

# Pool and Waterfront Guidelines for the Province of New Brunswick

Rev: September 2010



## PREAMBLE

These guidelines are provided as a resource to give direction to aquatic facility operators based on Canadian aquatic industry standards and best practices. The operator's task is to take these guidelines and apply or adapt them to their operation (pool or waterfront) in order to maximize safety. Two manuals, produced by and available at the Lifesaving Society will provide additional information about the requirements for safe operation of public pools and waterfronts.

- The Canadian Lifesaving Manual
- Alert: Lifeguarding in Action

The Lifesaving Society is Canada's lifeguarding expert. The Society works to prevent drowning and water-related injury through its training programs. The Society establishes aquatic safety standards and guidelines and consults widely on aquatic safety issues for aquatic facility owners and operators, governments, agencies and the judicial system. The scope of the Society research into public safety and risk management practices includes research and real operational experience from across Canada and around the world. In turn, the Society's expertise is shared internationally with the Royal Life Saving Society Branches throughout the Commonwealth and with the International Life Saving Federation.

This document provides owners of public aquatic facilities a set of clear recommendations from the Lifesaving Society for the safe operation of their facilities. This information is particularly important to New Brunswick pool operators and owners because of the lack of Regulations. The lack of Regulations related to public aquatic facility operations does not lessen the responsibility of owners and operators to maximize safety and meet accepted industry standards.

The Lifesaving Society recognizes that the recommendations provided in this document are not the only solutions that public aquatic facility owners can use to provide a safe environment for their customers. The Lifesaving Society also recognizes that each public aquatic facility has unique features. No single document can address every situation and need. In situations where owners implement alternative safety measures, the Society recommends that they thoroughly evaluate and document these measures. Contact the Lifesaving Society for assistance to understand, interpret, and implement the recommendations in the Guidelines.

---

Published by the Royal Lifesaving Society Canada  
55 Whiting Rd. unit 34, Fredericton NB, E3B 5Y5  
Email: [info@lifesavingnb.ca](mailto:info@lifesavingnb.ca)  
Website: [www.lifesavingnb.ca](http://www.lifesavingnb.ca)  
Copyright, 2010 by the Royal Lifesaving Society  
New Brunswick Branch.  
1<sup>st</sup> Printing, September 2010

---

**Table of Contents**

PREAMBLE..... 1

DEFINITIONS ..... 4

RISK MANAGEMENT ..... 6

    Who is Responsible? ..... 6

    Prevention of Risk ..... 6

OPERATING PROCEDURES ..... 7

    Bather Loads..... 7

    Lifeguard Ratios ..... 8

    Instructor to Student Ratios ..... 8

    Record Keeping/ Documentation ..... 9

PERSONNEL AND SUPERVISION ..... 10

    Qualifications ..... 10

    Training and Orientation ..... 10

    Supervision Systems ..... 11

    Factors Effecting Staffing..... 12

UNSCHEDULED CLOSINGS ..... 13

EMERGENCY PROCEDURES ..... 14

EQUIPMENT ..... 14

    First Aid Kit..... 14

    Lifesaving/ Rescue equipment ..... 14

SIGNAGE AND MARKINGS..... 16

    All Facilities ..... 16

    Pool Facilities ..... 16

    Waterfronts..... 16

FACILITY DESIGN AND SAFETY ..... 17

    Pool Facilities ..... 17

    Waterfront ..... 17

SPECIALIZED FACILITY EQUIPMENT ..... 18

    Waterslides ..... 18

Wave Action Pools .....	18
Saunas.....	19
Tarzan Ropes.....	19
Diving Boards /Rafts .....	19
Toys.....	19
REGULAR FACILITY INSPECTIONS .....	20
WATER QUALITY .....	21
Pool Facilities .....	21
Water Clarity .....	21
Water Chemistry.....	21
Pool Fouling .....	22
Waterfront .....	22
Waterfront Fouling.....	22
UNSUPERVIZED WATER FRONTS .....	23
Emergency equipment .....	23
Emergency Telephone.....	23
Group use of Unsupervised Waterfront.....	23
Signage .....	23
Staff .....	24
Uniforms.....	24
Hazard Markings .....	24

## DEFINITIONS

<i>Public Pool</i>	A swimming pool that admits members of the general public.
<i>Wave Action Pool</i>	A swimming pool with a mechanism to induce a wave action.
<i>Waterfront</i>	An area designated for swimming and shoreline recreation. The waterfront includes both the beach and the swimming area.
<i>Supervised Waterfront</i>	A Waterfront with Lifeguards on duty for regular scheduled periods.
<i>Unsupervised Waterfront</i>	A Waterfront the does not have Lifeguards on duty at anytime.
<i>Owner</i>	A person or agency who owns a piece of land with an adjacent body of water and designates that land as a waterfront.
<i>Operator</i>	A person designated by the owner of a waterfront to oversee the operations of a waterfront.
<i>Lifeguard</i>	A person, 16 years of age or older, holding current National Lifeguard Service in the appropriate option, Standard First Aid, and CPR Certificates, who is designated by the operator to safeguard swimmers.
<i>Assistant Lifeguard</i>	A person, 15 years of age or older, holding current Bronze Cross , Standard First Aid, and CPR Certificates, who is designated by the operator to assist qualified lifeguards to safeguard swimmers
<i>Swimming Area</i>	The area designated for public supervised swimming.
<i>Still water</i>	Lakes, ponds, Quarry's where there is no moving water or tidal change
<i>Open water</i>	Rivers, ocean front
<i>Current Award</i>	A Lifeguard award is current for 2 years from the date of certification, and a First Aid award is current for 3 years from the date of certification.
<i>Bather</i>	A person who enters a swimming area for the purpose of swimming, diving, or recreation purposes.

*Instructor* A person appointed by the owner or operator to teach specific skills to one or more persons in a swimming area.

*Duties and Responsibilities;*

Duties and responsibilities will be outlined in the policy and procedure manual supplied by the facility of employment

*Uniform:* Lifeguards will be so attired that they are easily and quickly identifiable to the public.

*Training;* Orientation: Must include a facility tour Review of staff manual outlining all policies and procedures

In Service: periodically offered though out the term of employment

*Staff manual* Available to every facility staff and volunteer  
Facility specific  
Must include all facility policies and procedures

*Manager* person who is responsible for the supervision of the operation of he pool and auxiliary facilities

*Owner/Operator* Person or agency that owns the facilitate or land providing access to the swimming area.

## **RISK MANAGEMENT**

### Who is Responsible?

Ultimately, the owner of a public aquatic facility is responsible for the safe operation of the facility. The responsibility for the operation of the facility may be delegated to a Facility Manager or Operator. This responsibility may be further delegated to individuals such as Supervisors or Lifeguards who may be left in charge of the facility if it is a supervised public pool. When the owner or manager is not present, the "in-charge" person, regardless of title, assumes full responsibility for the safe operation of the facility.

This document outlines the Lifesaving Society's recommendations for minimum safety requirements for public pools. Safety shall be the primary concern of owners and managers. All facility staff members are encouraged to go beyond the minimum requirements in their mandate to provide a safe environment. This means practicing risk management: working diligently to prevent emergencies, but also responding to them quickly and efficiently if they do happen.

### Prevention of Risk

Hire staff with the appropriate current qualifications and have them trained in the facilities emergency procedures

Maintain the facility according to the site management guidelines included in this document

Safety inspections should be conducted annually by an outside independent auditor

## OPERATING PROCEDURES

### Bather Loads

#### Pools and Recreational Facility

The maximum bathing load in a swimming pool or other water recreational facility shall not exceed the maximum design bathing load for the water recirculation system for that facility or as determined by the following formula:

$$\text{maximum bather load} = \frac{D}{2.5} + \frac{S}{1.4}$$

where,

D = the area in square metres of the part of the pool that is deeper than 1.35 metres; and

S = the area in square metres of the part of the pool that is 1.35 metres in depth or shallower.

#### Wave Action Pool

wave action pool shall ensure that the total number of bathers permitted at any instant on the deck and in the pool does not exceed the maximum bather load as determined by the following formula:

$$\text{maximum bather load} = \frac{D}{2.5} + \frac{S}{1.1}$$

where,

D = the area in square metres of the part of the pool that is deeper than one metre when no waves are being induced; and

S = the area in square metres of the part of the pool that is one metre in depth or shallower when no waves are being induced.

#### Whirlpools

Maximum bather load in a whirlpool shall not exceed one person for each square meter of water surface or the maximum design bather load for the water recirculation system whichever is less. Whirlpools with elevated water temperatures, health and safety issues as provided by the manufacturer should be clearly posted at the entrance to the whirlpool. The manager shall be responsible for the continuous supervision of bathers.

**Wading Pools**

Number of wading pool users at any one time should not exceed one person for each 1.5m<sup>2</sup> of water surface area. The manager shall be responsible for the continuous supervision of bathers.

Lifeguard Ratios

The following Chart outlines the recommended minimum number of Lifeguards required to provide safe levels of supervision to the average environment.

NOTE: In special circumstances, example: the pool design, equipment usage or ability of patrons, tides, currents or additional hazards may require more lifeguards to be on duty to maintain a safe level of supervision See section on Factors Effecting Staffing later in this document.

Number of bathers on the deck and in the pool		On Beach and in Water.	Minimum number of lifeguards / Assistant Lifeguards on active duty (Assistant lifeguard /Lifeguard Ratio max 2:1)
Wave Action Pool	Standard Rectangular Pool	Waterfront	
0	0-30	0	1
0	31-75	0-250	2
0	76-100	251-550	3
0 - 100	101-175	551-950	4
101 - 250	176-200	951-1300	5
251 - 400	201-300	+200	6
401 - 550	+100	+200	7
551 - 700	+100	+200	8
701 - 850	+100	+200	9
851 - 1000	+100	+200	10
1000+	+100	+200	11

Instructor to Student Ratios

These are Instructor to Student Ratios based on already present Instructional Programs:

- Lifesaving Society of Canada: 1:12 NLS program, 1:15 for pre-requisite levels, Swim for Life as recommended maximum ratios set by the Lifesaving Society.
- Canadian Red Cross Water Safety Programs: as per recommended maximum ratios as set by the Canadian Red Cross.

- YMCA: Has no set ratios
- Non –affiliate programs such as “school, learn to swim programs” should try to adhere to a maximum ratio of 1:15.

There are other Aquatic Programs available such as Dive Canada, Sears I can swim, and Syncro Canada. Contact the governing bodies for more information.

### Record Keeping/ Documentation

The operator must keep the following records for at least a seven-year period:

#### Pool

- Total number of bathers per swim/per day
- All emergencies and rescues
- Minor And Major First Aid
- Minor And Major Water Rescues
- Patron And Staff Incident Forms
- Shift Report Forms
- Fatality Reports
- Any and all other emergency incidents
- Equipment checklist
- Daily check of facility rescue and first aid equipment
- Test buttons were activated for ground fault currents
- Alarms and emergency switches checked
- Telephone for emergency use was checked
- A photocopy of required staff qualifications.

#### Waterfront

The operator must keep the following records for at least a seven-year period:

- Incident Reports
- Daily Beach Reports ,ie. Bather Loads, weather, interventions, staffing levels etc.
- First Aid reports
- Fatality reports
- Accidents
- Equipment check list
- Safety/site inspection
- Rescue report
- Seasonal year end report
- Any and all necessary documents pertaining to the municipality, public or private waterfront site.

## **PERSONNEL AND SUPERVISION**

### Qualifications

Pool Lifeguard	Minimum Age 16yrs Valid NLS – Pool Option Valid CPR level C Valid Standard First Aid
Assistant Lifeguard	Minimum Age 15yrs Valid Bronze Cross Valid CPR level C Valid Workplace Standard First Aid
Waterfront Lifeguard	Minimum Age 16yrs Valid NLS waterfront option Valid Standard First Aid Valid CPR level C
Water Slide Attendant	Minimum Age 15yrs Valid Bronze Cross Valid CPR level C Valid Standard First Aid
Wave Action Pool Lifeguard	Minimum Age 16yrs Valid NLS Waterpark option Valid Standard First Aid Valid CPR level C
Instructor Qualifications:	Given the basis of the Affiliated Aquatic Facility, programs offered will dictate the necessary required qualifications for instructors of their program.

\*\*All awards for the above mentioned qualifications must be current and up to date to be considered valid.

### Training and Orientation

- Hire staff with the appropriate current qualifications and have them trained in the facilities emergency procedures.
- Provide regular In-Service Training to maintain skills, team building and refresh knowledge of policies and procedures.

## Supervision Systems

- Minimize Distractions:** The primary duty of lifeguards is supervision. All efforts shall be made to minimize distractions that may interfere with this duty. Short conversations between lifeguards and bathers are necessary for public education about safe use of the facility and are key injury prevention practices. Longer conversations are not recommended because they interfere with effective supervision. Assigning duties such as pool maintenance, while on active duty, which may distract the lifeguard, is not recommended.
- Lifeguard Positioning:** The supervision position(s) of lifeguards shall be designed to eliminate blind spots in the swimming area. It must be possible for the lifeguard team to observe all bathers in the swimming area. Facility management and staff shall analyze the swimming area and implement systems that provide coverage of blind spots. These systems might include the use of elevated lifeguard stations, walking lifeguard patrols, or the use of observation tools such as large mirrors or video cameras and monitors. A system shall be implemented to provide regular observation of off-deck areas such as changerooms, saunas and steamrooms, exercise facilities, etc.
- Vigilance:** Lifeguarding is a vigilance task. Every effort shall be made to keep the lifeguard alert and focused on supervision. Regular rotation between stations and regular breaks from the vigilance task are required. If two or more lifeguards are on duty on deck, they should rotate lifeguard stations every 15-30 minutes. The Lifesaving Society recommends that lifeguards should be provided with a minimum 15-minute break from the supervision task every 2 hours. During this break, lifeguards may be required to perform other duties such as maintenance.
- Scanning:** All lifeguards shall be able to continuously scan their area of responsibility. Short interruptions, which are designed to prevent injury (e.g. safety education), are acceptable.
- Lifeguard Identification:** All lifeguards shall wear a uniform that permits them to be easily and quickly identified. The purposes of the lifeguard uniform is to make the lifeguards stand out so that they are readily distinguished from bathers and spectators, and can be quickly contacted in case of an emergency or when assistance is required.

**Communication Systems:** A system for lifeguards to communicate with the public must be established. For a small facility, this may be as simple as a whistle or air horn and the lifeguard's voice. For larger facilities, a public address system or at a waterfront a lifeguard in a boat may be required.

A system must be established for lifeguards to communicate amongst themselves. For a small facility this may be as simple as hand signals, whereas large waterfronts may require two-way radios.

A method for lifeguards to contact Emergency Medical Services (EMS) must be located in close proximity to the waterfront and must be tested daily.

Flagging system to indicated supervision levels at waterfronts.

Where a single lifeguard is patrolling the supervised area, a method of rapid communication between the lifeguard and backup personnel must be established.

### Factors Effecting Staffing

The required minimum number of lifeguards is one. At least one backup person trained in emergency procedures is recommended. Backup personnel must be trained and within verbal call to assist with the delivery of emergency procedures.

A greater number of lifeguards is desirable, and in some situations, is required to safely supervise the swimming area. When establishing the number of lifeguards required, the operator must take several factors into account:

- Lifeguard Requirements
- Scanning: a lifeguard should be able to scan each individual in the designated area within 15-20 seconds.

#### Pool Specific

- Pool design features that impact surveillance sight- lines
- Special Activities or Groups ie- special needs groups, large groups of non-swimmers

#### Waterfront Specific

- Size of swimming area: consider how long it would take a lifeguard to reach a distressed swimmer taking into account both the length of shoreline and the distance from shore to outer edge of swimming area.
- Potential dangers such as drop-offs, and bottom conditions. It may be necessary to position lifeguards by high-risk areas.

- Geographical features, such as curves or bends in shoreline affecting the lifeguards' view.
- Position of the lifeguards
- Currents and water conditions
- Availability and placement of equipment.
- Backup response time: additional personnel trained in first aid may be required to provide victim care.
- Swimmer Activities
- Number of swimmers
- Concentration/distribution of bather load
- Type of activity
- Special activities and groups
- Changing weather and water conditions
- Experience and training of lifeguards

### **UNSCHEDULED CLOSINGS**

Facilities are recommended to close when the following situations occur.

- Unaccepted water quality
- Emergencies Resulting in decreased safety
- Dangerous Weather
- Shortage of staff

When closed due to the above situations facilities may operate as dictated by the situation and the operators policy and procedure

## **EMERGENCY PROCEDURES**

Each facility must have documented emergency procedures available to all staff and volunteers. Procedures will be set forth as per the facility layout and design.

Operator must have a policy and procedure manual in place

Critical Incident Stress Management (CISM) must be addressed

Emergency procedures must include the following:

- Minor Rescues
- Major Rescues
- First Aid – Minor and Major
- Fire Evacuation
- Police, theft , assault, bomb threats etc.
- Missing Persons
- Water Quality Issues

Additional Emergency Procedures for Pools

- Chemical Emergencies
- Emergency Shut off Procedures
- Power Outages Procedures

## **EQUIPMENT**

### First Aid Kit

Facilities must provide fully stocked first aid kits as required by the New Brunswick Occupational Health and Safety Commission.

### Lifesaving/ Rescue equipment

Lifesaving devices are to be positioned in conspicuous places and readily available for use at all times. The following are recommended devices and equipment:

Pool Facility:

- Whistles
- First Aid Kits
- Blankets
- Reaching Poles
- Spine boards with Head Immobilizer
- Buoyant Throwing Assist
- Oxygen
- AED

### Waterfront

Each waterfront must have an assortment of rescue equipment available for use in emergency situations. This rescue equipment must be appropriate for the supervised environment and may include:

- First Aid Kits
- Whistles
- Blankets
- Spine boards with Head Immobilizer
- buoyant throwing assist with attached 15-meter line
- rescue cans and tubes
- throw bag
- skin diving equipment
- wide angle binoculars
- Paddle Board
- Communication Device

## **SIGNAGE AND MARKINGS**

Signs informing swimmers of waterfront rules and policies must be located at all access points. Minimum information to be included:

### All Facilities

- Where possible, universal signs and symbols should be used (e.g. taking into account those who cannot read or speak English/French).
- Admission policy clearly posted at entrance to facility
- House rules should be clearly posted in areas upon entrance to the facility as well as in a conspicuous location near the swimming area.
- Diving Restrictions
- Maximum Swimmer/Bather Loads
- Location of Telephone
- Location of First Aid stations.
- Rules clearly indicate which activities are prohibited and permitted.
- Specific Equipment usage: signs should be posted in close proximity to designated equipment regarding warnings and appropriate usage
- Signs indicating emergency signals must be posted
- Use of pictorial signs when possible around the pool deck.
- When at all possible rules should be available in both official languages

### Pool Facilities

- Depth markings should be clearly displayed around the pool perimeter
- Mark Deepest Point, Shallowest Point and Drop off Point
- Bathers should not be permitted to enter the pool water until they have taken a shower

### Waterfronts

- Supervision status (e.g. is a lifeguard on duty, is the waterfront an unsupervised waterfront?)
- Is the waterfront open or closed?
- Water conditions
- Location of Supervised area
- Hazardous areas should be clearly marked including
  - ❖ Drop offs
  - ❖ Rocks
  - ❖ Shallow water
  - ❖ Currents/Tides
  - ❖ Underwater objects

Specific warning signs must be located in highly visible locations near the hazard it is identifying.

## **FACILITY DESIGN AND SAFETY**

### Pool Facilities

Public Swimming Pool designs must be designed according to Federal, Provincial, Municipal and industrial building codes.

The Lifesaving Society strongly recommends that an expert in safety and Lifeguarding be involved in the design or upgrade of any public swimming facility in order to ensure that design features do not pose safety or supervision issues.

Note \*\*\* For recommendations on design, rules, and regulations, equipment and staffing contact the Lifesaving Society of New Brunswick.

### Waterfront

The purpose of designating the swimming area is to keep swimmers safe; this purpose is achieved by keeping swimmers in the supervised area and boats out.

- When choosing the dimensions of a swimming area, the operator must take lifeguarding requirements into consideration (e.g. rescue response time, currents, drop-offs, scanning the entire area, etc.)
- Where possible, limit access to the waterfront to one point of entry and pedestrian traffic only.
- If conflicting activities occur at the waterfront (e.g. swimming and boating), more than one point of entry may be desirable.
- Where boating occurs as part of waterfront operations, boating and swimming areas must be separated.
- All swimming areas must be distinguished with a continuous float line of rope and buoys such that the swimming area is visible from land and water by swimmers and boaters.
- Any permanent hazards (e.g. non-movable rocks, sudden changes in water depth) must be clearly marked.
- Where swimming areas are located adjacent to motor boat traffic, a set of Boating Restriction buoys must be placed outside the swimming area to alert boaters to the swimming area. The buoys should be designed so that the boat operator can easily see

## **SPECIALIZED FACILITY EQUIPMENT**

### Waterslides

Due to the variations of waterslides, they are to be operated and maintained as per the manufacturer specifications and proper usage signs clearly posted at the entrance of the slide.

Controls should be implemented which minimize the risk of collision or injury within the slide or the landing pool/ flume at the bottom of the slide.

Examples of controls would be:

- A slide attendant controlling the dispatch of sliders; (See Qualifications Section regarding Water Slide Attendant)
- Signage indicating that the next slider can't go until the slider ahead has reached the end of the slide;
- A method by which the Slide attendant can determine when the bather has reached the end of the slide,

Operators should evaluate factors which affect the movement of bathers within the slide (eg. water flow rate) and establish appropriate safety standards.

**Note:** Slider speed can affect the safety of the bathers. Sliding slowly and excessive speed can both create safety risks.

### Wave Action Pools

Under regular operating conditions a wave action pool is operated in the same manner other pools. Additional measures must be taken to account for the supervision challenges related to the wave action when it is in operation.

#### Supervision

- Ensure that all lifeguards supervising a wave action pool have the NLS Waterpark option.
- Ensure that all staff receive regular in-service training to review emergency procedures and practice skills.

#### Communications Systems

- Wave Action Pool facilities should be equipped with a public address system that is in good working condition and that is clearly audible in all portions of the pool; and
- the pool is equipped with a communications system that is in good working condition and that is connected to the public address system, each lifeguard station, the first-aid room and the admission control centre of the pool

- **Warning System** :The public address system should be used to sound a warning sufficiently an advance of the commencement of wave activation to give bathers the option of leaving the pool.

### Saunas

Due to the variations of Sauna's both wet and dry. They are to be operated and maintained according to manufacturer specifications with warnings and proper usage signs clearly posted at the entrance to the sauna.

### Tarzan Ropes

To be installed and maintained as per manufacturer specifications as well as inspected daily. Proper usage signs are clearly posted at the Tarzan Rope area.

### Diving Boards /Rafts

The use of diving boards, rafts and platforms shall be restricted in the interest of safety at the discretion of the pool manager. To be installed and maintained as per manufacturers specifications. Ensure that adequate depth and clearance is provided.

<b>Height of board/platform</b>	<b>Water depth required</b>	<b>Overhead clearance required</b>
1 meter or less	11 feet (3.3m)	16 ft. (4.8m) in all directions
3 meters	12 feet (3.6m)	16 ft. (4.8m) in all directions
5 meters	15 feet (4.6m)	16ft. (4.8m) in all directions

### Toys

The pool manager, at their discretion, shall set the rules and regulations for allowing pool toys, mats etc. for swimming enjoyment

- These rules and regulations should include a pre-deployment assessment for safety, hazards, concerns and limitations for usage.
- The effects on lifeguard positioning and scanning impacts should be considered when developing rules and regulations.

## **REGULAR FACILITY INSPECTIONS**

All areas and equipment of the facility shall be thoroughly inspected regularly. The inspection should identify any hazards that must be corrected or marked to protect the patrons.

A regular schedule of inspection and testing should be carried out. The schedule should be designed for the needs of the specific equipment or facility. The inspections may range from a simple visual inspection to a process to test the safe operation of the equipment. Tools such as checklists should be used to document the inspection results and ensure that the inspection process is consistent and comprehensive. Any deficiencies identified shall be documented and recommendations for corrective measures identified.

Deficiencies that affect the safe operation of the swimming area or equipment should be corrected immediately. If this is not possible, effective steps shall be taken to protect users and staff. In some cases it may be necessary to close the facility or equipment until it can be returned to a safe condition.

Waterfront Specific Inspection Needs.:

- Daily inspection the beach may be necessary, looking for hazards that may be introduced by patrons at the waterfront such as broken glass, fire pits, and deep holes.
- Because the waterfront may be affected by environmental conditions, such as the weather and water currents, which can introduce hazards, the inspection process should anticipate these potential changes. Example: after a storm, the swimming area should be inspected to identify hazards such as debris that may have been introduced into the swimming area or onto the beach.

## **WATER QUALITY**

### Pool Facilities

Every owner and every operator shall ensure that the clean water and make-up water are free from contamination that may be injurious to the health of the bathers.

It is recommended that pool operators follow and use the Recreation New Brunswick (RNB) Pool Operators Log Book, or a similar form of documentation, to record pool maintenance and water balancing.

### Water Clarity

Every owner and operator of a pool shall ensure that the pool water is of a clarity to permit a black disc 150 millimeters in diameter on a white background located on the bottom of the pool at its deepest point to be clearly visible from any point on the deck nine meters away from disc.

### Water Chemistry

Every owner and every operator shall ensure that the pool water is treated with chlorine, a chlorine compound, or a bromine compound.

#### Alkalinity

- The ideal total alkalinity is 100ppm(mg/l), minimum 80 ppm (mg/l), maximum 140 ppm (ppm (mg/l) for swimming pools and at least 120 to 150mg/l for whirlpools.
- Test once a week.

#### pH levels

- The pH ideal 7.4, value is within the range of 7.2 to 7.6
- Test at least once daily

#### Combined Chlorine

- Normal maximum of 0.5 ppm (mg/l) absolute maximum 1.0 ppm (mg/l)
- Test at least once daily

#### Calcium Hardness

- Ideal 300 ppm (mg/l), Minimum 250 ppm (mg/l) maximum approximately 600 ppm (mg/l)
- Test on a weekly basis

#### Cyanuric Acid

- Ideal 30 ppm (mg/l), maximum approximately 60ppm (mg/l)
- Test on a weekly basis

#### Water Temperature

- Test at least every 24 hours

### Pool Fouling

Every public aquatic facility shall develop a procedure to deal with a pool fouling incident. This procedure shall be able to provide for the removal of the contaminating material and provide effective disinfecting of the pool. A pool fouling incident may involve the release of feces, vomit, blood, or other organic, potentially infective material into the pool water.

Measures shall be implemented that minimize the probability of a pool fouling incident. Children who have not been toilet trained shall be required to wear either a cloth diaper covered by an impermeable pant with closures that seal around the leg and waist openings, or pool diapers. Persons with diarrhea shall be directed to stay out of the pool until they are well.

Pool fouling is a serious concern. Illness involving *E. coli* and *cryptosporidium* have been traced to exposure in aquatic facilities.

Pool owners and operators are also encouraged to become further informed about water treatment and pool fouling through the Center for Disease control or their Public Health Office

### Waterfront

Waterfront public swimming areas shall be tested on a regular basis by the Provincial Public Health Organization (PPHO); Owners/operators shall contact the PPHO to ensure the water meets acceptable health standards.

### Waterfront Fouling

Every waterfront should take steps to minimize the risk of contamination of the swimming area with fecal material. These may include:

- Recommending that children who have not been toilet trained wear a cloth or pool diaper covered by an impermeable pant with closures that seal around the leg and waist openings;
- Ensuring that effluent from washrooms cannot enter the swimming area;
- Recommending that persons with diarrhea, stay out of the waterfront until they are well;
- Prohibiting dogs from using the swimming area or beach.

Waterfront fouling is a serious concern. Illness involving *E. coli* and *cryptosporidium* have been traced to exposure in waterfronts.

## **UNSUPERVISED WATER FRONTS**

Waterfronts may be used by a variety of bathers within the community.

At a Supervised Waterfront, lifeguards will be present to educate the people about how to enjoy the waterfront safely and be part of the safety supervision of the group.

At unsupervised waterfronts, bathers are responsible for providing their own safety, while using the waterfront.

It is recommended that owners of unsupervised waterfronts provide the following in order to maximize the safety of bathers.

### Emergency equipment

Every unsupervised waterfront shall have the following emergency equipment available and appropriately located for use in an emergency:

- A dedicated emergency telephone with posted emergency numbers;
- At least 1 buoyant throwing assist with a 15 metre buoyant line attached;
- At least 1 reaching pole at least 3 metres in length.

### Emergency Telephone

- Every waterfront shall have an emergency telephone which is easily accessible.
- The telephone shall be able to work in the event of a power failure.
- A payphone is acceptable if it provides direct EMS access without requiring any payment.
- If the emergency phone is not easily accessible, directions to the nearest phone shall be posted at the beach.
- Emergency contact telephone numbers shall be posted by the emergency telephone.
- It is recommended that a script for the emergency call be posted beside the emergency phone. The script should be designed to provide the information required to direct the request for emergency assistance. This may include information such as: facility address, phone number, a prompt to describe the nature of the emergency, the location for emergency access, etc.

### Group use of Unsupervised Waterfront

Recommend that groups develop a safety plan and provide a qualified lifeguard to supervise the group at the waterfront. A safety plan should also include safety rules, planned emergency procedures, an emergency communication system, rescue and first aid equipment and defined supervision roles of other supervisors such as teachers, group leaders, and parents.

### Signage

Signs should be posted at entrances and exits to the waterfront, or where there are no specific entrances and exits, at reasonable intervals along/near the swimming area, that convey safety information, outlining hazards and indicating how hazards are marked.

Staff

The owner/operator of an unsupervised waterfront may decide to employ staff at that waterfront. The duties and responsibilities of such staff will be determined by the role assigned to them by the owner/operator but would not include supervision of swimmers.

Uniforms

Any staff at a unsupervised waterfront should be easily identified.

Hazard Markings

Where specific hazards have been identified, a marking system consisting of signs or buoys shall be put in place to ensure that bathers are informed.