TOWNSHIP OF EDWARDSBURGH CARDINAL
ACTION ITEM

Committee: Administration & Operations

Date: April 13, 2026

Department: Parks / Recreation & Facilities

Topic: Splash Pad Approval

Purpose: Council direction is required to advance the project. The following steps are proposed:

1. **System Selection**
   Determine the preferred splash pad system type (flow-through or recirculating) based on operational priorities, environmental considerations, regulatory requirements, and long-term sustainability.
2. **Project Budget and Procurement**
   Establish a project budget aligned with the selected system and authorize staff to proceed with issuing a Request for Proposals (RFP) for detailed design and construction.

Background: The Municipality is considering the development of a splash pad in Spencerville. As the community is serviced by a groundwater (well-based) system, water supply and wastewater capacity are key factors in determining the most appropriate design approach. Two primary system options are available: a traditional flow-through system utilizing the existing well, and a recirculating system designed to minimize water consumption.

Analysis

Option 1: Flow-Through (Well-Based) System

A flow-through splash pad operates using a continuous supply of fresh water drawn from the municipal well. Typical demand ranges from approximately 60 to 100 gallons per minute, which can result in daily usage exceeding 25,000–35,000 gallons depending on operating hours.

While this option may present lower initial capital costs, it introduces several considerations:

- A hydrogeological assessment may be required to confirm sufficient aquifer capacity.
- Well performance may vary seasonally, with reduced reliability during peak summer months.
- During drought conditions, non-essential water uses such as splash pads may be restricted.

- Operation during low water conditions could potentially impact on neighboring private wells.

Input received from the South Nation Conservation Authority indicates that during the 2025 drought, many wells experienced reduced capacity, and municipalities were encouraged to conserve water, including limiting recreational water uses.

Wastewater and Discharge Considerations:

In addition to water supply, the discharge of water from a flow-through splash pad presents significant challenges.

Based on information provided by the Environmental Services Department, the estimated splash pad flow of approximately 53,400 gallons per day (~212 m^3/day) would represent a substantial portion of the Spencerville lagoon system capacity. The lagoon system has an annual storage capacity of approximately 116,000 m^3, averaging 317 m^3/day, with only a single discharge per year.

At full operation, the splash pad would:

- Represent approximately two-thirds of the total daily system capacity
- Even at reduced operation (~50%), it still accounts for approximately one-third of total capacity

From a financial perspective:

- The 2026 Spencerville wastewater budget is approximately $160,000
- The splash pad could contribute an estimated $52,800 annually (based on ~1/3 of total system loading)

Beyond operating costs, there are significant capacity limitations:

- The lagoon system does not have sufficient available capacity to accommodate this additional volume
- Previous studies (Phase 1 Environmental Assessment) have explored increasing capacity through additional discharge infrastructure; however, associated capital costs were determined to be prohibitively high.

Alternative discharge options are also limited:

- Sanitary sewer discharge is not considered viable due to capacity constraints and cost
- Storm sewer discharge would likely require:
    - Dichlorination of water
    - Use of County-owned infrastructure
    - Approval from external agencies, which may not support additional third-party flows

As such, direct discharge options present significant operational, financial, and regulatory challenges.

Option 2: Recirculating System

A recirculating splash pad system collects, filters, disinfects, and reuses water, requiring only a limited amount of make-up water to offset evaporation and minor losses.

Key considerations for this option include:

- Significantly reduced water demand compared to a flow-through system
- Minimal wastewater discharge requirements
- Improved reliability during periods of drought or water conservation measures
- Reduced impact on the municipal well system and surrounding groundwater users
- Higher initial capital cost due to additional infrastructure (filtration, storage, and treatment systems).

This approach aligns with best practices for water conservation and may allow for more consistent operation throughout the summer season.

Regulatory Considerations. The development and operation of a splash pad in Ontario is subject to multiple regulatory requirements. Under Ontario Regulation 565/90 (Public Pools), splash pads are classified as Class B public pools and must meet strict public health standards. For recirculating systems, this includes requirements for filtration, continuous disinfection, water quality monitoring, and daily record keeping under the oversight of the local Health Unit. For flow-through systems, the water must meet potable (drinking water) standards, ensuring it is safe for public contact.

Where a splash pad is supplied by a municipal well, Ontario Regulation 903 (Wells) and associated Ministry of the Environment, Conservation and Parks (MECP) requirements also apply. Any water taking exceeding 50,000 litres per day (approximately 13,200 gallons per day) requires a Permit to Take Water (PTTW) and supporting assessment. Based on typical operating flows, a flow-through splash pad is estimated to use approximately 80,000 to 100,000 gallons per day (approximately 303,000 to 378,000 litres per day), which is 6 to 7.5 times greater than the provincial threshold. As such, this type of system would likely require permitting and detailed hydrogeological review. Obtaining a Permit to Take Water would also involve additional costs and timelines. Hydrogeological studies require to support an application typically range from $20,000 to $60,000 or more, with total costs (including application fees and consulting support) commonly in the range of $25,000 to $75,000+. The process may take 6 to 12 months or longer, and approval is not guaranteed, particularly in areas experiencing groundwater constraints or drought conditions.
Additionally, significant groundwater withdrawals have the potential to impact surrounding wells, particularly during periods of drought. These regulatory frameworks, combined with guidance from the South Nation Conservation Authority and the Ontario Low Water Response Program, may result in restrictions on non-essential water uses during drought conditions.

Conclusion

Both system options present viable paths forward; however, they differ significantly in terms of water demand, wastewater impacts, operational reliability, and long-term

sustainability within a well-based servicing context. A flow-through system may offer lower upfront costs but carries increased risk related to water availability, regulatory requirements, permitting costs, wastewater capacity limitations, and potential operational restrictions during drought conditions. A recirculating system requires greater initial investment but reduces water consumption, minimizes impacts on the aquifer and wastewater system, and enhances the ability to operate consistently during the summer months.

Policy Implications: The proposed project will be subject to and carried out in accordance with the Township of Edwardsburgh Cardinal's Procurement Policy. Given the anticipated project value, the work will require a formal competitive procurement process (Request for Proposal or Tender), ensuring fairness, transparency, and best value for the municipality.
In alignment with the Procurement Policy:

- The project will be publicly advertised to encourage open competition and attract qualified proponents.
- Evaluation criteria will be clearly defined and consistently applied to all submissions.
- Contract award will be based on a combination of price, technical merit, and overall value, in accordance with municipal procurement thresholds.
- All procurement activities will be conducted in a manner that is fair, transparent, and defensible, maintaining public trust and accountability.

Strategic Plan Implications: The proposed splash pad project aligns with the Township of Edwardsburgh Cardinal's Strategic Plan by supporting key priorities related to community development, recreation, and quality of life.
Specifically, the project advances the Township's strategic objectives by:

- Enhancing Community Amenities: The development of a splash pad provides accessible, family-friendly recreational infrastructure that supports healthy, active lifestyles for residents of all ages.
- Supporting Growth and Vibrancy: Investment in recreational facilities contributes to making the Township a more attractive place to live, work, and visit, supporting broader goals related to population growth and community vitality.
- Promoting Inclusive and Accessible Spaces: The splash pad is designed to be an inclusive recreational feature, removing barriers to participation and providing free or low-cost access to outdoor play.
- Responsible Infrastructure Investment: Through careful planning, Class 'B' costing, and adherence to procurement policies, the project reflects the Township's commitment to responsible, sustainable, and well-managed capital investments.
- Environmental Stewardship (if using recirculating system): The consideration of a recirculating water system supports responsible water use and aligns with environmental sustainability goals identified in the Strategic Plan.

Overall, the project represents a meaningful investment in community well-being and aligns with Council's long-term vision of maintaining a complete, healthy, and vibrant municipality.

Financial Considerations: The Class 'B' estimate provides a high level of confidence in the anticipated project cost; however, final project pricing will be determined through a competitive procurement process. To proceed, Council direction is required for staff to prepare and issue a Request for Proposal (RFP) or Tender for the project. As part of this direction, Council should establish a maximum upset limit or budget threshold that it is prepared to commit to for the project.

This approach will:

- Ensure that the project remains within a financially sustainable range established by Council.
- Provide clarity to proponents regarding the Township's budget expectations; and
- Allow staff to evaluate submissions based on both cost and overall value within the approved financial parameters.

Should submitted bids exceed the approved budget threshold, staff will report back to Council with options, which may include scope adjustments, re-tendering, or reconsideration of project timing

Recommendation: That Committee recommends that Municipal Council proceed with the development of a Splash Pad at 4 Ryan Street in Spencerville utilizing a recirculating water system as recommended by staff; And further that Council direct staff to prepare and issue a Request for Proposal (RFP) for the design and construction of the splash pad; And that Council establish an upset limit of **$**_____ (inclusive of applicable taxes and contingency) for the project; And further that staff report back to Council with the results of the RFP process and any recommendations for award.

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Facilities Manager CAO