

CALDWELL-CARVER CONSERVATION AREA
Pond Conservation & Monitoring Public Use Survey Report

June 4 – October 5, 2023



Photos by Kate Dickson

Submitted by the Rockcliffe Park Environment Committee and Pond Working Group

November 2023

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Figure 1: Pond Shoreline July 5, 2023. Photo by Kate Dickson

Pond Conservation and Monitoring Public Use Report June - October 2023

Executive Summary

The Pond and McKay Lake in the Heritage Conservation District of Rockcliffe Park are part of the Caldwell-Carver Conservation area. There are fish in the Pond including carp and sunfish. Two types of turtles, painted and snapping, live there. Bird life includes ducks, kingfishers, gulls, geese and herons (great blue, black-crowned night, and green) plus many other songbird species. Otters visit and swim in the water sometimes, and the area includes skunks, the occasional fox, and raccoons. The best time to see the wildlife is after or before swimming hours.

During the summer of 2023, the *Pond Working Group*, under the direction of the *RPRA Environment Committee*, undertook a sample survey to provide data and qualitative observations on weekday usage. From June 12th – 23rd the weekday counts and observations were documented between 8am and 2pm by a pond regular swimmer and volunteer. The number of swimmers appeared to be manageable, with the highest cumulative count being **303 on Friday June 23rd**. During this time, two families of geese had also nested at the Pond where they remained until mid-August.

During July and August, weekday information was collected by a dedicated volunteer and Pond swimmer. **Monday July 3, 2023**, witnessed a large influx of swimmers, shoreline sunbathers, and picnickers totalling a cumulative **estimate of 650 persons**. **August** saw a steady but manageable stream of swimmers and sunbathers at the Pond. It appeared that the newly opened *NCC River house on the Ottawa River* was proving more attractive to some of the visitors, as the number of swimmers appeared to be fewer. Whether the NCC River House has a longer-term mitigating impact on Pond usage will be determined over the next 5 years. **September 30th to October 3rd and 5th** 2023 experienced a record-breaking heat wave that drew many swimmers and sunbathers, as well as parking congestion that weekend.

The **water level** was measured weekly and **water quality** samples taken every two weeks. By October 12, 2023, the water from the Northeast Boundary Signpost had receded 15' 3". The projecting tree stump was more than 3 ft. above the water. Water quality remained good.

The fundamental importance of ensuring a **city bylaw officer visits** the Pond at random times after the 2pm closure deadline begins in April and continues until late October of each year. When the City bylaw officers are visible and present to enforce the 2pm closure deadline, most swimmers respect that rule and comply. Without the presence of the bylaw officer, the swimming hours are regularly disregarded by many swimmers. The Pond working group and RPRA are grateful to the city for its ongoing support.

Several recommendations proposed in the 2022 Pond report pertaining to signage at the Pond were accepted and implemented by the city in 2023. The **ropes and poles** were reinstalled on July 6, 2023, after which most swimmers respected this boundary between July and October. A new pictographic sign was also developed to reflect "**no dogs in the water or the sand.**" No new sign was developed explaining the "**no digging**" rationale with a view to continuing to raise awareness about the potential of shoreline erosion and the need for conservation. Of note is that between July 28th and August 22nd,

2023, three signs leading to the Pond were defaced by **graffiti** stating that the swimming hours had been extended to 9pm.

The 2023 Pond report concludes with several **Observations and Recommendations** to be discussed with the City of Ottawa officials. Thanks to those on the Pond Working Group: Nic Fortier (Chair), Marilyn Blattel, Kate Dickson, Jane Newcombe, Lola Price, Tim Stevenson, Mark Willcox.

1. Introduction

The Pond and McKay Lake in the Heritage Conservation District of Rockcliffe Park are part of the Caldwell-Carver Conservation area. The Pond's shoreline, the paths and the woods are known for the wildlife that it attracts. There are fish in the Pond including carp and sunfish. Two types of turtles, painted and snapping, live there. Bird life includes ducks, kingfishers, gulls, Canada geese, herons: (great blue, black-crowned night and green) and many other songbird species. Otters visit and swim in the water sometimes, and the area includes skunks, the occasional fox, and raccoons. The best time to see the wildlife is after swimming hours.

During the summer of 2023, the *RPRRA Environment Committee* and *Pond Working Group* decided to use community volunteers to gather quantitative and qualitative data documenting the usage patterns of the public at the Pond between 8:00am to 2:00pm over 14 weeks (24 weekdays of records). The intent was to provide information to inform recommendations and policies for maintenance and conservation actions as required, while striking a balance between the enjoyment of the Pond by Rockcliffe Park residents and the public at large, and the preservation of the Pond's shoreline, flora and fauna. This unfunded study was conducted by community volunteers for selected hours from May 29 to September 7. The water level was also measured weekly and water quality samples taken every two weeks.

2. Methodology

The community volunteers' task was to count people at the Pond, classify them as adults or children, and record whether they were sitting at the platform area, sunbathing, swimming, paddling,¹ digging in the sand, and the location of each of these activities (i.e., in the Pond, Northeast shoreline; East/condo shoreline). In addition, the daily temperature/rain/sun/cloud were recorded. The volunteers were also asked to observe and document the following:

- i) water level changes from the post and/or stairs;
- ii) whether swimming hours were being respected (7am – 2 pm);
- iii) whether the signage was working;
- iv) estimated duration spent at the Pond;
- v) number of bikes on racks and elsewhere;
- vi) number of cars parked on Pond St. & Lakeway Ave;
- vii) results of City *E. coli* sample analysis and RPRRA *E. coli* analysis on a bi-weekly basis;
- viii) presence of and engagement with the public by the Bylaw officers.

¹ **Methodology for data collection:** If an individual is standing a meter beyond the shoreline, or if the water is below the waistline, they are counted as shoreline *sunbathers*. Those in the shallow Pond waters with the water at waist level or above were counted as *swimmers*. If they are sitting, paddling, or kicking around in the shallow water, they are also counted as swimmers. The count also covers the number of people sitting or standing in the public access entrance area and stairs.

General Comments and Assessments: The observations were requested every half hour at different times during the day.

3. Results

The 2023 survey provides a clear **sample** of Pond usage and the related environmental pressures for selected hours when public access to the Pond is permitted. The data were collected for 24 weekdays over 14 weeks. It does not cover all five days a week (Monday to Friday), nor after-hours usage. The overall results are therefore an undercount of the full weekly use of the Pond. The Nitrogen and Phosphorus sampling in 2023 shows there was no significant change between June and October (Annex C). The report concludes with several observations and recommendations to be discussed with the City of Ottawa officials.

3.1 Water Level Changes May – October 2023

On April 27th, 2023, the water level was notably high – well above the 5th step of the entrance stairwell. On May 29th, 2023, the water level was 15” deep at that signpost and the tree stump was 9” below the surface. By October 12, 2023, the shoreline from the Northeast Boundary Signpost had receded 183” or 15’ 3”. The projecting tree stump emerged more than 36” or 3 ft. above the water.



Figures 2-4: Water recedes 183” from April 27 – Oct 27, 2023

Photos by Kate Dickson

Annex B highlights the water level measurements taken in 2023 and previously in 2022. The coloured rows show the water level measurements from 2022. Differences in the monthly water level for the two years may be attributed to the winter snow and summer rainfall patterns over each month. These differences are particularly notable in the months of August and September. For example, on August 8, 2023, the water’s edge was 6.7’ (81”) from NE signpost compared to August 9, 2022, when the water was 12’ 8” (152”) from NE signpost. There was also an 8’ difference between September 5, 2023, and September 6, 2022.



Figures 5 - 6. Tree Stump shifts from 9" below surface (May 29, 2023) to 36" above surface (Nov 15, 2023)

Photos by Kate Dickson

3.2 Water Quality: Results of City and RPRA *E. coli* sample analysis collected on a bi-weekly basis

Annex C presents a record of the Water Chemistry and Bacteriological data. Water samples were taken by Ottawa Public Health and the RPRA every two weeks between May and October in 2023. For the RPRA chemical and bacteriological sampling, a volunteer swam to the middle of the Pond, dove down 5ft. and took a water sample. The RPRA testing was done on days when the City did not sample. Swimmers were able to review the results posted on the sign by the Pond entrance.

The OPH values represent the geometric mean of three samples taken from a 1 – 1.5m deep area between 15 – 30cm below the surface. 10 cfu/100 mL is the lowest possible result that can be reported through the testing method used at the Ontario Public Health Laboratory. The provincial limit of 400 cfu for swimming water that requires closing the area was never detected. (cfu means colony forming units.)

3.3 Respect for the swimming hours (7am – 2pm)

*The fundamental importance of ensuring a bylaw officer visit the Pond at random times after the 2 pm closure deadline begins in April and continues until early to late October of each year.*²

It should be noted that the numbers and duration of those swimming in the Pond and using the Northeast shoreline after 2:00pm has not been tallied. When the City bylaw officers are visible and present to enforce the 2pm closure deadline, most swimmers respect that rule and comply (many, however, swim slowly back to shore and emerge around 2:25pm). Without the presence of the bylaw officer, the swimming hours are regularly disregarded.

For example, **April 5th, 2023**, was the first sunny, hot weekend after a long winter. At 3:15pm a family van with at least 5 members parked and walked down to the Pond with their towels and paraphernalia joining at least 20 people who had jumped the Pond fence (which had not yet been opened by the city) and were swimming regardless of the 2pm deadline. A brief exchange with those behind the fence

² As mentioned in the Introduction, the conservation area attracts wildlife. There are fish in the Pond including carp and sunfish. Two types of turtles, painted and snapping, live there. Bird life includes ducks, kingfishers, gulls, Canada geese, herons (great blue, black-crowned night, and green) and many other songbird species. Otters visit and swim in the water sometimes, and the area includes skunks, the occasional fox, and raccoons. The best time to see the wildlife is after or before swimming hours.

reflected an off-handed disregard for the swimming rules at the Pond. A second example occurred during the last week of **September** and first week of **October 2023** when the temperatures hit record highs. Swimmers continued to swim after hours throughout October and November. As very few random visits to the Pond by City Bylaw officers occur in the fall, many swimmers continue to disregard the afternoon swimming hours at the Pond with impunity. *(Please see recommendation for a new sign in Section 6.)*



3.4 Compliance with the Signage

Between July 28th and August 22nd, 2023, three signs leading to the Pond were defaced by **graffiti**. The painted words indicated the swimming hours to be expanded to 9pm and cited NIMBY by the neighbours. Bylaw officers reported the graffiti to their supervisor. This misconception by some of the Pond swimmers on the extended swimming hours each day likely arose from the opening of the new *NCC River house* on the Ottawa River on August 1st, 2023.



Figure 9: Graffiti – Photo by Jane Newcombe

The 2022 Pond report to the city included several observations and recommendations pertaining to signage at the Pond. The chart below summarizes the recommendations that were accepted and implemented by the city in 2023 and those that were not.

Observations in 2022	Recommendations in 2022	Follow-up in 2023
<p>Some Pond Swimmers frequently disregard the boundary sign limits clearly indicating no access to the shoreline beyond the swim area and sit on the riprap beyond that marked area. Children, youth and adults were often observed moving beyond the "do not pass" signs to walk over the riprap towards the Condo shoreline.</p>	<p>That the ropes and poles that were attached to the "do not pass" signs in 2019 and 2020 be reinstated.</p>	<p>This recommendation was <u>implemented by the city</u>. The ropes and poles were reinstalled on July 6, 2023. Most swimmers respected this boundary between July and September.</p> <p>Figure 7: Boundary ropes</p>  <p>Photo by Kate Dickson</p>
<p>While the great majority of Pond users do not bring their dogs and are aware that dog-feces on the sand can increase <i>E. coli</i> bacteria levels, one recalcitrant dog owner was observed to state that there are no signs at the shoreline requesting dogs to stay off the sandy area. There is one with a no-swimming design.</p>	<p>That a new sign be developed explaining the "no dogs on the sand" rationale.</p>	<p>This recommendation was <u>implemented by the city in August</u>. Additional pictograph signs depicting, "No dogs swimming," were placed at the entrance stairwell and along two fences.</p>  <p>Photo by Kate Dickson</p>
<p>Digging is more notable now with the increased number of swimmers. A child, when asked to stop digging responded by noting there are no signs requesting one not to dig.</p>	<p>That a new sign be developed explaining the "no digging" rationale with a view to continuing to raise awareness about the potential for erosion of the shoreline and the need for conservation.</p>	<p>This recommendation was <u>not undertaken by City officials</u>. Very few interventions were subsequently made by the Pond volunteers, or the City Bylaw officers to communicate with the public. Some regular swimmers noted that they had tried to talk to parents to slow down this practice.</p>

3.5 Summary of weekday survey and observations: Selected hours, June – September 2023

June 2023:

From June 12th – 23rd data were collected every half-hour by a volunteer for the three periods between 8am and 2pm. During this time, the area was experiencing smoke from the wildfires in Northern Canada. Two families of geese had also nested at the Pond for much of this period. The number of swimmers appeared to be manageable, with the highest count being 303 on Friday June 23rd.

Estimated Pond Swimmers (Adults, Toddlers)						
	Date	8am - 10am	10am - 12pm	12pm – 2 pm	Cumulative Daily Total	Temperature
Mon	12/06/23	21	15	42	78	16-18 overcast
Wed	14/06/23	27	8	25	60	16-19 light rain overcast
Friday	16/06/23	10	51	48	109	20 - 24 Sunny-Cloudy
Wed	21/06/23	18	51	121	190	20 - 25 Sunny-Cloudy
Friday	23/06/23	31	77	195	303	23-27 Sunny-Cloudy
Mon	03/07/23	21	337	292	650	25 - 31 Sunny Hot



Figures 10-11: Swimmers, sunbathers, and paddlers, June 23 & July 6, 2023 – Photos Kate Dickson

July 2023:

Monday July 3, 2023, witnessed a large influx of swimmers, shoreline sunbathers, and picnickers totalling an estimated 650 persons. Approximately 50 - 100 people per hour were recorded at the Pond that hot, sunny, long weekend day. Between **12 noon and 1:30pm**, about 25 to 30 persons were observed sitting on the rip-rap ledge (including 3 separate picnics) and along the shore. The volunteer taking the count noted that there were *“too many picnickers, and not enough persons just swimming (and leaving).”* Between **12 noon and 1:30pm**, 35 to 38 cars were parked along Pond St/Lakeway Dr. to Blenheim, often lining both sides of the street, making it very difficult to get through. Between 27 and 39 bicycles were also counted in that period. Between 1:30pm and 2:20pm, the Bylaw officer was observed standing at the top of the platform stairs.

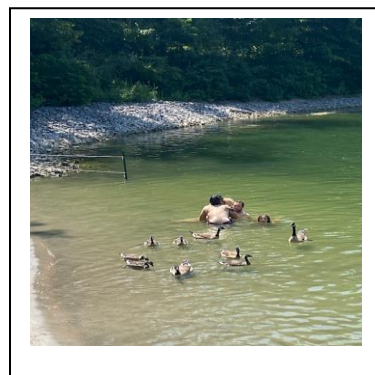
On **Wednesday July 5, 2023**, between 1:00pm and 2:00pm, the concentrated number of swimmers crowded onto the entrance platform, swimming in the Pond, and sunbathing or paddling on the NE shoreline made it virtually impossible for the volunteers to count accurately. On the streets above,

there were 28 cars parked down Lakeway Dr. and 20 bicycles on the racks and fences. *No bylaw officer was observed by the volunteers at that important time of day.*

On **Tuesday July 11, 2023**, the weather was warm (24°C) and clear. Between **11:30am – 12:30pm** the numbers were a manageable 36 swimmers and 8 children. Close to 21 persons with beach towels and 3 picnic sets were observed on the NE shoreline which measured 5' 2" (62") from the permanent post to the edge of the shore. Clothing, towels, and sandals filled the platform fence, blocking the view. About 15 - 19 cars stayed and left along Lakeway Dr. and Pond Ave, while 8 – 10 bicycles and a scooter were locked at the racks. *The bylaw officer was at the Pond around 11:30pm but not observed over the next hour.*

On **Monday July 17, 2023**, the day was hot (27°C) and muggy. Fifty swimmers (10 of whom were children) were counted between **12:45pm and 1:30pm**, while 3 families set up on the shoreline with chairs, towels, picnic blankets and coolers. *No Bylaw officer was seen at the Pond but was observed above reading in his/her car.* At 12:45pm there were 11 cars and 7 bicycles which by 1:30pm had increased to 25 cars, and 11 bikes - with more arriving than leaving.

Thursday July 20, 2023, was warm, muggy and overcast. Between **10:00am and 10:45am**, 20 adults and 3 children were counted swimming, while 12 cars and 9 bikes were observed above to be in constant transit. At **12 noon**, the number of swimmers increased to 34 plus 4 children, and the number of cars and bicycles increased to 23 and 17 respectively. At 10:45am, eight geese continued to intermingle with 5 adults and 3 toddlers paddling in the water and picnicking on the shoreline, which had now increased to 6' 7" ft (or 81") from the post to the water's edge. One family of five left between 12 noon and 12:45pm, having stayed for approximately 2 hours. People were still arriving despite the rain starting. *The bylaw officer was present between 12 noon - 12:30pm.*



*Figure 12: July 6, 2023, Goose families
Photo - Kate Dickson*

August 2023:

The month of **August** saw a steady but manageable stream of swimmers and sunbathers at the Pond. It appeared that the newly opened *NCC River house on the Ottawa River* was proving more attractive to some of the newer visitors to the Pond. On **Monday, August 1st, 2023**, 12 adults and 10 youths were counted swimming between 11:30am and noon. The 8 geese continued to share the Pond with swimmers until 2pm each day after which time, they swam in the quiet. On **Thursday, August 3rd, 2023**, 36 adults and 7 youth were counted swimming between **1:00pm – 1:30pm**, while 10 adults and 4 children sat and paddled respectively along the NE shore. The sand now measured 6' 7" (81") from the post. Thirteen cars and three bicycles were counted at that time on August 3rd. *The Bylaw officer was visible at 1pm at the platform and seen sitting in his/her car at 1:30pm.* This trend of fewer swimmers seemed to continue throughout August and early September.

Over the weekend of **September 30th to October 3rd and 5th**, the record-breaking heat wave drew many swimmers and sunbathers. As those camped out on the shoreline were engaged in deep conversation and exuded a message of "Do Not Disturb," the volunteer's attempt to measure the area was not completed. October 5th late morning was hopping with people of all ages in and out of the water. Approximately 60 people were counted on the shore area and in the water. Twenty or more

cars were parked all along Lakeway Dr. and up MacNabb St., as the sign indicates no parking May – September.

4. Recreational Carrying Capacity (RCC)

With climate change upon us, combined with the new high-rise condominiums along Beechwood, the large development at Wateridge, and intensification pressures in Manor Park, the Pond's "carrying capacity" formulation may be a central issue requiring joint attention with the city over the next few years. Many swimmers value the conservation efforts and would like to see "*Come, Swim and Leave*" be encouraged. They also express concern about overuse, too much noise, too many plastic inflatables etc. and whether there could be approaches that set limits on the maximum numbers able to swim at the peak hours (11:00am – 2:00pm). **Recreational Carrying Capacity** is defined as "*the level of use a recreation area can receive without suffering negative impact to environmental reservoirs and onsite experience.*" (i.e., the maximum number of visitors that can fit into a defined space over a period). A formula exists to calculate RCC should the need arise over the coming years.

Physical Carrying Capacity is calculated by the equation: $PCC = A \times V/a \times Rf$
 A = available area for public use
 V/a = 1 visitor per sqM
 Rf = rotation factor (# of permissible visits per day or average time spent per visit)

5. Presence and engagement with the public by the Bylaw officers

As mentioned in Section 3.3 of this report, the presence of the student Bylaw officers is highly appreciated by the community and the regular swimmers for their role in protecting the Pond as part of the Conservation area. In March 2023, to support a more consistent approach and understanding of the initiative, the working group developed a background document on the Caldwell-Carver Conservation area, together with an orientation deck outlining the suggested role of the bylaw officers while on duty. (See Annex A.) The chart below outlines the recommendations that were made pertaining to bylaw enforcement in 2022 and undertaken in 2023.

Observations in 2022	Recommendations in 2022	Follow-up in 2023
In early June, student Bylaw officers did not ask persons who had disregarded the "do not pass" sign to move as the water level prevented them from approaching on foot. As the level receded, the officers walked along the shoreline to request them to shift positions.	That for next season, the student Bylaw officers actively enforce the <i>Do not pass sign</i> , and clarification be given as to whether fines could apply.	<u>This recommendation was partially addressed by the city.</u> Constraining issues described in the text below require further reflection, discussion, and consensus on approach.
The student Bylaw officers are not familiar with the area's history and its conservation status.	That with the approval of the councillor's office and the manager for the program, the student Bylaw officers	An orientation deck was provided but implementation was inconsistent; further discussion on heightening the

Observations in 2022	Recommendations in 2022	Follow-up in 2023
	commence the next season by receiving an in-person orientation , using the orientation deck developed by the Pond Working Group for its student data surveyors.	effectiveness of the bylaw officers' presence requires our joint attention. (See discussion below.)

Of note is that during the summer of 2023, members of the Pond Working Group, residents in the Pond area, and some daily swimmers (all of whom are supportive of the efforts to protect the Conservation area) articulated concerns about an apparent need for more training among the student officers. In contrast to previous years, the officers appeared to spend proportionately more time sitting passively in the Bylaw car at the Pond entrance, as opposed to proactively ensuring a greater visibility around the Pond, engaging more actively with the public on the entrance platform, and using their authority to articulate and enforce the rules as necessary. It was also felt that messaging to the public was sometimes inconsistently expressed by the bylaw officers. *(Please see recommendation in Section 6.)*

Regarding swim hours, swimmers are frequently observed around 4pm or late afternoon. In a few cases, it appeared that there were no bylaw officers on duty. On other occasions, when approached in the car, the officer advised that they "couldn't be there all the time." *(Please see recommendation in Section 6.)*

Before the ropes were reinstalled in early July, there appeared to be more frequent trespassing onto the shoreline (rip-rap) to get to the smaller eastern shore in front of the condos. Walking on the shoreline is clearly prohibited with signage, stakes, and ropes. It was reported that, when observed, enforcement officers are either in their cars or not easily located. On one occasion, when three officers were located, and it was explained that visitors were walking on the shoreline (rip rap), the officers thought there was nothing they could do. *(Please see recommendation in Section 6.)*

In general, the process to ensure that swimmers comply with the 2:00pm time limit went well in 2023. A bylaw officer was observed to speak with polite confidence/authority to the laggards asking them to swim back as soon as they see her to be out of the Pond in a timelier fashion. Three or 4 swimmers asked why a whistle or megaphone was not used (as they don't have a watch while swimming) to which the reply was that "Whistles are for lifeguards and that is not the bylaw officers' job." It would seem to be a personal choice whether to use a megaphone or not, as other officers did use them on different occasions. *(Please see recommendation in Section 6.)*

6. Observations and Recommendations: 2023 and 2024

Observations	Recommendations
<p>The partnership with the City of Ottawa has been very productive and fruitful since 2012.</p>	<p>That in December 2023 and February 2024 there be a reflection and dialogue between the Working Group, the RPRA and the City of Ottawa on the implications and the following recommendations to strengthen the surrounding environment emanating from the collated data and this report.</p>
<p>In contrast to previous years, the Bylaw officers appeared to spend proportionately more time sitting passively in the Bylaw car at the Pond St. entrance, rather than proactively ensuring a greater visibility around the Pond, engaging more actively with the public at the entrance platform, and using their authority to articulate and enforce the rules as necessary. It was also felt that messaging to the public was sometimes inconsistently expressed by the bylaw officers.</p>	<p>That the Bylaw program: i) recognizes that some of the most challenging times in terms of infractions occur after 2pm; ii) between 9am and 8pm encourages the officers to spend at least every half-hour walking around the Pond and over to the condo side, and to be visible for longer periods of time at the entrance platform and stairwell; iii) includes training on managing difficult people; and, iv) permits the issuing of tickets when deemed useful as a preventative instrument.</p>
<p>It is difficult to engage with more recalcitrant members of the public to ask that they respect the rules and the swimming hours. When the City bylaw officers are visible and present to enforce the 2pm closure deadline, most swimmers respect that rule and comply.</p>	<p>That bylaw officers use a megaphone provided by the city at 2:00pm to ensure swimmers realize the time and comply accordingly.</p>
	<p>That a refresher orientation be provided on the Pond in 2024. It could include an outline of expectations, explanations of why certain actions are prohibited, and what type of enforcement (e.g., tickets, summons) can be used. <u>Members of the Pond Working Group would be very pleased to assist in-person</u> on details around the importance of conservation considerations, and why certain rules are in place.</p>
<p>Without the presence of the bylaw officer, the rationale for the swimming hours is frequently questioned by newcomers or visitors to the area.</p>	<p>That a bilingual interpretive sign or placard highlighting how the wildlife are attracted to the area would provide a permanent answer to this ongoing question. It could be placed at the entrance to the swimming area.</p> <p>Suggested wording on the placard could be:</p> <p><i>“The Pond and McKay Lake are part of the Caldwell - Carver Conservation Area. There are</i></p>

Observations	Recommendations
<div data-bbox="326 268 672 583" data-label="Image"> </div> <p data-bbox="313 600 699 655">Figure 13 Goose Families. June 21, 2023 Photo by Kate Dickson</p>	<p data-bbox="824 233 1414 407"><i>fish in the Pond, two types of turtles and a wide variety of birds including herons, ducks, and Canada Geese. Other wildlife exists here and the best time to see them undisturbed is before or after swimming hours."</i></p>
<p data-bbox="203 695 799 1008">On weekends and very hot days, parked cars line both sides of Pond St. and Lakeway Drive up to Blenheim. Cars continually move in and out between 10:30am – 2:30pm creating a safety hazard for pedestrians and blocking service trucks, ambulances, and residential traffic at peak hours. On one occasion a garbage truck was forced to stop and wait until there was sufficient clearance to move through.</p>	<p data-bbox="824 695 1390 869">The city considers implementing “No parking between 10am – 3pm May to October” on one side of Lakeway Dr. and Bylaw officers be authorized to issue tickets for any cars blocking laneways.</p>

ANNEX A

City of Ottawa Pond Support and Bylaw Role

The City of Ottawa has supported the Pond by making repairs to the sandy shoreline caused by erosion, some caused by nature, and some caused by human use. The city repairs and maintains the fences and stairs. Due to the Pond's popularity over the years, City Bylaw oversight has helped to maintain respect for the rules of the conservation area of the Pond, and public observance of the hours for swimmers (7am – 2pm). It is important to note that there is no lifeguarding and no changerooms or bathroom facilities.

Role of the Bylaw Officers

- Understand that the Bylaw Officers are **highly appreciated** by most visitors to the Pond who value the uniqueness of the area.
- Do not hesitate to be **visible to the public** by walking around the Pond and McKay Lake as frequently as possible. This is particularly important between **2pm and 8pm** when swimming hours are closed.
- Stand visibly at the **top of the stairs at 2pm** and use a whistle or megaphone to warn swimmers that the hours are over. Laggard swimmers will oblige by 2:15 – 2:25pm.
- To maintain the support of the public, **engage with them** as much as possible. Know the rules and the rationale.
- Watch for visitors who are **smoking** – remind them of the city-wide bylaw prohibiting smoking and ticket them if deemed necessary.
- Watch for swimmers going **beyond the rope boundaries**, or walking toward the condos **over the rocks**, or **throwing rocks** into the water.
- Watch for **dogs** on the sandy area or swimming. Let the swimmers/sunbathers know this is not permitted.
- Watch for **bicycles** being attached to the fence along the footpath or within the entrance platform fence. This is not permitted.
- Pedestrians have right of way – therefore bicycles should **not be ridden** around the Pond and/or McKay Lake –bicycles should be pushed.

Background Information About the Pond

The Caldwell-Carver Conservation Area includes the eastern shore of McKay Lake, the Pond, and the Corridor of Public Passage (COPP) footpaths. Rockcliffe Park residents Ewan Caldwell (1920 – 2001) and Humphrey Carver (1902 – 1995) were active in environmental work and planned the shoreline restoration after damage caused by lakefill damage in the late 1960s and 1970s.

The Pond was originally a quarry for sand and gravel. The quarry closed in 1949 when ground water made it too wet to continue digging. At that point, the deepest part of the quarry was 30 meters. Water gradually filled in, and today the Pond may be as deep as 15 meters in the center. The drop off is sudden as you wade into the water.

Swimming became popular, but eventually the hours were limited to between 7am to 2pm partly because the Pond is part of The Caldwell-Carver Conservation Area and partly because it is also in the middle of a residential area. Without inlets or outlets for water turnover, the Pond is environmentally sensitive. Currently, the quality of the water is healthy thanks to a lot of effort and care.

The conservation area attracts wildlife. There are fish in the Pond including carp and sunfish. Two species of turtles, painted and snapping, live there. Bird life includes ducks, kingfishers, gulls, herons (great blue, green and black-crowned night) and many songbird species. Otters visit and swim in the water sometimes, and the area includes skunks, the occasional fox, and raccoons. The best time to see the wildlife is after swimming hours.

1. *Why is the Pond environmentally sensitive?*

The Pond itself has no inlet or outlet. Water quality depends on users being aware of this and (for example) not allowing pets into the water which could introduce *E. coli* (a bacteria that causes intestinal problems). It would take a very long time to repair that sort of problem.

2. *Why is McKay Lake not open for swimming to the public.*



The shoreline of McKay Lake is not conducive to swimming access (the bottom is oozy/squishy/mushy, and the ooze is quite deep, and someone could sink in and drown/suffocate). The west side of McKay Lake is private property. The east side of McKay Lake is city property, including the bottom as well as the shoreline. The No Swimming Rule is a city rule and applies to similar waterbodies under their jurisdiction.

Figure 14: Isthmus McKay Lake. Photo by Kate Dickson

The marsh area is home to two species of turtles, other aquatic wildlife including waterfowl, (ducks, a pied-billed grebe pair, geese); they and their nesting habitat are protected under the **Migratory Birds Convention Act**, and they should not be disturbed. It is part of the conservation area.

3. From time to time, volunteers from the Rockcliffe Park Environment Committee will be in the area removing (by pulling out or cutting) invasive plants (buckthorn and dog-strangling vine and possibly poison ivy). They may be working between the shoreline and the fence in the wooded area. They operate under a Consent to Enter permit issued by the city.

Annex B:

Water Level Changes: May – September 2023

The following chart shows the water level measurements taken in 2023 and previously in 2022. The coloured rows show the water level measurements from 2022. Differences in the monthly water level for the two years may be attributed to the winter snow and summer rainfall patterns over each month. These differences are particularly notable in August and September. For example, on August 8, 2023, the water's edge was 6.7' (81") from NE signpost compared to 12' 8" (152") on August 9, 2022. There was also an 8' difference between September 5, 2023, and September 6, 2022.

DATE	Projecting Stump Measurements at Western end of Pond	Platform Steps Measurements	Northeast Boundary Signpost to Water's Edge Measurements
April 27th 2023	Stump submerged 10-12" below surface	Covered the 5 th platform step	18" deep at NE signpost
May 15th 2022	Stump submerged 2" below surface	Reaches 3 rd platform step & 4" from riprap	
May 29th 2023	Stump submerged 9" below surface		15" deep at NE signpost
June 6th 2023			11" deep at NE signpost
June 13 2023	Stump emerged 6" above surface		3" deep at NE signpost
June 15 - 16th 2023	Stump 10 ½" above surface	Flush with the lower platform step	1" deep at NE signpost & 18" of sand showing behind
June 21st 2022	Stump 4" above surface	Reaches 2 nd platform step & 6" from riprap	
July 11th 2023	Stump 20" above surface		5.2' (62") from NE signpost
July 12th 2022	Stump 18" above surface	Reaches below the final platform step	3'(36") from NE signpost
July 14th 2022		Covers the base of the platform steps	Sandy area opening quickly
July 18th 2023			6.7' (81") from NE signpost
July 19th 2022			6' (72") from NE signpost
July 25th 2023	Stump - 25" above surface		7' (84") from NE signpost
July 26th 2022			6' 3" (75") from NE signpost
July 28th 2023	Stump 25" above surface		
July 28th 2022	Stump - 21" above surface	Base steps are no longer under water	
August 1st - 3rd 2023	Stump - 27" above surface		6.7' (81") from NE signpost
August 2nd 2022			12' (144") from NE signpost
August 8th 2023			6.7' (81") from NE signpost
August 9th 2022			12' 8" (152") from NE signpost
August 15th 2022		Water edge is 5' (60") from the base steps	14' (168") from the (NE) signpost
August 22, 2023*	Stump - 21" above surface (heavy rains)		6.2' (75") from the NE signpost (heavy rains = rising water levels)
August 29, 2023**	Stump - 25" above surface		7.1' (85") from NE signpost
Sept 5th 2023			7.7' (93") from NE signpost

DATE	Projecting Stump Measurements at Western end of Pond	Platform Steps Measurements	Northeast Boundary Signpost to Water's Edge Measurements
Sept 6th 2022	Stump - 33" above surface.	Water edge is 10'(120") from the base steps	15' 6" (186") from NE signpost
Sept 8th 2023	Stump - 27" above surface		8' 5" (101") from NE signpost
Sept 18th 2023 *	Stump - 31" above surface		12' (144") from NE signpost
Sept 29th 14' 1"	Stump - 32.5" above surface		14' 1" (169") from NE signpost
Oct 3rd & 5th 2023	Stump - 35" above surface		Not accessible – "too many sunbathers on the shoreline to measure!"
Oct 12th 2023			183" (15'3") from NE signpost

* Very heavy rains mid August affected Pond water level – staying higher than the previous few years.

**Heat wave late August early September and little precipitation saw level dropping faster again.

Annex C

2016 – 2023 Water Chemistry and Bacteriological Data

Date	Parameter		
	Kjeldahl Nitrogen mg/L***	Total Phosphorus mg/L***	<i>E. coli</i> cfu/100 mL
10 May 2016	0.52	0.009	
12 July 2016	0.54	0.023	
23 July 2016	0.83	0.015	
12 June 2017			*13
26 June 2017			*14
10 July 2017			*9
13 July 2017	1.50	0.02	
28 July 2017			*27
11 August 2017	0.80	<0.03	
22 August 2017			§*244
24 August 2017			*11
14 Sept 2017	0.90	0.06	
19 June 2018			*10
3 July 2018			*23
17 July 2018			*10
31 July 2018			*22
14 August 2018			*10
16 August 2018	<0.8	0.008	
28 Sept 2018	0.30	0.009	
03 July 2019	0.27	0.012	
21 August 2019	0.31	0.009	
6 July 2020	0.349	0.005	**15
20 July 2020			**1
3 August 2020	0.458	<0.020	**1
17 August 2020			**24
8 Sept 2020	<0.8	0.008	**2
5 Oct 2020	1.100	0.014	**0
10 Nov 2020	0.719	0.02	**0
28 April 2021	0.419		**0
15 June 2021	0.484	1.010	**20
12 July 2021	0.575	<0.20	**12
9 August 2021	0.423	0.014	**13
16 September 2021	0.750	0.011	**6
15 October 2021	0.573	0.006	**0
31 May 2022	0.653	0.009	**2
1 June 2022			*10
15 June 2022			*10
29 June 2022			*10
13 July 2022	0.371	0.014	*18
27 July 2022			*10
8 August 2022	0.387	0.008	
10 August 2022			*10
24 August 2022			*10

6 September 2022	0.356	0.00	**0
1 June 2023			*10
13 June 2023	0.040	0.016	**2
1 4 June 2023			*10
28 June 2023			*10
6 July 2023	0.560	<0.008	**2
28 July 2023			*10
8 August 2023	0.483	0.008	**2
24 August 2023			*10
5 September 2023	0.439	0.009	**2
12 October 2023	0.467	0.016	**0

cfu means colony forming units

The **yellow** indicates the highest recorded value for that parameter over the period 2016-2023.

*Samples taken by Ottawa Public Health. The values represent the geometric mean of three samples taken from a 1 – 1.5 m deep area between 15 – 30 cm below the surface. 10 cfu/100 mL is the lowest possible result that can be reported through the testing method used at the Ontario Public Health Laboratory.

**Analysis by Eurofins Environment Testing for RPRA.

§ After very heavy rainstorms on 18 and 22 August 2017.

***For Nitrogen and Phosphorus by year of sampling between 2016 and 2023 there has been no significant change although there are intra-season variations.