



Subject: *Mount Uniacke - Splash Pad Options*
To: Parks, Recreation and Culture Committee
Date Prepared: May 28, 2025
Related Motions: C25(188)
Prepared by: Evan MacDougall, Manager, Parks and Buildings
Approved by: Alana Tapper, Director, Parks, Recreation and Culture

Summary

Council motion C25(188) requested staff to explore the establishment of a splash pad in Mount Uniacke.

Financial Impact Statement

There are no financial impacts coming from this report, any future financial impacts will be brought back for Council consideration.

Recommendation

Staff are seeking Council direction.

Recommended Motion

Move that the Parks, Recreation and Culture Committee recommend to Council that Council...

Background

At the May 21, 2025 Regular Meeting of Council, staff were requested to bring back a report exploring the establishment of a splash pad in Mount Uniacke.

The intent was to bring back information on potential locations, types of systems available, water quantity/quality, operating models and funding.

Discussion

EXISTING SPLASH PADS

There are two splashpads operating in the municipality; one is municipally owned/operated adjacent to the East Hants Aquatic Center (EHAC) and the second is owned/operated by the volunteer-run Hants North Recreational and Development Association at Findley Park on the North Noel Road.

TYPES OF SYSTEMS

Flow Through System

Both the EHAC and Findley Park splash pads are “flow through systems”, meaning the water is not recirculated or re-used. Flow through systems allow for single use of the water which then goes into a wastewater system. This appears to be the preferred system within the industry as it does not require retreatment from any potential bacteria, waste or other contaminants in order to prevent the spread of communicable disease or infection.

Recirculation System

A recirculation system uses less water than a flow through system, but it requires a holding tank to catch the wastewater for retreatment as well as requires additional water to be added that has been lost due to evaporation, run-off and absorption. For example, a splash pad of similar size to the asset in Findley Park would need approximately 1100 gallons of water resupplied each day if it were on a recirculation system (1-2 gallons top up per sq foot per day of usage). If a recirculation system was supplied by a 1 gallon per minute (gpm) well, it would have to draw almost continually throughout a 24 hours period on that well just to recharge the recirculation holding tank required for a splash pad the size of the asset at Findley Park.

Recirculation systems require continuous monitoring and testing similar to pool operations. It would be recommended to test multiple times a day, at the EHAC water is tested 7 times a day and a recirculated splash pad would have to be tested on a similar schedule. If there is a fouling and contaminated water is collected into the holding tank, the entire system would need to be flushed at least once. This would be a slow process if not on municipal water, either by relying on the well to refill or by trucking fresh water in.

WATER QUANTITY & QUALITY

Mount Uniacke Specific Information

In the Uniacke Groundwater Study, it was determined there was sufficient water for residential use. For residential use, the NS Department of Environment and Climate Change suggests a requirement of 357 gallons per day. From ABC Recreation (installers of splash pad infrastructure), splash pads require between 5000 and 26,000 gallons a day depending on the size of the infrastructure and also dependent on if the water is getting recirculated.

Many of the wells recorded in Mt Uniacke have only 1gpm of flow. Of the wells recorded since 1990, 137 wells provide 1.75 gpm or less, 76 wells provide 2-4 gpm, 29 wells provide 5-8 gpm and 14 provide over 10 gpm. From those recorded, only 4 wells would be able to provide enough water to operate a splash pad on its own, with 3 of these in lake areas where splash pad run off could create issues for the lake. Multiple wells could be used to feed a splash pad; there would be an additional cost to drill multiple wells and additional components required for extra pumps and lines.

Also noted in the Uniacke Groundwater Study was a high risk of “well interference” from wells created by new development. From this, there is the possibility that multiple wells in a small area for a splash pad could cause “well interference” issues for its adjacent neighbors.

Another consideration with water quality is elevated arsenic and manganese in Mount Uniacke well water. This would require treatment before it being used in a flow through system for a splash pad. As an alternative to well water, other sources that can be considered include lake water and trucking in water. Lake water could be difficult to treat due to additional organics present and would require treatment similar to a recirculated

system with frequent testing to confirm the water is suitable for bathing. Trucking in water would be fairly costly.

Hants North Specific Information

Hants North has 40 gpm water flow and is in an area with very few other competing wells. Due to the size of the land parcel at Findley Park, there is minimal competition to other residential wells in the area. The splashpad run-off goes into the surrounding ground, ditch and pond - likely helps recharge the well. Despite having a flow of 40 gpm, the Hants North splash pad is designed to operate a few water features at a time. This particular splashpad was designed based on the specific waterflow. In discussions during the Hants North splashpad construction, contractors stated that a minimum 20-30 gpm were recommended for a smaller flow through splash pad.

In discussions during the Hants North splash pad construction, the contractors stated that 20-30 gpm were recommended for a smaller splash pad without the use of holding tanks or a recirculation system. Some of their low flow ground sprays require as little as 2-5 gpm. There is the potential to have multiple wells for one splash pad, but in most areas of Mount Uniacke, it would require 10 or more wells to supply a splash pad. That number of wells in a small area may make it difficult to prevent the flow through water from recharging the wells providing the water.

OPERATING MODELS (staffing/facility)

There are two operating models to consider for operating an additional splash pad within the municipality - by municipal staff or by a volunteer organization in the community.

The splash pad at the EHAC is operated by municipal staff that are trained as pool operators and this system uses municipally treated water.

The second operating model, similar to the one at Findley Park, is to operate a splash pad through a volunteer group. The Hants North Development Association hires seasonal staff to work on the grounds during the summer.

In Mount Uniacke, there are currently no municipal facilities that have municipal staff onsite to conduct testing multiple times per day. There are also limited community groups in Mount Uniacke, and none that currently hire seasonal staff as part of their operations.

Future options can include hiring staff for daily surface cleaning, testing/treating the water or subcontracting to a local pool company. Both would have significant budget implications as current staffing could not accommodate additional testing and the financial implications of supporting a volunteer group would depend on the group's capacity and organization make up.

POTENTIAL LOCATIONS

- Mount Uniacke library location is a central in the community and has the Uniacke District School directly adjacent, however the well flow at the library is only 1 gpm.
- Cottage Country park locations are not close to the center of the community and are less ideal location at this time based on the demographics of the area.
- Lakelands Parcel is very close to Lily Lake and is also not centrally located within the community. The park isn't currently developed and doesn't have open sight lines, but could be a potential location in the future as the park is developed out.
- Rockwell Drive is somewhat central to the community and would have better water flows than in other areas, but the property is in the Halifax water shed and there is no road at this time. This could be a potential location in the future as the residential development creates additional roads and density, but permissions and potential impacts within the Halifax Water shed issue will have to be investigated further.

INSTALLATION

Estimated cost for a flow through splash pad with a similar size to Findley Park is estimated to be \$175,000 for only the splash pad components with additional funds required for land preparation, landscaping, parking and washroom facilities.

The estimated cost for a recirculation system and splashpad similar to Findley Park is \$250,000 - \$300,000 for the splash pad components only, with additional funds required to complete the project as noted in the above paragraph.

SUMMARY

From internal staff review:

- The municipality does not currently own a property that has sufficient well water flow, even with multiple wells, to operate a flow through splash pad system.
- If a suitable property was found with sufficient well water flow, a splash pad could potentially create issues for other wells in the area based on the amount of water that would be pulled from the water table at the driest times of the year.
- Wastewater run-off could create issues if discharged near a lake.
- A recirculation system would most likely be the best option with the current municipal property inventory, but a flow through system may be an option depending on future open space parcels.
- There would be a significant cost with operating a recirculation splash pad, either with additional staff or a hired contractor operating the splash pad as staff are unaware of a local non-profit organization in Mount Uniacke that would have the capacity to operate a splash pad in the Mount Uniacke area.

STRATEGIC ALIGNMENT

The 2021-2024 East Hants Strategic Plan speaks of sustainable infrastructure and the goal is to provide infrastructures that meets the needs of the communities throughout East Hants.

FINANCIAL CONSIDERATIONS

There are no financial impacts coming from this report, any future financial impacts will be brought back for Council consideration.

Mount Uniacke specific reserves currently have the following funds as of March 31, 2025:

Capital Reserves	Amount (\$)
Excess CCBF (Mount Uniacke 12.5%) - Not Firehall Applicable	433,412.34
Excess CCBF (Mount Uniacke 12.5%)	797,679.95
Open Space Reserves - Mount Uniacke	3,779.14
Uniacke District Recreation Civic Centre	38,402.98
Operating Reserves	
Growth Management Grant - Mount Uniacke	212,375.00
Uniacke District Recreation Fund	147,642.20
Uniacke - Recreation	1,019,009.52
Lights Other-Mount Uniacke Safety - Contingency	108,761.73
Lights Other-Mount Uniacke Subdivision Lights - Contingency	8,925.96
Obligatory Reserves	
Open Space - Mount Uniacke	202,873.67