps that have been included are conceptual and may vary slightly when implemented:

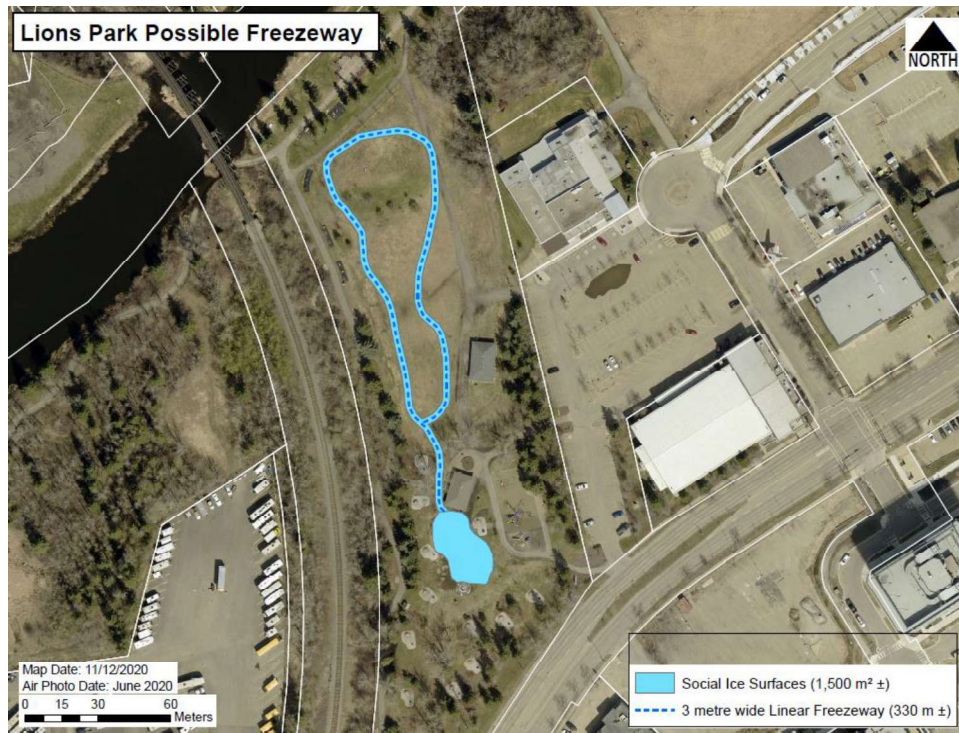
1. Small Freezeway Loop - Rotary Park

- Distance – 1041 m² of freezeway plus 1960 m² of social ice
- Additional Operating Costs - \$30,500 – \$33,600 for the season
- Timing – Could be flooded in January 2021 until weather permits (March 2021)
- Considerations for this option
 - High wind exposure is a challenge on the site
 - Site is easier to navigate for maintenance equipment
 - In spring, melting ice might cause for soggy park site in spring
 - Start area would be by the picnic tables
 - No water access on site so third party support required on site, which is also additional cost.
 - Due to the location of the existing landfill cap, we would need to pump melt water in the spring east into the bioswale.



2. Small Freezeway Loop - Lions Park

- Distance – 990 m² of freezeway plus 1924 m² of social ice
- Additional Operating Costs - \$6,200 - \$7,300 for the season for just the trail loop in the north part of the park
(Operating budget for the social ice surface is already included in the 2021 budget)
- Timing – Could be flooded in January 2021 until weather permits (March 2021)
- Considerations for this option
 - Builds off existing services at the Lions social ice surface
 - Site has existing water access and picnic shelter
 - In spring, melting ice might cause for soggy park site in spring
 - Will have to be site fit and may cause the area to have to be modified when building as hills on site could create obstacles.



3. Large Freezeway Loop with middle social ice - Rotary Park

- Distance – 1632 m² of freezeway plus 2644 m² of social ice
- Additional Operating Costs - \$37,300 - \$40,300 for the season
- Timing – Could be flooded for winter season 2021/2022
- Considerations for this option
- High wind exposure is a challenge on the site
 - Site is easier to navigate for maintenance equipment
 - In spring, melting ice might cause for soggy park site in spring
 - Start area would be by the shelter and need rubber matting to access the loop.
 - Playground trail access would need to be closed.
 - No water access on site so third-party support required on site, which is also additional cost.
 - Due to the location of the existing landfill cap, we would need to pump melt water in the spring east into the bioswale.



CONFIDENTIAL:

No