



The Corporation of the City of Courtenay

Staff Report

To: Council

File No.: 5335-20

From: Director of Engineering Services

Date: January 24, 2024

Subject: Courtenay and District Memorial Outdoor Pool - Condition Assessments and Options Analysis

PURPOSE:

The purpose of this report is to provide council with an update on the Courtenay and District Memorial Outdoor Pool condition assessments and request direction for staff to commence with all operationally necessary repairs to the pool for the 2024 season as well as begin procurement for an Options Analysis for the future of the pool in its current location.

BACKGROUND:

The Courtenay and District Memorial Outdoor Pool is one of the oldest pools of its kind in British Columbia and has played a significant role in the community since July 1st, 1949. The original 25 meter pool is made of cast-in-place walls and slabs. The pool has had several upgrades throughout the years including the addition of the wading pool in 1959 and change rooms and multipurpose area in 1979.

Owned, maintained, and operated by the City, the Courtenay and District Memorial Outdoor Pool is turning 75 years old this year. It is nearing the end of its useful life and requires capital investment in the form of repair, renovation, or redevelopment in order to continue operating and serving the Comox Valley into the future.

In partnership with the Comox Valley Regional District (CVRD) an Aquatic Needs Strategy was completed in 2023 to provide a 25-year vision and ten (10) year implementation plan for the future of indoor and outdoor aquatics in the Comox Valley. The Aquatic Needs Strategy identified the outdoor pool as an important community asset that should be maintained both from an aquatic services and community amenity perspective.

Based on the findings and recommendations of the Aquatic Strategy, the City undertook a public engagement to assess the public's response to the facility options put forward for the future of the outdoor pool by the Aquatic Needs Strategy. As per the Courtenay and District Memorial Outdoor Pool *What We Heard Report*, results demonstrated that the preferred option is to maintain the Outdoor Pool at its current location and maintain the current service level while addressing identified issues with the facility, with the next most supported option being a significant renewal of the outdoor pool at its current location. Only 4% of respondents indicated their preferred option was the permanent closure of the outdoor pool.

Both the Aquatic Needs Strategy and the Outdoor Pool public engagement have clearly and consistently demonstrated that the Courtenay and District Memorial Outdoor Pool is a valued community asset, even by those residents who do not use its programs and services. It is clear from the public's response that

there is strong support for outdoor aquatic services in Courtenay and the Comox Valley, and strong support for the continued provision of an outdoor pool, with the preference being to maintain it at its current location either through repair, renovation, or construction of a new pool.

DISCUSSION:

Based on the age and condition of the facility, initial facility condition assessments were completed for the Courtenay and District Memorial Outdoor Pool beginning in 2014 to identify immediate, short, medium, and long term capital investments required for the continued operation of the outdoor pool.

Since 2017, the following capital work has been completed:

- New boiler and boiler room (2017)
- Change Room Interior walls and flooring (2018)
- Chemical storage and safety improvements
- Safety items (main drain)
- Annual maintenance (basic maintenance, deck crack repairs, and painting)
- Recirculation Pump Replacement (2023)

While initial immediate (regulatory) and some short term capital upgrades were completed, all medium and long term recommendations were delayed until such time as the Aquatic Needs Strategy and Outdoor Pool public engagement were complete. The rationale being that the future of the outdoor pool, including future capital investments would be guided by a sound Aquatic Needs Strategy. Therefore, through effective repairs and mitigation measures, the outdoor pool has remained in operation since 2018, except for the 2020 COVID-19 related closure.

Leading up to the 2023 pool season however, it was identified through further facility condition assessments, that additional repairs and improvements were required as a result of the ageing facility and systems. In addition, a water loss analysis was completed to identify the source(s) of water loss which staff had identified over and above typical water loss due to usage and evaporation; this work resulted in a delay in the opening of the pool for the 2023 operating season. Environmental and Public Health regulators were advised of the leakage, with a commitment to report back on outcomes and findings. As a result, the regulator has requested that the City develop a remediation plan to address the leaks and report back within one to two years.

The 2023 operating season saw several other unplanned or temporary closures of the pool due to equipment breakdowns or operational failures, including the requirement to replace a failed recirculation pump. Due to the age of the pool and its infrastructure, unplanned repairs and subsequent service disruptions will continue to emerge in the coming years until such time as an investment is made into the renewal of ageing assets and associated appurtenances or the pool is upgraded or redeveloped.

Condition Assessment

Throughout the second half of 2023, a series of condition assessments was completed to determine the current condition of the pool and its systems (mechanical, structural, and electrical), and in order to prioritize any immediate operational repairs and any significant repairs that may be required in the near future.

As a result of the age of the outdoor pool, it is also imperative that work be completed to assess the pool's systems and update required documentation as set out by the Province in its pool design guidelines. It's expected that this investigation will form the basis of any urgent work in 2024.

While the condition assessments outline a number of immediate, short, medium, and long term recommended facility repairs, many of the identified items are typical of a facility of this age, especially a facility that is subject to the outdoor elements year-round, including freeze/thaw cycles, and a high groundwater table.

Mechanical – Main Pool

The mechanical condition assessment was undertaken by two separate firms throughout 2023. Belzona Molecular provided leak investigation services as well as testing of the pool's recirculation systems. AME Group reviewed and assessed the pools mechanical systems such as water supply piping, pumps, and drainage piping among other systems.

Through leak detection assessments and inspections, it was identified that the main pool is losing a significant volume in any one given day. Over the operating season the pool is experiencing an approximate loss or unexplained loss of twenty-two (22%) percent per day. Through a series of leak detection tests, water loss was observed at pool basin cracks and expansion joints, as well as within the pressurized recirculation piping. A leak that was discovered at the main drain valve was repaired through the full replacement of the valve assembly.

AME completed a health code review in relation to the pool's mechanical system. The assessment suggested that the City explore a list of upgrades as a priority to enhance the safety features of the pool. These include reviewing the pool and wading pools' single main drains, anti-entrapment systems, and chemical storage practices.

Mechanical - Wading Pool

During a water usage audit and site review, it was observed that the wading pool was losing a significant amount of water each day through a concrete drain sump that has been compromised and requires repair. Additional work is required to confirm the wading pool is meeting its turnover rates as required by the BC Pool Design Guidelines.

Structural

Thurber Engineering completed a review of the outdoor pool's concrete structure and coating. Thurber's findings include delamination of concrete, degradation of the joint filler material, significant pool paint coating build up, and blistering of the coating and interlaminar debondment of the coating system. Addressing these items would also address some of the findings of the water loss assessment.

Electrical

The electrical equipment within the facilities are operational and have been maintained throughout the operating life. It is not known but assumed that many of the electrical systems currently in place do not meet current electrical code which is typical of a building of this age. Electrical consultants who carried out the condition assessment indicated that the system would likely not be required to be brought up to current code as long as it is being maintained.

Options

The Comox Valley Aquatic Needs Strategy and Courtenay and Outdoor Memorial Pool What We Heard Report outlined five (5) options for the future of the outdoor pool facility, summarized in Table 1: Outdoor Pool Facility Options. Further detail is available in the Aquatic Needs Strategy and the outdoor pool What We Heard Report.

Table 1: Outdoor Pool Facility Options

Outdoor Pool Facility Option	Location	Capital Budget Estimate
Option 1: Status Quo	At existing site: Lewis Park	\$1 Million plus cost for repair and leak remediation (TBD)
Option 2: New outdoor pool at existing indoor aquatic facility site.	Co-located at the CV Aquatic Centre	\$12 Million
Option 3: New outdoor pool	At existing site: Lewis Park	\$18.2 million for replacement
Option 4: New outdoor pool at new site	To be determined	\$16.6 million (does not include land cost)
Option 5: Closure of outdoor pool without replacement or relocation	N/A	\$1 million for decommissioning (pending further study to confirm cost).

As per the Courtenay and Outdoor Memorial Pool What We Heard Report, the public preference is for the pool to be maintained at its current location, either through repair or redevelopment. Preferences for the relocation of the pool to another location (Comox Valley Aquatic Centre or alternative unidentified location) were generally even split, and only four percent (4%) supported the permanent closure of the pool.

Consideration of Options for relocation or permanent closure

Based on the Aquatic Needs Strategy which identifies the Courtenay and District Memorial Outdoor Pool as a valued community asset, in addition to feedback highlighting its central location, social impact, and significant usage, staff are recommending that Council approve proceeding with an option analysis for the future of the pool at its current location.

The public has clearly indicated that it does not support the permanent closure of the outdoor pool; with the Comox Valley Aquatics Strategy also recommending its continued operation. The public has indicated its support for continued investment in the pool either in the form of repair, redevelopment, or relocation.

While approximately 25% of respondents to the outdoor pool public engagement indicate their preferred option is for the pool to be relocated to the Aquatic Centre, this is less than the 56% who support it remaining in its current location. Concerns with relocation also include comments regarding centralizing aquatic services in one area of the City and region, as well as the social value of a stand-alone outdoor pool centralised in the City. In addition, if the City was to proceed with this option, considerable capital repair and maintenance work would still be required at the Outdoor Pool if the direction was to ensure its continued operation until such time as the outdoor pool could be relocated. Based on the Comox Valley Recreation Commission strategic plan for redevelopment of the Comox Valley Aquatic Centre this would be a minimum of five to seven years. The Options Analysis will include consideration of repairs required for the ongoing operation of the pool in its current form and location, and could inform the capital repairs required for operation over the next five to seven years should Council wish to explore the option of relocation to the Aquatic Centre.

While relocation to another, unidentified location, was included in the facility options and was supported by 16% of respondents, without an identified property for relocation this is not an option that can be assessed for feasibility at this time. As for relocation to the Aquatic Centre, this option would also require capital investment in the outdoor pool until such time as a new pool is built at a new location if the direction is to maintain the outdoor pool's operation in the meantime.

Based on the above, as well as the Aquatic Needs Strategy findings and outdoor pool public engagement results, staff recommend an options analysis for the current location, however the alternative options could be included in the scope of work, with an associated increase in estimated project budget, if directed by Council.

Next Steps

Staff are recommending an initial three-year strategy for capital investment and facility planning for the outdoor pool. These recommendations have been developed based on the Aquatic Needs Strategy, findings from the outdoor pool public engagement as outlined in the What We Heard Report, and the recently updated condition assessments. The recommendations align with community preference for the outdoor pool to remain on site while also acknowledging that further options and feasibility analysis must be completed to understand the repair, capital improvement, and redevelopment implications and considerations for this location.

The proposed three year plan as outlined below addresses immediate operational repairs as well as provides decision points at the end of each phase for Council discussion and further direction as the scope is refined.

Proposed Immediate Actions – 2024

1. Begin immediate work on routine and planned maintenance required for operation (i.e. cracks, VIHA requirements, sand filter medium replacement, etc.)
2. Begin required repairs as a result of the Condition Assessments:
 - a) Continue investigations to update pool operations documentation (required)
 - b) Complete needed mechanical and safety work (scope to be confirmed)
3. Conduct Outdoor Pool Options Analysis to study the future of the memorial pool at its current location. This study will identify options and associated costs and lifecycles for 3 options:
 - a) Repairs
 - b) Renovations (Capital Upgrades)
 - c) Redevelopment (construction of a new pool)

Staff are recommending that all upgrades (estimated to cost approximately \$75,000) related to health and safety and core operational functionality commence in early 2024, to ensure the pool is operational for the 2024 summer season. Initiating this work as quickly as possible is critical as the work could impact the planned opening schedule of the pool in 2024.

Proposed Short Term Plans - 2025

If an options analysis for the current location is approved by Council, as the conclusion of the analysis, a recommendation will be presented to Council to approve the direction for the facility. Once direction is confirmed by Council, staff would initiate detailed design.

Staff will also report back to regulators to seek review and approval for the leak remediation plans.

As noted above, many of the systems are at the end of their service life. Even with the repairs that are planned for 2024, regular operations are at continued risk for unplanned repairs and shutdowns.

Proposed Long Term Plans – 2026 and beyond

If Council proceeds with detailed design following the proposed Options Analysis, at the conclusion of the design work, a recommendation will be presented to Council to approve the direction for the facility. If direction to proceed is provided, a closure of the facility would be planned for as early as 2026 to allow for the planned construction.

POLICY ANALYSIS:

The OCP sets out the following policies:

- LU 16 Prioritize infrastructure investment using a multiple bottom line decision-making approach based generally on the following parameters and priorities:
 - a. High-growth areas;
 - b. Public health and safety;

- c. Environmental responsibility;
 - d. Regulatory need;
 - e. Asset management principles;
 - f. Economic efficiencies and impact, such as partnerships, project coordination, and economic spinoffs
- PR3: Ensure appropriate and sufficient parklands, play spaces, and recreation infrastructure are provided as a form of essential social and ecological infrastructure to meet the needs of the community and accommodate growth.
 - PR 13: Maintain and invest in Lewis Recreation, Lewis and Sims Parks as centralized, high –intensity regional recreation destinations intended to serve the indoor and outdoor creation needs of the community
 - PR14: Continue to review plans for expansion or renovation of existing recreational facilities in accordance with the Parks and Recreation master plan and particularly within the Town and Neighbourhood Centres and Corridors.

Parks and Recreation Master Plan Recommendation 4.1.3: Plan for the short-term operation and long-term replacement of the outdoor pool with a communications and engagement process.

- Provide information to the community regarding the age and condition of the outdoor pool, the challenges of the location, and the maintenance and capital improvement costs.
- Undertake a feasibility study for replacing the outdoor pool activities
- Consult with the community regarding the options identified in the feasibility study

FINANCIAL IMPLICATIONS:

Costs for the above mentioned works are estimated as per below:

Phasing	Item	Year	Estimated Cost	Note
Immediate Action	Required Repairs	2024	\$75,000	
Immediate Action	Options Analysis	2024	\$125,000	
Short Term	Detailed Design	2025	\$250,000	Dependent on Option Chosen
Long Term	Construction	2026 or later	\$1M - \$18M	Dependent on Option Chosen

In the interest of time and financial transparency, staff have submitted a preliminary financial request to the Comox Valley Regional District Recreation Grant Service for the costs associated with immediate operational repairs (\$75,000) and the Options Analysis (\$125,000), in addition to our annual capital maintenance grant request. This request will be modified as required based on Council's decision. If funding is not supported through the CVRD Recreation Grant Service staff will return to Council with alternative funding recommendations.

ADMINISTRATIVE IMPLICATIONS:

Planning for the future of the Courtenay and District Memorial Outdoor Pool is a strategic priority and incorporated into the work plans of Engineering Services and Recreation, Culture, and Community Services. Engineering Services will lead the Options Analysis and necessary repairs, and will work with Public Works Services to complete the annual maintenance in advance of the 2024 operating season. Consultants with technical knowledge specific to this work will be utilized as required.

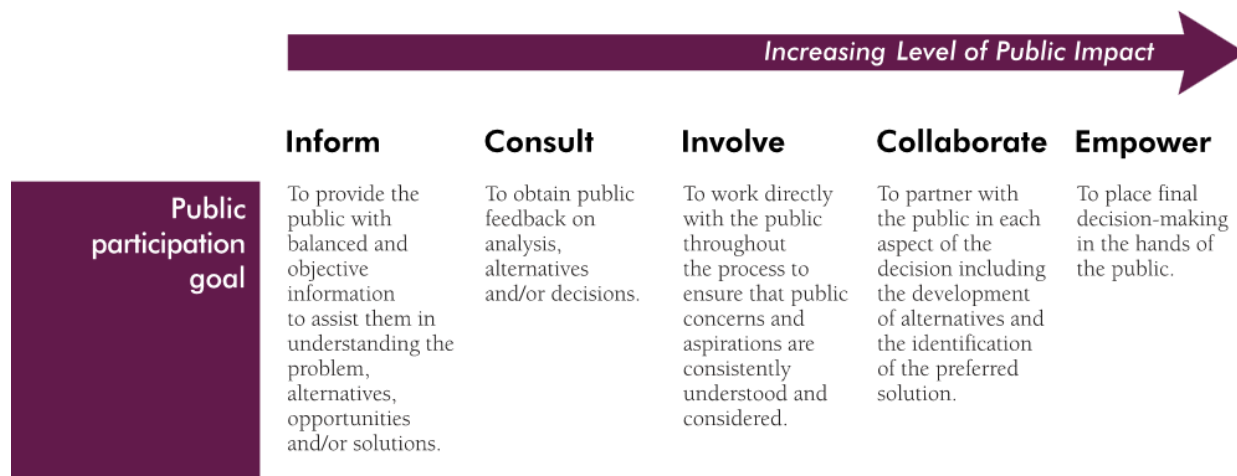
STRATEGIC PRIORITIES REFERENCE:

This initiative addresses the following strategic priority:

- Parks and Recreation - Complete recreation facilities need assessments and capital improvements: Florence Filberg Centre, Courtenay & District Memorial Outdoor Pool, Lewis Centre

PUBLIC ENGAGEMENT:

Based on the IAP2 spectrum, the City would inform the public of the proposed works in 2024 as needed.



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OPTIONS: To be read as separate resolutions

1. THAT based on the January 24, 2024 report “Courtenay and District Memorial Outdoor Pool - Condition Assessments and Options Analysis”, Council direct staff to proceed with procurement to start immediate repairs for the Courtenay Memorial Pool; and
2. THAT Council direct staff to proceed with procurement for an Options Analysis for the future of the pool at its current location.
2. THAT Council provide alternative direction to staff.

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ATTACHMENTS:

1. PRESENTATION - Courtenay and District Memorial Outdoor Pool - Condition Assessments and Options Analysis

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