

# Environmental Conditions Policy

28 January 2024

## OVERVIEW

This Policy is meant to serve as a guideline for all Coaches, Instructors, Members and users of Leduc Boat Club equipment. This Policy outlines the environmental conditions and limits of conditions regarding Leduc Boat Club equipment use. These conditions include; water temperature, wind, lightning/thunder and air quality.

Private boat owners should also use this Policy as a guideline on environmental conditions.

*Do not always trust data from one source if it appears to differ from observations.*

## SCOPE

This Policy applies to all Members and groups utilizing club equipment.

All users of club equipment are **required to comply with Transport Canada Regulations** in regards to required safety equipment on board.

## Water Temperature

### Cold water

Cold water is defined as a water temperature of 10 degrees Centigrade or less.

All users of club equipment are **required to wear non-inflatable PFDs** (Personal Floatation Devices as defined by Transport Canada Regulations). Cold weather gear such as neoprene clothing is also highly recommended.

## **Wind Speeds**

### **Canoe**

A sustained wind speed of 25 kph or over is the maximum limit of canoe rentals. A gusting wind speed of over 25 kph users of club equipment users should be made aware of the conditions and proceed with caution by monitoring the conditions for changes and staying close to the dock area.

### **Kayak**

A sustained wind speed of 30 kph or over is the maximum limit of kayak rentals. A gusting wind speed of over 30 kph users of club equipment users should be made aware of the conditions and proceed with caution by monitoring the conditions for changes and staying close to the dock area.

### **Stand Up Paddle Board**

A sustained wind speed of 25 kph or over is the maximum limit of Stand Up Paddle Board rentals. A gusting wind speed of over 25 kph users of club equipment users should be made aware of the conditions and proceed with caution by monitoring the conditions for changes and staying close to the dock area.

### **All Other Club Watercraft**

A sustained wind speed of 40 kph or over is the maximum limit of club equipment use. A gusting wind speed of over 40 kph users of club equipment users should be made aware of the conditions and proceed with caution by monitoring the conditions for changes and staying close to the dock area.

### **Coached Athletes**

The coach or instructor will determine the wind speed limits but should use All Other Club Watercraft as guidelines.

### **Outreach Programs/Groups**

Wind speed forecasts the day before the booking will be used to determine if wind speed will be above sport allowances. If speeds are above thresholds then bookings may have to be switched to another type of craft, the paddle tank or canceled.

## Lightning

### Lightning/Thunder

Any lightning/thunder detected in the area is a requirement to return to shore. A wait period of 30 minutes with no detectable lightning strikes or thunder is required before returning to the water.

## Air Quality

### Air Quality

#### Limits of Exertion

If the AQHI is **above “7”** on water activities will be canceled and moved to indoor facilities.

If the AQHI is **between “4 - 6”** on water activities will be reduced in intensity, reduced duration of activities and provide additional rest periods or moved to indoor facilities.

Air Quality Measurements are available at

<http://environment.alberta.ca/apps/aqhi/aqhi.aspx>

Purple Air

Windy

The community used shall be Leduc and if is unavailable then Edmonton shall be used.

Take note of the Last Update Time. You can also view the Stations where the measurements are taken.

Review the Maximum AQHI Forecast. A Detailed Forecast (Hourly for the day) is available under the Detailed Forecast Tab.

Review the AQHI and Limits of Exertion

## RESPONSIBILITIES

It is the responsibility of all equipment users to ensure that they comply with the Leduc Boat Club Environmental Conditions Policy. It is important that all Coaches, Instructors and Staff are familiar with this policy and adhere to it for the safety of all persons.

## **REFERENCES**

### **Weather and Radar Forecasts**

The Weather Network

<https://theweathernetwork.com>

Windy (updated more frequently from Personal Weather Stations)

<https://windy.com>

### **Lightning**

Canadian Lightning Danger Map

[https://weather.gc.ca/lightning/index\\_e.html?id=WRN#mapTop](https://weather.gc.ca/lightning/index_e.html?id=WRN#mapTop)

### **Air Quality Measurements**

<http://environment.alberta.ca/apps/aqhi/aqhi.aspx>

This site is helpful for planning your outdoor event.

<http://www.albertahealthservices.ca/news/air.aspx>

## Beaufort wind scale table

Force	Wind Speed		Descriptive Term	Effects Observed at Sea	Effects Observed on Land
	Km/h	Knots			
0	Less than 1	Less than 1	Calm	Sea surface like a mirror, but not necessarily flat.	Smoke rises vertically.
1	1 - 5	1 - 3	Light air	Ripples with the appearance of scales are formed, but without foam crests.	Direction of wind shown by smoke drift, but not wind vanes.
2	6 - 11	4 - 6	Light breeze	Small wavelets, still short but more pronounced. Crests do not break. When visibility good, horizon line always very clear.	Wind felt on face. Leaves rustle. Ordinary vane moved by wind.
3	12 - 19	7 - 10	Gentle breeze	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered whitecaps.	Leaves and small twigs in constant motion. Wind extends light flag.
4	20 - 28	11 - 16	Moderate breeze	Small waves, becoming longer. Fairly frequent whitecaps.	Raises dust and loose paper. Small branches are moved.
5	29 - 38	17 - 21	Fresh breeze	Moderate waves, taking a more pronounced long form. Many whitecaps are formed. Chance of some spray.	Small trees with leaves begin to sway. Crested wavelets form on inland waters.
6	39 - 49	22 - 27	Strong breeze	Large waves begin to form. The white foam crests are more extensive everywhere. Probably some spray.	Large branches in motion. Whistling heard in telephone wires. Umbrellas used with difficulty.
7	50 - 61	28 - 33	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Whole trees in motion. Inconvenience felt in walking against wind.
8	62 - 74	34 - 40	Gale	Moderately high waves of greater length. Edges of crests begin to break into the spindrift. The foam is blown in well-marked streaks along the direction of the wind.	Leaves off trees. Generally impedes walking into wind almost impossible.
9	75 - 88	41 - 47	Strong gale	High waves. Dense streaks of foam along the direction of the wind. Crests of waves begin to topple, tumble and roll over. Spray may affect visibility.	Slight structural damage occurs, e.g. roofing shingles may become loose or blow off.
10	89 - 102	48 - 55	Storm	Very high waves with long overhanging crests. Dense white streaks of foam. Surface of the sea takes a white appearance. The tumbling of the sea becomes heavy and shock-like. Visibility affected.	Trees uprooted. Considerable structural damage occurs.
11	103 - 117	56 - 63	Violent storm	Exceptionally high waves. Sea completely covered with long white patches of foam. Visibility affected.	Widespread damage.
12	118 - 133	64 - 71	Hurricane	Air filled with foam and spray. Sea entirely white with foam. Visibility seriously impaired.	Rare. Severe widespread damage to vegetation and significant structural damage possible.