



## Boulder Parks & Recreation

### Background

Our mission at Boulder Parks and Recreation is to promote the health and well-being of our community. So, we *love* to provide an incredible offering of aquatics amenities and services because we know Boulder community members *love* to swim.

And that's not just anecdotal: an [Aquatic Feasibility Plan](#) completed in 2015 identified that community demand for lap swimming exists with 45-50% of the population in Boulder as compared to 2-5% of the population nationally.

We've responded to that above-average demand with an above-average level of municipal pools. In the [2014 Parks and Recreation Master Plan](#), benchmarks showed Boulder's level of service for swimming pool facilities per 100,000 residents exceeded national and regional benchmarks, and more than doubled the number of swimming facilities per resident compared to the country's 100 most populous cities.

A key recommendation of the 2015 Aquatics Feasibility Plan was to replace the aging Scott Carpenter Pool to meet the community need for outdoor recreational swim experiences – and again, the Boulder community demonstrated their support for swimming amenities with 81% of voters extending the Community, Culture and Safety Tax in 2017 which helped to fund the pool replacement project among others.

### **There's no other way to put it: Boulder *loves* swimming!**

So when our city was faced with an unprecedented and worldwide health crisis this spring and the construction timeline for the new pool project became impacted, we took a risk and started to prepare the seasonal Spruce Pool for patrons at a time when there was no public health guidance available for pools, widespread furloughs and plummeting revenues were deeply impacting resources, almost all city facilities were closed, and other municipalities were announcing summer season pool closures.

When Governor Polis released updated guidance on June 4<sup>th</sup> for Personal Recreation that included swimming, we were ready to open Spruce Pool the very next day.

As summer progressed, we took the same approach to prioritize and maximize swimming opportunities across our system. Pool lanes at the East Boulder Community Center were made available for swim teams and user groups, the North Boulder Recreation Center was opened as an indoor swimming option for community members, and hours for leisure swimming and vulnerable community members were added across the system.

When construction for the new Scott Carpenter Pool site finished – we worked to open the pool as soon as possible and welcomed swimmers just four days after being able to move in and train our team, prioritizing lap swim opportunities for community members.

Our measure of success during this crisis has been supporting as many community members to *safely* recreate as possible. The nature of the COVID-19 pandemic has made this challenging, and to prevent



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community spread of the virus, capacity is significantly less than before. Lanes that previously accommodated 3-5 swimmers have been restricted to a single swimmer. Teams operate under very strict protocols that allow them to train safely.

We have rolled with the changes, remained vigilant and responsive, and tried to maximize opportunities where possible. We are so grateful for the community's support as we've navigated these uncharted waters together.

It hasn't all been smooth sailing though: our technology platform for online reservations was not designed for the individual reservation needs of the pandemic and we've had to be patient while our vendor creates software to meet these needs. Clarifications on public health guidelines have resulted in many changes for how teams and individuals utilize services week-to-week, and we've had to make numerous adjustments to facilities and services that were never designed for operating in a global pandemic.

Our outdoor pools are not an exception – while year-round operations were considered as an option during the design phase for Scott Carpenter Pool in 2017, the [final concept plan](#) that was developed with extensive community engagement and ultimately approved by the Parks and Recreation Advisory Board provided for a seasonally operated facility. This decision followed an in-depth feasibility analysis of a covered, year-round facility as well as of seasonal enclosures, and was ultimately informed by the community's strong preference that Scott Carpenter Pool remain an outdoor facility with views of the natural setting and Flatirons; as such, any temporary or seasonal enclosures proved operationally infeasible and incompatible with our climate sustainability goals. Thus, the pool we have today was designed and built for seasonal operations.

### Analysis

In response to strong community interest and in the spirit of remaining flexible in the face of an unprecedented crisis, we consulted with experts in the aquatics community to explore the precise parameters that would allow us to maximize utilization of our outdoor facilities during the pandemic.

Specifically, we took an approach focused on 'how might we' operate and considered:

- Safety and Code Compliance
- Facility Design and Operational Feasibility
- Financial Feasibility and Good Governance

Below I will share a summary of that analysis, the conclusions that we have drawn for each section, and the considerations staff will use to drive operational decisions into the fall.

#### Safety & Code Compliance

- The State of Colorado requires that public pools operate at or above 77 degrees water temperature.



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- National governing bodies of aquatics, USA Swimming and US Masters Swimming, along with the World Health Organization, recommend water temperatures between 78-86 degrees as comfortable and safe for those engaging in moderate physical activity in a pool.
- Both outdoor pools utilize overnight thermal pool 'blankets' to cover the water and retain heat. Per manufacturer guidance and guidelines from the National Swimming Pool Foundation, no pool cover should be used while the pool is in use. Partial covering of the pools during operation is not advised.
- Health code requires public pools to provide toilet and shower facilities on site.
- Lifeguards are required at public pools; \*This is a key distinction from the local private facilities that operate year-round pools.

**Safety & Code Compliance Conclusion:** Outdoor pools could meet safety and compliance guidelines when operated at a minimum of 78 degrees water temperature while fully uncovered and overseen by lifeguards.

### Facility Design and Operational Feasibility

- The natural gas boiler systems and thermal covers at the outdoor pools were designed, sized, and constructed to maintain water temperatures above 77 degrees in average air temperatures above 50 degrees. When air temperatures average below 50 degrees, the heating and energy demands required to maintain water temperature exceed those available on-site. The boiler systems were not designed or spaced to accommodate supplemental heating elements.
- At Spruce Pool, the boilers do not function when evening air temperatures average lower than 50 degrees.
- The staff spaces, restroom and locker room spaces at the outdoor pools were not designed as conditioned (heated/cooled) spaces. We have been advised by the Scott Carpenter Pool project architect that these spaces cannot operate below 40 degrees air temperature without risk of damage. Costs for 4-season portable showers and toilets exceed \$10k per month.
- As facilities where water safety is required to be overseen by lifeguard staff, a safe working environment is paramount. Lifeguards must both remain warm *and* rescue ready. This becomes a significant challenge poolside with air temperatures below 50 degrees.

**Facility Design & Operational Feasibility Conclusion:** Outdoor pools could operate as designed and staffed while meeting safety and code compliance conclusions when sustained air temperatures remain above 50 degrees (and nighttime 50 degrees at Spruce Pool).

### Financial Feasibility and Good Governance

- Before opening for the season, staff completed a thorough operating analysis to determine conditions for financially sustainable operations during the pandemic. This included:
  - o Increased expenses for cleaning and personal protective equipment;
  - o Reduced revenues due to capacity restrictions; and
  - o A fee model to allow for responsible operations while still fulfilling commitments to those with low-incomes through BPR's Financial Aid Program and honoring age-based discounts.



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- Spruce Pool offers up to 8 reservable lap lanes. Utilization has averaged 98%.
- Scott Carpenter pool offers up to 20 reservable lap lanes. Utilization has averaged 87%.
- In the first 'cold weather' days of the season, earlier this week, utilization averaged between 20-50%.
- Current state operating expenses will continue to increase as the air cools due to increased utility expenses to heat the water.
- In Boulder County, all other public pools will close to the public by the end of September (note that in Lafayette and Louisville, outdoor pools were not operated this year due to the pandemic).
- Across the Front Range, many municipal agencies have established air temperature thresholds for outdoor pool operations of 60-65 degrees.

**Financial Feasibility and Good Governance Conclusion:** Based upon the current operating model, utilization must average 60% to ensure pool operations are not subsidized beyond what is budgeted to allow for means-based Financial Aid and age-based discounts. Any operations beyond September will exceed those provided by other public agencies.

### Pandemic Extended Outdoor Season Plan

In summary, we have determined that while operating through the winter is not feasible without significant expense and major facility modifications, we will extend Boulder's outdoor pool season as conditions allow:

- **Spruce Pool** will remain open until:
  - Average lane utilization at outdoor pools drops below 20 swimmers per hour (indicating the community outdoor swimming interest could be met solely by the Scott Carpenter Pool); OR
  - Nighttime air temperatures average below 50 degrees<sup>1</sup>.
    - ➔ Upon closure of Spruce Pool, the indoor pool at the East Boulder Community Center will open for public use.
- **Scott Carpenter Pool** will remain open until:
  - Sustained average lane utilization drops below 60% ; OR
  - Daily air temperature average below 50 degrees.
    - ➔ Upon closure of Scott Carpenter Pool, the indoor pool at the South Boulder Recreation Center will open for public use.
- Staff will maintain discretion to limit hours or close temporarily based upon weather conditions or to allow adequate recovery following a water rescue.

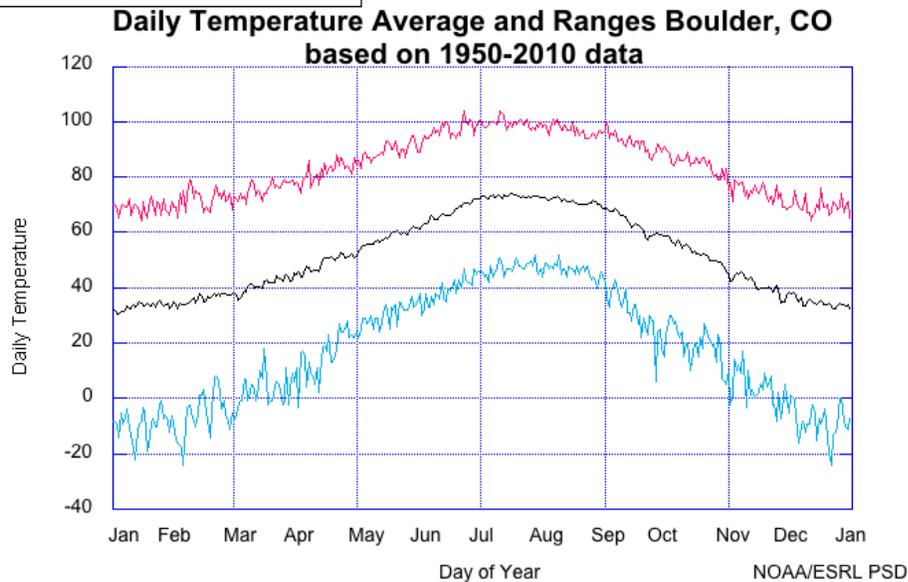
While a specific date when temperatures will drop below 50 degrees is hard to identify based upon Colorado's variable weather patterns, the chart below may help provide some historical insight as you consider the weeks ahead:

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<sup>1</sup> Weather as recorded by the National Oceanic and Atmospheric Administration (NOAA).



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While we hope you are thrilled with our plans to operate Boulder’s seasonal outdoor pools as long as we can within the above constraints, we recognize this may be disappointing due to some people’s preference for swimming outdoors year-round amidst the pandemic. We have gathered some information that we hope helps increase comfort with indoor lap swimming, as we have three year-round recreation centers that together provide 22 lanes to the community:

### Recreation Center COVID-19 Protocols:

- While health guidelines allow up to 50 people in the pool area, lap swimming operations are limited to 1 swimmer/lane or 2 from the same household.
- Staff and patrons are screened per city policy.
- Face coverings are required at all times, including during exercise, unless the individual has received doctor authorization that wearing a mask could impair their ability to breathe. Face coverings may be removed for swimming activity but must worn before and after using the pool.
- Custodial day porters provide hourly cleaning of high touch areas (doors, counters, restroom fixtures).
- The entire facility is “fogged” after closing using an electrostatic sprayer.
- Entry is by reservation only.

### Aquatics Specifics Protocols:

- Sanitized, watertight storage bins available for each pool lane reservation
- Water chemistry is maintained at higher levels of chlorine (3.0 PPM instead of 2.0 PPM)
- Electronic whistles from lifeguards and physical distancing.



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### **Indoor Swim Area Air Quality**

- The CDC guidance on operating indoor pools recommends “increasing introduction and circulation of outdoor air as much as possible.”
- All three recreation centers have dedicated Heat Recovery Units to condition the air in the pool spaces and provide large volumes of outside air. Indoor pools are designed in this manner to control condensation on windows and remove chloramines (aka “the chlorine smell) from the air.
- This air handling equipment for all three indoor pools provides the outside air necessary to exceed the CDC’s guidance of 1.2 air changes per hour by providing 4 to 6 air changes per hour (The air change per hour rate indicates how many times per hour the entire volume of the air in the natatorium is changed over. A higher number corresponds to better ventilation).