

REPORT / RECOMMENDATION



To: Park Board

Agenda Item #: VI.A.

From: John Keprios, Director
Parks & Recreation Department

Action

Discussion

Date: November 19, 2012

Information

Subject: Edina Nordic Ski Snowmaking Proposal

Action Requested:

Staff requests the Park Board recommend to the City Council that they approve the Edina Nordic Ski Team's proposal which includes the following:

- Permit the Edina Nordic Ski Team to create a cross country skiing loop trail on City-owned property that is north of Creek Valley Elementary School campus as shown on the attached map.
- Permit the Edina Nordic Ski Team to use the City of Edina's 185 CFJ diesel air compressor during the winter months at no charge to make snow.
- Donate approximately 2 million gallons of water for the purpose of making snow during the winter months at the High School Campus for the cross country ski trail.

Information / Background:

Attached is a copy of a proposal from the Edina Nordic Ski Team prepared by Assistant Coach Craig Jarvinen. The Edina Nordic Ski Team is proposing to make snow and move it onto a 1 km groomed cross country ski trail to be located on City-owned property just north of the Creek Valley Elementary School campus. They are requesting permission to build and groom the trail on City-owned property and use it for their Nordic Ski program. They are also proposing that the trail be made available to the general public when not being used by the Nordic Ski Team.

They also offer within their proposal to make snow to create a sliding hill for the general public next to Creek Valley Elementary School. That is the only part of their proposal that staff does not support. We question the cost/benefit plus the liability/risk exposure for both the City and School District. The City currently does not have a designated sliding hill in any park mainly due to liability reasons.

The cost to the City of Edina to donate 2 million gallons of water is approximately \$2,000. The cost to donate the use of the compressor is a bit difficult to estimate; however, we do know that it costs \$650 per month to rent one from a private rental company. The City-owned 185 CFJ air compressor machine has a 30 gallon diesel fuel tank that lasts approximately 10 hours on a full tank. To hire a contractor to refill the tank costs \$6.00 per gallon. For our staff to refill the compressor would involve over-time plus fuel expenses. The oil on the compressor needs to be changed every 100 hours of use.

Staff supports their request for these donations. This should be a significant help to the Edina Nordic Ski Team and will result in a wonderful cross country ski trail for the general public to enjoy during the winter months. With our unpredictable changing weather climate, this will be a tremendous asset to the Nordic Ski Team and the general public.

When staff first received this proposal, we asked if they would consider doing this at Braemar Golf Course instead and moving their program to a groomed loop at the Golf Course. That suggestion was rejected due to the cost of bussing and they prefer to have the trail immediately next to the High School campus to take advantage of what little day light is left at the end of the school day.

Edina Nordic Ski Team Coach Andy Turnbull will present their proposal at the Park Board meeting.

Staff recommends that the Park Board recommend that the City Council approve their proposal with the exception of the snow-making for the sliding hill.

ATTACHMENTS:

Proposal from the Edina Nordic Ski Team

MAKING SNOW FOR THE EDINA NORDIC SKI TEAM

And for the Edina Community

November 2012

Prepared by Craig Jarvinen,

Edina Nordic Ski Team Assistant Coach

jarvinen@aol.com

The popularity of cross country skiing continues to grow dramatically. However, the quality of the cross country ski season has always been tied to the quality of snow. Climate change seems to be making this more extreme, but there is a solution that several high schools in Minnesota have already used to address the problem – make your own snow.

Snow is a combination of two variables, temperature and precipitation. Precipitation is not all that predictable, but cold weather is much more predictable. Making snow can be as simple as turning on the water when it's cold enough. Snow making would be somewhat costly if there were only 7 athletes on the team, but Edina has a large team with 140 athletes.

There are four locations in the Twin City area that make snow for cross country skiing. The closest is skiing on the downhill and snow board runs at Hyland Hills in Bloomington, but this is only open to cross country skiers from 7am to 9am. Middle school athletes can't make it. High school athletes can and do make use of this from 7am to 8am, but transportation is always an issue for such a small window of opportunity. Lake Elmo and Maple Grove are simply too far away for practice, but we do hold races in Maple Grove. Wirth Park is the only other option, but it is incredibly popular and most often too busy to accommodate Edina athletes on the 2km loop. Wirth Park must give priority to the high schools that use it as their home course. Edina's home course is Hyland Park reserve, but there is no snow making on the cross country trails. Wirth Park is the home course for Minneapolis South and Southwest. The 2012 Minnesota State Nordic Ski Race hosted 11 Minneapolis skiers and 4 Edina skiers.

It is becoming clear to ski teams, that snow making is an essential element in the beginning of every ski season.

PROPOSAL

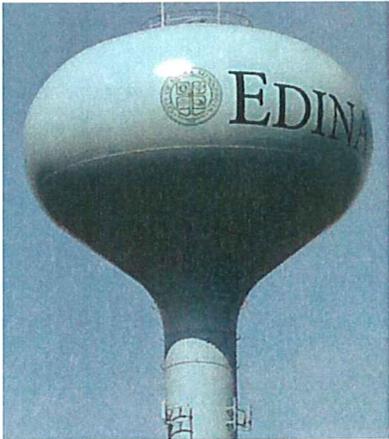
The team would like to make enough snow at the base of Gleason Water Tower to create a 1 km loop almost entirely within Creek Valley Elementary School Park and partially on Creek Valley Elementary School property. An alternative location would be entirely on high school property centered on the running track.

We would like to use the City of Edina's 185 CFM diesel air compressor. We need an air compressor for several days (after the ground freezes) to drive the snow maker.

We would also like the City of Edina to donate city water for snow making, and in exchange, we will cover the sledding hill at Creek Valley Elementary with snow for sledding and make the cross country skiing loop available to the Edina community when the team is not practicing.

Required elements:

Water – up to 1 million gallons:



Snowmaker – we are considering a small snowmaker called the Cornice III from CHS Snowmaker:



Air compressor. We would like to use one like this that is owned by the City of Edina:



High pressure water pump. We are considering this model. It is a 9hp Davey portable fire pump:



CONCERNS

We are concerned about the noise created when making snow. The snowmaker, the air compressor and the pump all produce noise. We are aware of Edina's noise rules and will make sure that all rules are followed. We intend to address noise issues by making snow as far away from homes as possible, in areas covered with trees, and on the side of a hill that faces highway 62. Snow making is usually best done at night because the temperatures are usually colder and snow making is far more efficient. We could also make snow during the day when weather permits. If we do make snow at night, we will use sound insulation as needed. Sometimes snow can only be made at night. The temperature needs to be freezing, but humidity is an even more important factor. Dry conditions are ideal for snow making. Since Minnesota is usually humid, temperatures need to be well below freezing to make snow.

If there is little natural snow, it is quite possible that our snow making loop could become very popular. This is a good problem, but it needs to be on radar.

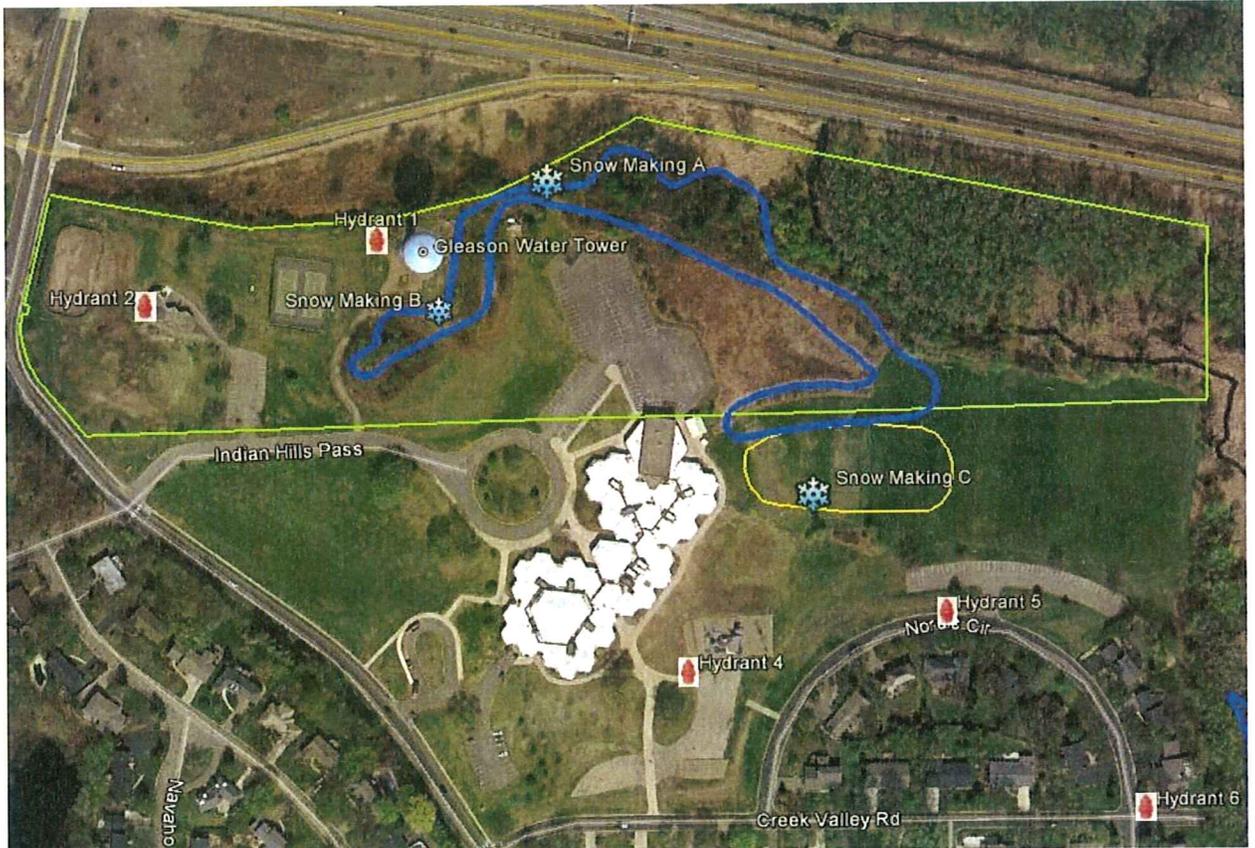
COMMUNITY BENEFITS

If Edina supplies the water, we could also make enough snow to cover the sledding hill at Creek Valley Elementary School.

The trails are available for anyone to use, not just high school athletes. The team uses the trails from 3:30 to 5:30 Monday through Friday. The trails are open to anyone for skiing. If there is little natural snow, the trails could become very popular. Walkers and snowshoers are not allowed on the trail.

SNOW MAKING LOCATION

The proposed snow making loop (and most desirable spot) is around Gleason Water tower -- in blue. The sledding hill is outlined in yellow. Snow flake icons represent snow making locations. The primary location A is just to the east of the water tower. The green outline is the border of Creek Valley Elementary School Park:



Location A is the best spot for making snow at Creek Valley Park. The nearest house is over 1000 feet from the snow maker at location A. There is a significant buffer between the house and location A - a hill covered with trees. No house can be seen from location A.

Location B is an alternate snow making location, but less desirable than location A because it is not in the center of the trail loop. The nearest house is 700 feet from the snow maker at location B. There is a buffer between the houses and location B - a stand of trees.

Location C is for making snow on the sledding hill. The nearest house is 350 feet away and there is only a small buffer – a few trees. This is the only location with a direct line of sight from houses. However, only the snow maker and pump would be at location C. The air compressor would be located behind the Creek Valley Elementary School building with no lines of sight to any house.

This is an alternate snow making loop at the high school. All proposed trails and proposed locations on this map are on school property. The primary snow making location E for this loop is at the 50 yard line on the track:



Location E is an alternate snow making location. The best spot for making snow at the high school is Location E. The nearest house is 560 feet from the snow maker at location E. There is a significant buffer between the house and location E - a small hill covered with a stand of trees. The nearest house without a buffer is 800 feet from location E.

Location D is an alternate snow making location, but less desirable than location E because our grooming equipment is stored at location E. The nearest house is 375 feet from the snow maker at location D. There is a significant buffer between the houses and location D - a hill covered with a stand of trees.

REQUEST FROM THE CITY OF EDINA

Water – We would like to the City of Edina to donate up to 1 million gallons of water for snow making. This amount of water is estimated to be worth about \$2,000.

Air Compressor – We would like to use the City of Edina’s 185cfm diesel air compressor.

Permission and any required permits. We would like approval to do the following three things:

Operate snow making equipment up to 24 hours a day for up to several days at a time at least once a year. If we lose snow or need more, we would like to have the option to do this 2 or 3 more times. We would like to make snow as soon as the ground is frozen. This usually happens in the end of November or early December.

Operate a snow cat on City and school property to move the snow. This is likely to happen only once per year and only for one or two days.

PROPOSAL STATUS

Edina High School - Approval from Principal Dr. Bruce Locklear

Creek Valley Elementary School - Tentative approval from Principal Dr. Kari Dahlquist

City of Edina Parks & Recreation

In communication with Ann Kattreh, Assistant Parks & Recreation Director regarding snow making in Creek Valley Park

City of Edina Health

In communication with Sherry Engelman, Community Health Administrator/ City Sanitarian regarding noise - proposed equipment locations and proximity to homes has been determined; equipment noise levels need to be finalized;

City of Edina Public Works

In communication with Dave Goergen, Public Works Coordinator regarding water use – okay to move forward with proposal to board/council for approvals; winter hydrant use is okay

In communication about the availability of a city air compressor – availability is good;