Updated March 22, 2021
DOH 333-255

Water Recreation Facility Occupancy Supplemental Guidance

Background

Different types of Water Recreation Facilities regulated under chapters 70.90 RCW, 246-260 WAC, and 246-262 WAC are allowed to open in different phases, according to the DOH guidance on reopening of Water Recreation Facilities. This is a supplement to the aforementioned document. This document may be updated in the future as the Governor's orders change or a new situation emerges.

Purpose

The purpose of this document is to guide facility managers to make safe educated decisions on how many people should be allowed at their facilities. It is important to consider each facility's unique challenges when making these decisions. Once completed, the facility manager should include this information in their COVID-19 response plans. Have it ready at the facility for administrative and training purposes as well as in the case the regulatory authority asks for this information.

Important Considerations

- The physical distancing requirement, along with wearing face coverings whenever required and possible, is particularly important for preventing the spread of the virus in all phases.
- Start with a conservative number of people and slowly adjust the number of people upwards to see how many people can comfortably be in the facility without violating the physical distancing requirement.
- This guidance is theoretical in nature, and the principles provided in this document should be applied carefully to reflect the true environment unique to your facility.

Occupancy Requirements for All Water Recreation Facilities except for Waterparks and Standalone Splash Parks (Phases 1 and 2)

During Phase 1 and Phase 2, the most restrictive of the following is the factor that governs how many people should be allowed in your facility at any given time:

- The total number of patrons (facility staff excluded) present within the facility at any given time must not exceed:
    - 50 people maximum.
    - The water surface area (square footage) of the pool plus the surface area of the perimeter deck divided by 162.

- All patrons are able to comfortably and reasonably practice six-foot minimum physical distancing at all times except for people from the same household.

Note: All of the above must be satisfied to be in compliance with the Governor's order and to protect the public from COVID-19. The physical distancing requirement shown above in bold is particularly important for preventing the spread of the virus.

Limiting the Number of People to 50 within the Facility

DOH recommends limiting the number of people within the facility to 50 (excluding facility staff). However, if you have a large facility (for example, a large city pool or a waterpark), limiting the number of people to 50 may be neither necessary for ensuring physical distancing nor reasonable because of the large size of the facility. In that case, work with the local health department and use the guidelines and formulas provided in the next section. It explains how the physical distancing requirement is applied to calculate the reasonable maximum occupancy for your facility. Work with the local health department to decide on a reasonable maximum occupancy specific to your facility. DOH can be available for consultation. There must be COVID-19 specific plans in place to ensure that people do not congregate in a concentrated area at all.

Ensuring Plenty of Space for Physical Distancing

Physical distancing (social distancing) between people who are not from the same household is thought to be one of the most effective ways to prevent the spread of COVID-19. How this can be implemented depends on the type of facility and the type of activity. Remember that facility staff are excluded from these calculations. See Appendix 1 for more information. The information provided below is advisory and theoretical in nature.

In the Water

There needs to be some "wiggle" space around each person to allow for easy physical distancing between them. If we imagine a bubble around each person with a 3-foot radius with a minimum of 3-foot wiggle space in all directions as they move between people, each person will need 162 square feet as shown below. According to this, maximum bather capacity for a pool should be:

$$Maximum\ bather\ capacity = Surface\ area\ of\ the\ pool\ (square\ feet) \div 162$$

Perimeter Deck

You are allowed to have patrons on the perimeter deck in addition to bathers in the water. Perimeter deck is also known as wet deck and it is the deck space immediately adjacent to the body of water, typically 4 to 6 feet wide around the perimeter of the body of water. No other areas of the deck are allowed to be included in this calculation during Phase 1 and Phase 2. Find the surface of the perimeter deck and use the following formula to calculate the maximum occupancy for your deck.

$$Maximum\ deck\ occupancy = Surface\ area\ of\ the\ perimeter\ deck\ (square\ feet) \div 162$$

Refer to Appendix 2 below for an example scenario.

Occupancy Requirements for All Water Recreation Facilities except for Waterparks and Standalone Splash Parks (Phase 3)

During Phase 3, the most restrictive of the following is the factor that governs how many people should be allowed in your facility at any given time:

- The total number of patrons (facility staff excluded) present within the facility at any given time must not exceed (does not apply to spas):
    - The water surface area (square footage) of the pool plus the surface area of all available pool deck divided by 72; and
    - The spectator area (square footage) divided by 36.
- 50% of the normal maximum occupancy if provided by the local building or fire department.
- All patrons are able to comfortably and reasonably practice six-foot minimum physical distancing at all times except for people from the same household.

Ensuring Space for Physical Distancing

In Phase 3, the requirement for physical distancing is loosened to allow for more people to occupy the facility, but physical distancing is still a requirement, and the following formula is used:

$$Maximum\ occupancy = Surface\ area\ of\ all\ water\ surfaces\ and\ all\ available\ pool\ decks \div 72$$

This much space allows patrons to pass by one another without breaking the physical distancing rule but there may be no "wiggle" space. See Appendix 3 for more information.

In the case of spectators, if they are seated and not moving around, they may not need as much space. The following formula can be used to calculate the maximum occupancy in the spectator seating area.

$$Maximum\ occupancy = Surface\ area\ of\ the\ spectator\ area \div 36$$

See Appendix 4 for an example scenario of a typical pool/spa combination.

See Appendix 5 for an example of a large competitive pool facility with spectator areas.

Phase 2 Occupancy Requirements for Waterparks

Waterparks are not allowed to open in Phase 1.

Maximum Occupancy: In Phase 2, the most restrictive of the following is the deciding factor for the maximum occupancy:

- 25% of the total waterpark capacity during a normal time.
- Square footage of patron accessible areas ÷ 486.
- All patrons are able to comfortably and reasonably practice six-foot minimum physical distancing at all times except for people from the same household.

Limiting the Number of People to 25% of the normal maximum occupancy

The normal maximum occupancy for waterparks may be determined by different factors such as:

- Sum of maximum bather load in each pool
- The number of restrooms available
- Local building and fire codes

Whatever the maximum occupancy set for a normal time is for your facility, do not exceed 25% (one fourth) of that number during Phase 2.

Ensuring Plenty of Space for Physical Distancing

Use the following formula to calculate the maximum occupancy:

$$Square\ footage\ of\ patron\ accessible\ areas\ \div 486$$

"Square footage of patron accessible areas" means the total area available for patrons to access within the waterpark. This includes:

- Bodies of water, all available pool decks, and grass areas meant for and frequently used by patrons.

This does not include:

- Equipment rooms, staff areas and rooms, gardens with plants, and any other areas not meant for patrons.

The above formula is intentionally designed to be protective during Phases 1 and 2 in order to minimize the possibility that the crowd congregates in any part of the facility either intentionally or unintentionally. See Appendix 6 for an example scenario.

Phase 3 Occupancy Requirements for Waterparks

Maximum Occupancy: In Phase 3, the most restrictive of the following is the deciding factor for the maximum occupancy:

- 50% of the total waterpark capacity during a normal time.
- Square footage of patron accessible areas ÷ 162.
- All patrons are able to comfortably and reasonably practice six-foot minimum physical distancing at all times except for people from the same household.

Phase 2 Occupancy Requirements for Standalone Splash Park

Standalone splash parks are not allowed to open in Phase 1.

Maximum Occupancy: In Phase 2, the most restrictive of the following is the deciding factor for the maximum occupancy:

- 25% of the total spray pool capacity during a normal time.
- Square footage of the spray pool ÷ 162.
- All patrons are able to comfortably and reasonably practice six-foot minimum physical distancing at all times except for people from the same household.

Limiting the Number of People to 25% of the normal maximum occupancy

The normal maximum occupancy may be determined by different factors such as:

- If it is a recirculated spray pool, the maximum daily bather load may be determined by the size of the surge tank and the frequency of draining and cleaning of the surge tank. From the maximum daily bather load, it is possible to calculate the maximum occupancy at any given time during the operation hours.
- You may have a facility operation plan that states what the maximum occupancy is.
- Local codes and ordinances may specify what the maximum occupancy is.

Ensuring Plenty of Space for Physical Distancing

Use the following formula to calculate the maximum occupancy:

$$Square\ footage\ of\ the\ Spray\ Pool\ \div 162$$

Square footage of the spray pool includes the wet deck (the part of the deck that is constantly wetted by the spray features) and its surrounding perimeter deck (4-foot wide deck).

See Appendix 7 for an example scenario.

Phase 3 Occupancy Requirements for Standalone Splash Park

Maximum Occupancy: In Phase 3, the most restrictive of the following is the deciding factor for the maximum occupancy:

- 50% of the total spray pool capacity during a normal time.
- Square footage of the spray pool ÷ 72.
- All patrons are able to comfortably and reasonably practice six-foot minimum physical distancing at all times except for people from the same household.

More COVID-19 Information and Resources

Stay up-to-date on the current COVID-19 situation in Washington, Governor Inslee's proclamations, symptoms, how it spreads, and how and when people should get tested. See our Frequently Asked Questions for more information.

A person's race/ethnicity or nationality does not, itself, put them at greater risk of COVID-19. However, data are revealing that communities of color are being disproportionately impacted by COVID-19. This is due to the effects of racism, and in particular, structural racism, that leaves some groups with fewer opportunities to protect themselves and their communities. Stigma will not help to fight the illness. Share only accurate information to keep rumors and misinformation from spreading.

- WA State Department of Health 2019 Novel Coronavirus Outbreak (COVID-19)
- WA State Coronavirus Response (COVID-19)
- Find Your Local Health Department or District
- CDC Coronavirus (COVID-19)
- Stigma Reduction Resources

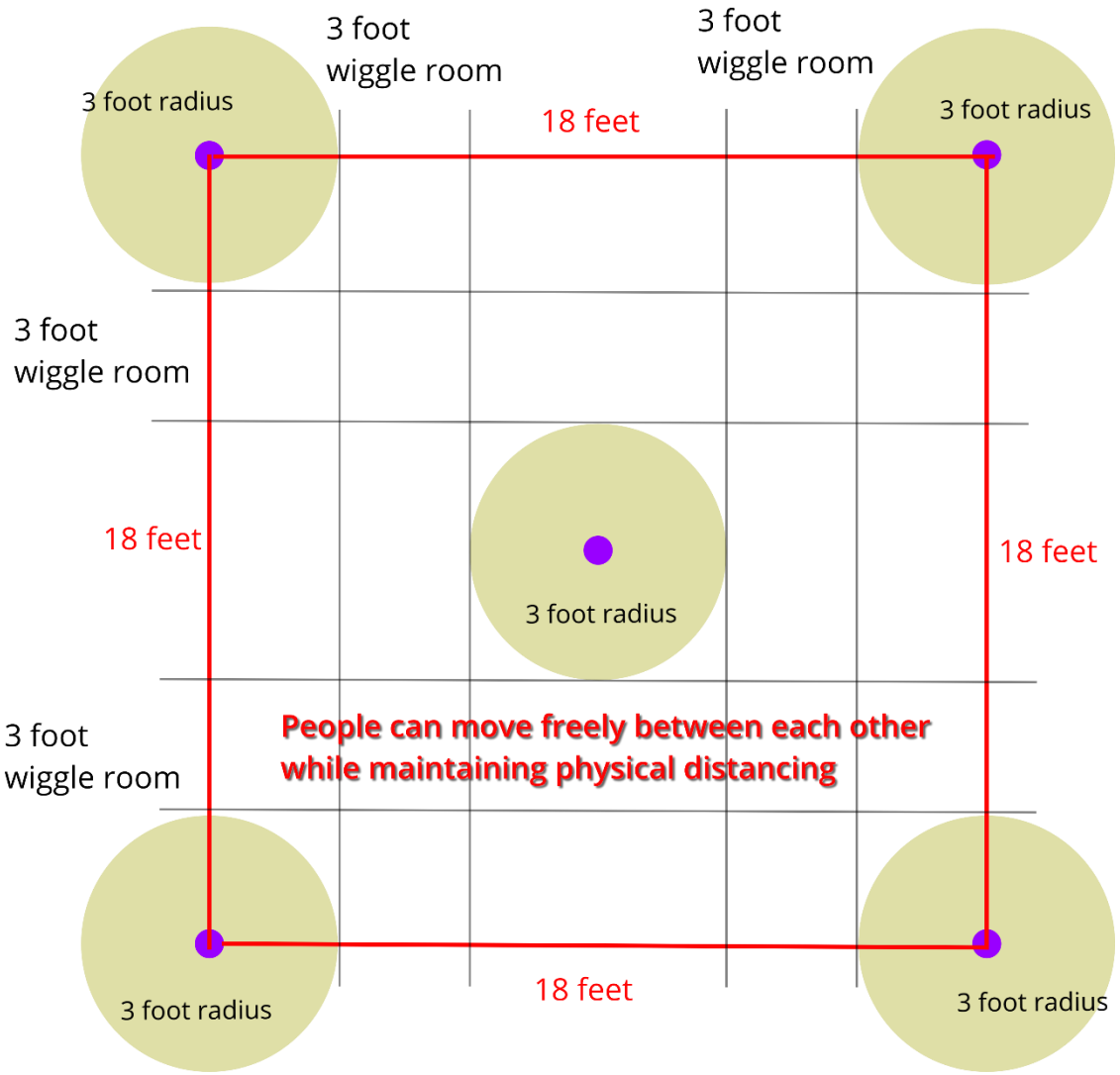
Have more questions? Call our COVID-19 Information hotline: **1-800-525-0127**

Monday – 6 a.m. to 10 p.m., Tuesday – Sunday and observed state holidays, 6 a.m. to 6 p.m. For interpretative services, **press #** when they answer and **say your language.** For questions about your own health, COVID-19 testing, or testing results, please contact a health care provider.

Appendix 1: Calculating maximum occupancy with wiggle space

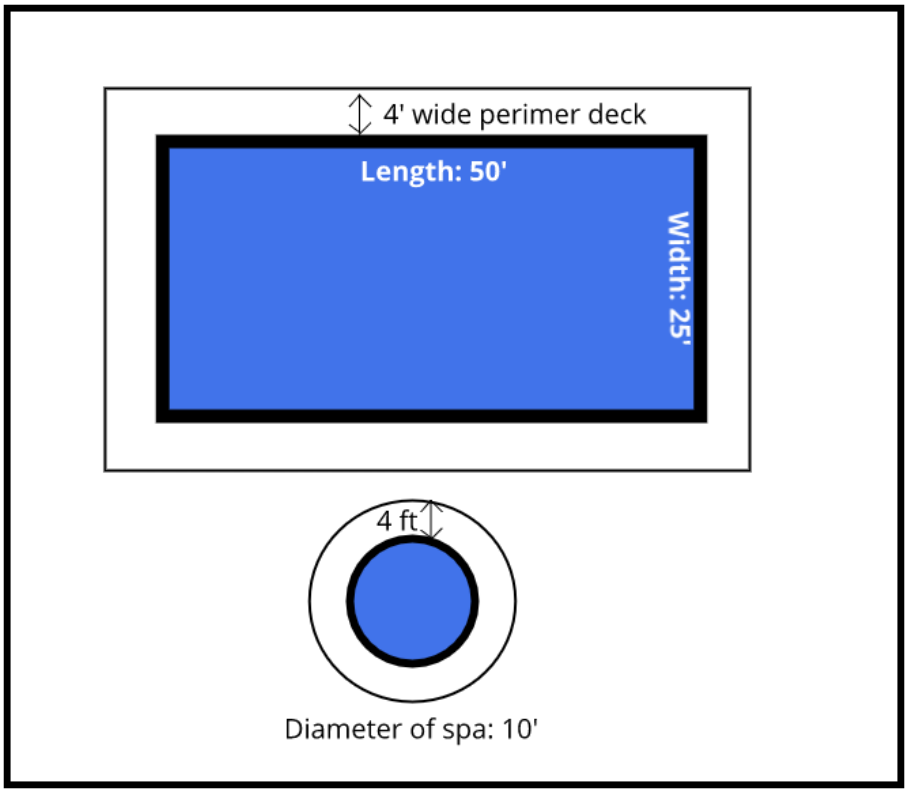
There needs to be wiggle space around each person to allow for easy physical distancing between bathers. If we imagine a bubble around each person with a 3-foot radius with a minimum of 3-foot wiggle space in all directions as they move between people, each person will need 162 square feet as shown below.

$$Maximum\ bather\ capacity = Surface\ area\ (square\ feet) \div 162$$



Appendix 2: Example Scenario (Typical pool/spa facility in Phases 1 and 2)

Provided below is a hypothetical scenario to further illustrate and clarify the guidelines in this document.



Pool maximum capacity:

- The water surface area of the pool is:

$$Pool\ water\ surface\ area = 50\ \times 25 = 1250\ square\ feet$$

- According to the "Ensuring Plenty of Space for Physical Distancing" criterion, the maximum bather load for this pool is:

$$Maximum\ bather\ capacity = 1250 \div 162 = 7.71\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number\text{: } \mathbf{7\ people\ maximum}$$

- The perimeter deck surface area is:

$$Perimeter\ deck\ surface\ area = 58\ \times 33 - 1250 = 664\ square\ feet$$

- According to the "Ensuring Plenty of Space for Physical Distancing" criterion, the maximum deck occupancy for this perimeter deck is:

$$Maximum\ deck\ occupancy = 664 \div 162 = 4.1\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number\text{: } \mathbf{4\ people\ maximum}$$

Spa Maximum capacity:

- The water surface area of the spa is:

$$Spa\ water\ surface\ area = 5\ \times 5\ \times 3.14 = 78.5\ square\ feet$$

- According to the "Ensuring Plenty of Space for Physical Distancing" criterion, the maximum bather load for this spa is:

$$Maximum\ spa\ occupancy = 78.5\ \div 162 = 0.48\ people$$

If it is less than one, you can round this up to ***1 person maximum****.

*Most spas are smaller than 162 square feet in water surface area, and that will lead to the maximum occupancy of less than one person. If this happens, it is permissible to have one person in the spa. If the spa's water surface area is 162 square feet or greater, follow the formula and round down to the closest whole number.

- The perimeter deck surface area is:

$$Perimeter\ deck\ surface\ area = 9\ \times 9\ \times 3.14 - 78.5 = 175.84\ square\ feet$$

- According to the "Ensuring Plenty of Space for Physical Distancing" criterion, the maximum deck occupancy for this perimeter deck is:

$$Maximum\ deck\ occupancy = 175.84 \div 162 = 1.09\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number: \mathbf{1\ person\ maximum}$$

Total theoretical occupancy:

- The total theoretical occupancy is the sum of the all numbers above:

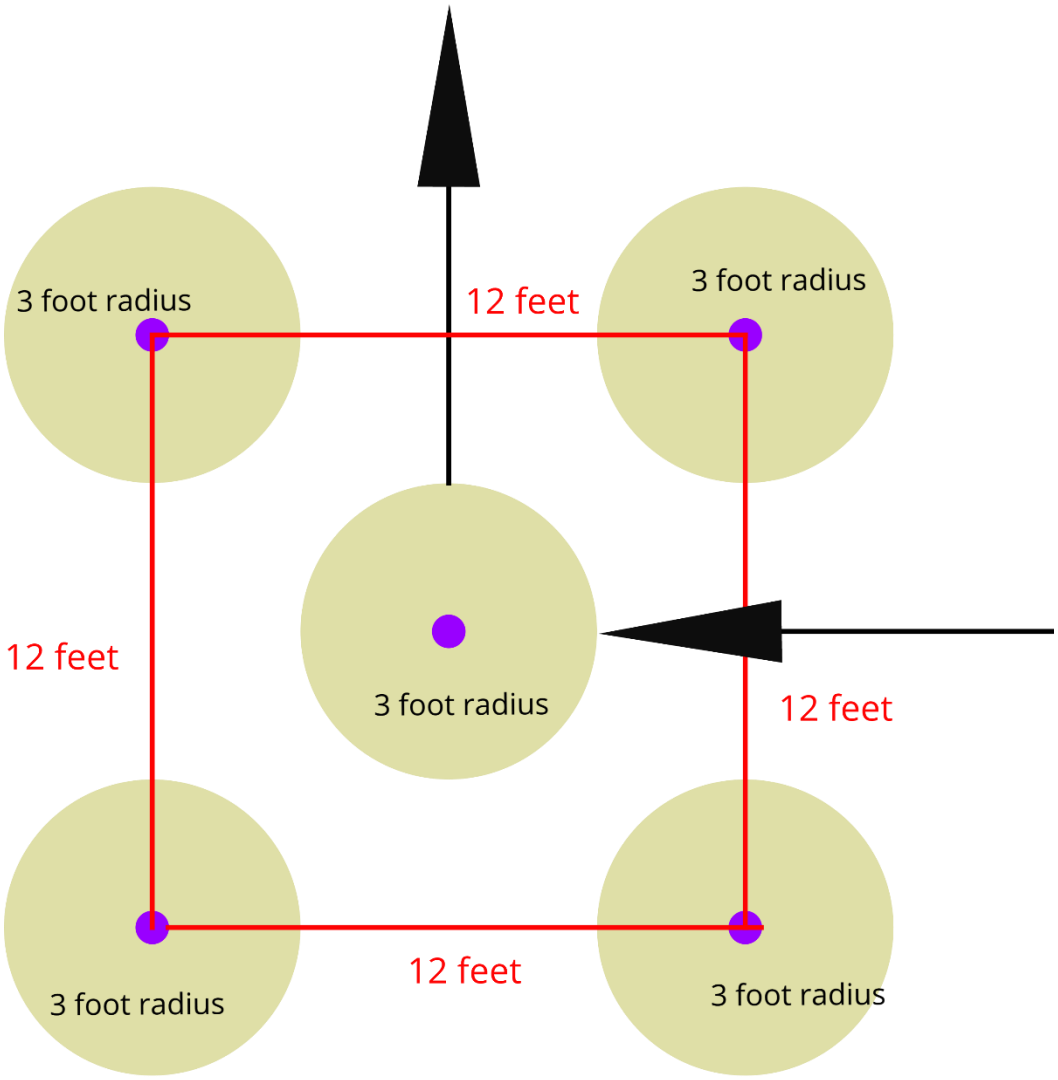
$$Total\ theoretical\ occupancy = 7 + 4 + 1 + 1 = \mathbf{13\ people\ maximum}$$

- In this case, the total did not exceed 50 people. If your calculations lead to a total maximum occupancy exceeding 50, consult with the local health department to agree on a reasonable number. If the local health department is not available for consultation, it may be best to limit the number to 50 people total.
- It is up to the facility owner and manager to encourage both patrons and staff to practice physical distancing at all times between people from different households.

Appendix 3: Calculating maximum occupancy without wiggle space

If we imagine a bubble around each person with a 3-foot radius, and say that the bubbles must not overlap as people move between each other, each person will need 72 square feet with no wiggle space as shown below. According to this, maximum bather capacity is:

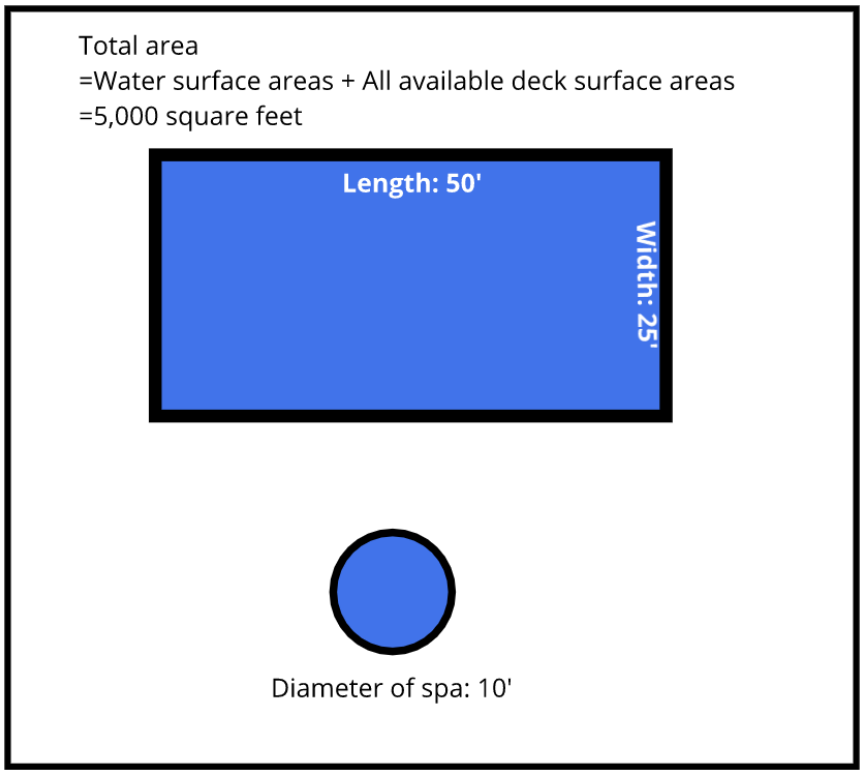
$$Maximum\ bather\ capacity = Surface\ area\ of\ the\ pool\ (square\ feet) \div 72$$



People can move between each other while maintaining physical distancing

Appendix 4: Example Scenario (Typical pool/spa facility in Phase 3)

Provided below is a hypothetical scenario to further illustrate and clarify the guidelines in this document.



Available pool deck space plus water surfaces

The sum of all available pool deck areas and water surface areas combined is:

$$5{,}000\ square\ feet$$

According to the physical distancing criteria for Phase 3, the total occupancy during Phase 3 for this facility is:

$$Maximum\ occupancy = 5{,}000\ \div 72 = 69.44\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number: \mathbf{69\ people\ total}$$

Depending on the size of deck available, this number may be higher than 50% of the maximum occupancy limit during normal times provided by the local building department or fire department. If that is the case, do not go over 50% of the maximum occupancy limit during normal times.

Pool maximum capacity:

- The water surface area of the pool is:

$$Pool\ water\ surface\ area = 50\ \times 25 = 1250\ square\ feet$$

- According to the physical distancing criterion, the maximum bather load for this pool is:

$$Maximum\ bather\ capacity = 1250 \div 72 = 17.36\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number: \mathbf{17\ \boldsymbol{people\ maximum}}$$

Spa Maximum capacity:

- If the maximum bather load of the spa during normal times is known, use **50%** of that as the maximum occupancy during Phase 3. The bather load is often shown on the spa's user rule on the wall.

- If the maximum bather load of the spa during normal times is not known, use the following formula.

$$\underline{Spa's\ water\ surface\ area\ \div 36}$$

  - The water surface area of the spa is:

$$Spa\ water\ surface\ area = 5\ \times 5\ \times 3.14 = 78.5\ square\ feet$$

  - According to the formula above, the maximum occupancy for this spa is:

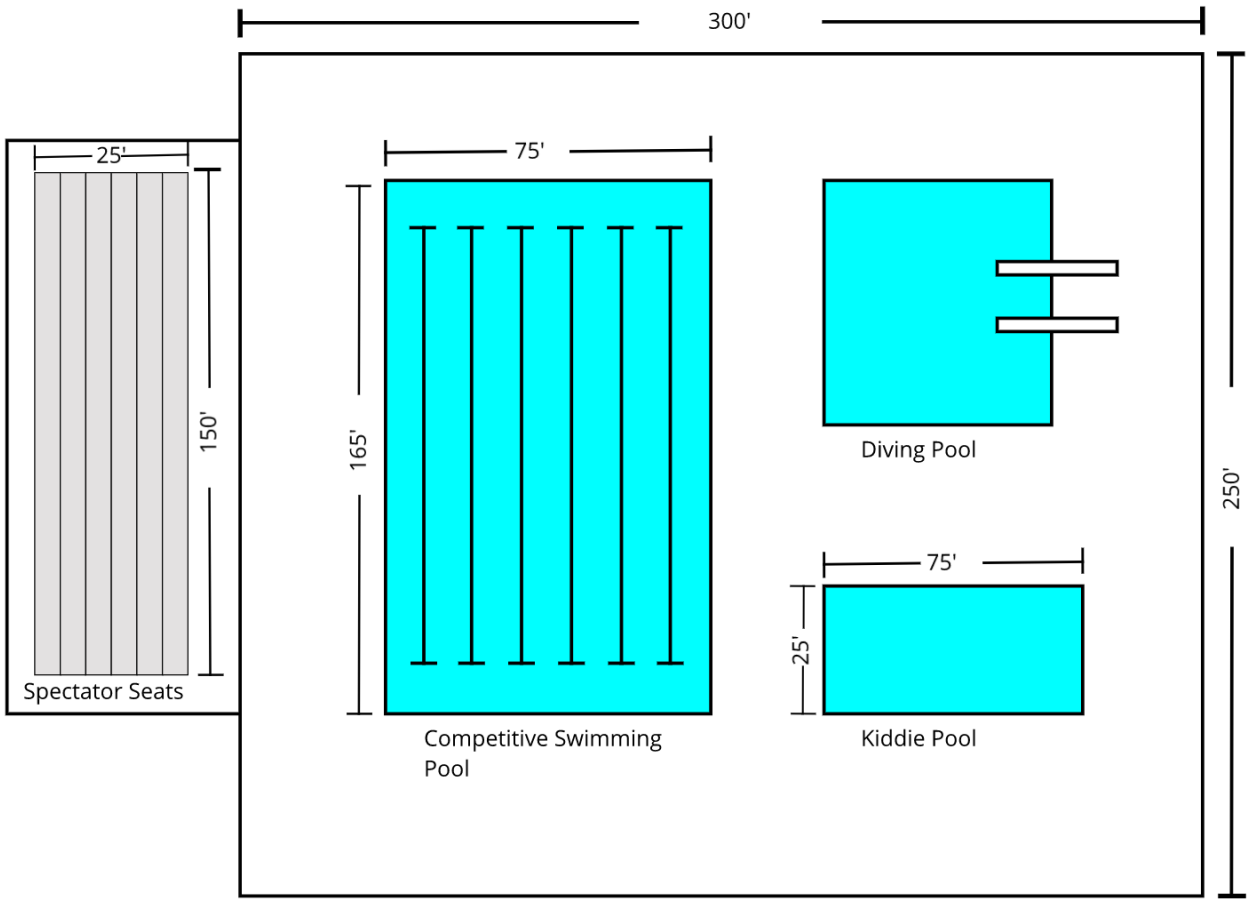
$$Maximum\ spa\ occupancy = 78.5\ \div 36 = 2.18\ people$$

    Round down the closest whole number: ***2 people maximum***.

- In either case, people must be able to comfortably and reasonably physically distance from one another.

Appendix 5: Example Scenario (Large Competitive Pool Facility with Spectator Areas in Phase 3)

Provided below is a hypothetical scenario to further illustrate and clarify the guidelines in this document.



<u>Pool Area (pools and decks) Occupancy:</u>

In the above example, the total area of the pool facility (excluding the spectator area) is:

$$300 \times 250 = 75{,}000\ square\ feet$$

Then, the total number of people allowed to be within the pool facility is:

$$75{,}000 \div 72 = 1{,}041.67$$

$$Round\ this\ down\ to\ the\ closest\ whole\ number: \mathbf{1{,}041\ people\ maximum}$$

- Remember that, for indoor facilities, the maximum is 200 people.
- This number may be higher than 50% of the maximum occupancy at your facility during normal times provided by your local building department or fire department depending on the size of the deck space available. If that is the case, do not go over 50% of the maximum occupancy for normal times.

Spectator Area Occupancy:

In the above example, the area available for spectator seating is:

$$25 \times 150 = 3750\ square\ feet$$

According to the formula for spectator areas, the maximum number of spectators is:

$$3{,}750 \div 36 = 104.2\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number: \mathbf{104\ spectators\ maximum}$$

This means that the total number of people allowed in this facility is:

$$1{,}041 + 104 = \mathbf{1{,}145\ people\ maximum}$$

- Remember that, for indoor facilities, the maximum is 400 people.
- Again, if this number is greater than 50% of the maximum occupancy during normal times, then do not go over 50% of the maximum occupancy during normal times.

Competitive Swimming Pool Maximum Occupancy:

The surface area of the competitive swimming pool is:

$$Surface\ area = 75 \times 165 = 12{,}375\ square\ feet$$

According to the formula for pools, the maximum occupancy in the pool is:

$$12{,}375 \div 72 = 171.9\ people$$
$$Round\ down\ to\ the\ closest\ whole\ number: \mathbf{171\ people\ maximum}$$

Kiddie Pool Maximum Occupancy:

The surface area of the Kiddie Pool is:

$$75 \times 25 = 1875\ square\ feet$$

According to the formula for pools, the maximum occupancy in the pool is:

$$1{,}875 \div 72 = 26.04$$
$$Round\ down\ to\ the\ closest\ whole\ number: \mathbf{26\ people\ maximum}$$

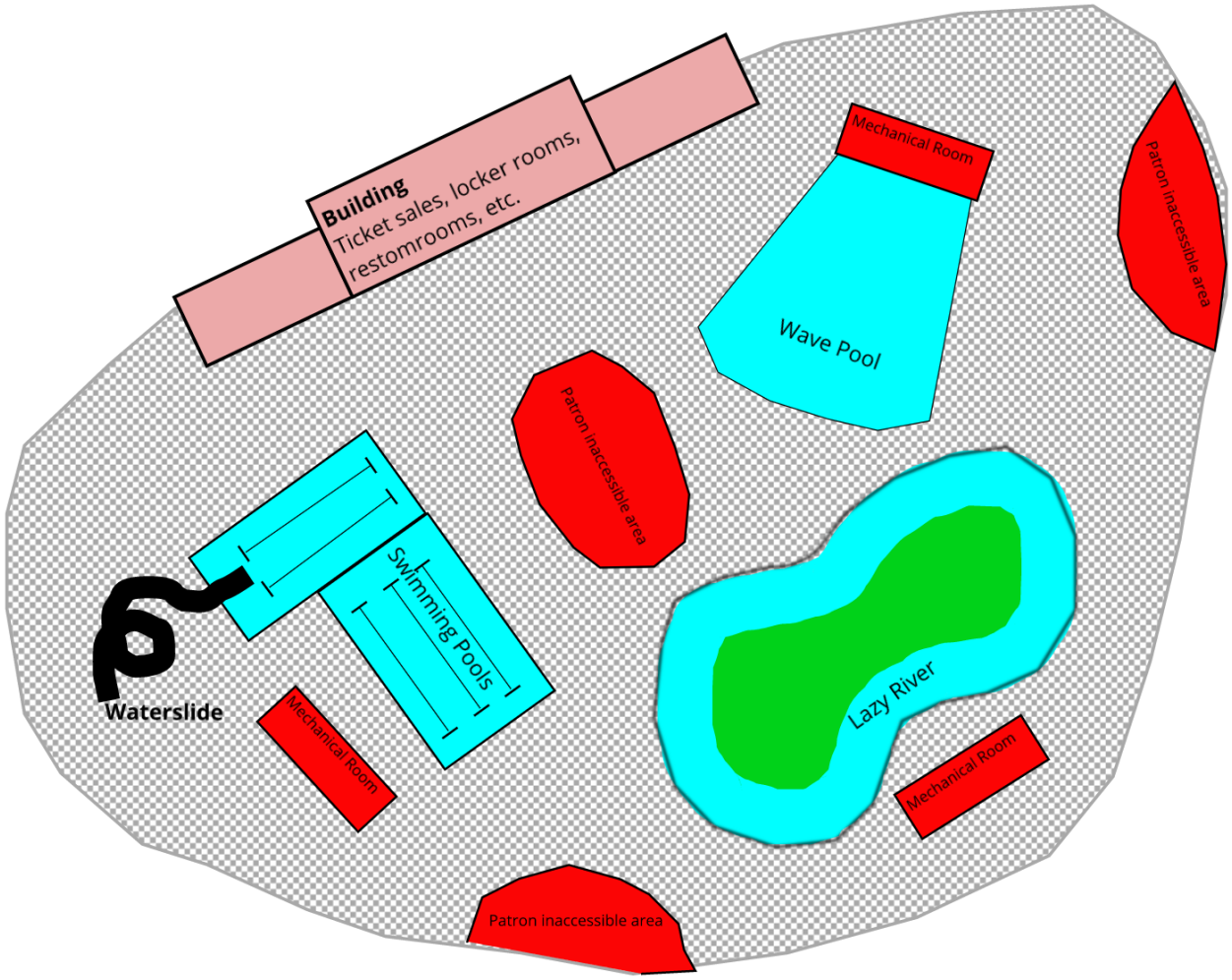
Diving Pool Maximum Occupancy:

If the diving pool is used for diving activities, the surface area of the pool does not determine the maximum bather load for that pool, but the safety plan does. Typically, divers cannot enter the pool until the people who dove into the pool before them exit the pool.

Appendix 6: Example Scenario (Waterpark in Phase 2)

Below diagram shows a hypothetical waterpark. The grey shaded area inside the facility enclosure has 200,000 square feet of space. The red areas are not accessible to patrons, and they have a combined area of 20,000 square feet.

- The total area within the waterpark is 200,000 square feet
- Total areas that are <u>not</u> accessible to patrons or <u>not</u> meant for patrons within the waterpark (equipment rooms, staff-only areas, gardens, etc.) are 20,000 square feet



Then the square footage of patron accessible areas is 200,000 - 20,000 = 180,000 square feet.

Following the formula provided above, the maximum occupancy for this waterpark is:

$$Square\ footage\ of\ patron\ accessible\ areas\ \div 486$$

$$= 180{,}000\ \div 486 = \mathbf{370\ People}$$

Appendix 7: Example Scenario (Standalone Splash Park in Phase 2)

Below diagram shows a spray pool that is in a circle shape. The inner circle in blue is the wet deck, which gets constantly wetted by the spray features and has a radius of 16 feet. The outer circle in grey is the perimeter deck that is 4 feet wide. In this scenario, the square footage of this spray pool is:

$$Square\ footage\ of\ the\ spray\ pool = (16 + 4)\ \times (16 + 4) \times 3.14$$
$$= 20\ \times 20\ \times 3.14$$
$$= 1{,}256\ square\ feet$$

Then the maximum occupancy for this spray pool is:

$$Maximum\ occupancy = 1256\ \div 162 = 7.75\ people$$
$$= Round\ down\ to\ \mathbf{7\ people}$$