



Shadow Lakes Association

Lake and River Navigation and Hazard Marker Program

Operating Plan

Purpose

The Shadow Lakes Association has two primary goals related to our annual marker program.

They are:

1. to improve the safety of boating activities
2. to reduce the potential of damage to our members' watercraft from underwater hazards.

The program scope includes coverage of the entire Lake and river system from the mill pond in Coboconk upstream to the base of the dam in Norland.

The marker program has been in operation continuously since the founding of the association and is regarded as a primary service provided to our members and is the association's single largest annual operating expense.

The association provides this service gratuitously and without any warranty or representation as to the accuracy of marker location, completeness of marker coverage, or suitability of channel depth.

Marker types and locations

There are two types of markers placed by the association under this program:

1. **Navigational markers** - Red and Green markers are placed for the purpose of guiding boaters through narrow channels between lakes, or in rivers to guide boaters through the best available channel. These markers are placed in accordance with standard channel marker convention (ie; when travelling upstream red markers are on the right side of the channel and green markers are on the left side). The markers are placed to guide the boater through the deepest part of the channel. However since channel depths vary due to both the topography of the channel and the flow rate at any given time boaters must still exercise their own judgement as to whether the depth is sufficient at the time for the draft of the boat they are operating.

2. **Hazard markers** – Larger yellow markers are placed to mark underwater hazards that could cause damage if struck by a boat's drive unit. These are placed as single markers or as clusters where larger underwater hazards exist. Due to the annual fluctuation of water levels that is typical in the Shadow lake system some underwater hazards only pose a threat during periods of low water. The association, however, strives to place markers at all locations that could cause a threat during the worst case (low water level) scenario. Hazard markers are, in general, placed where rock hazards exist in open water that would not be visible or obvious to an approaching boater. As a general rule hazard markers are not placed within 15 metres of the shoreline unless necessary due to specific localized traffic.

The association, through its contractor maintains a detailed maps of the location of all navigational and hazard markers that are installed annually. These maps are reviewed annually and suggestions from members for improvements are welcomed.

As part of the formalization of the lake marker operating plan the map is posted on the SLA website and upgraded to include a numbering system that uniquely identifies every marker. The purpose of the numbering system is to provide members with a better means of identifying the location of a missing or damaged marker when contacting the contractor.

Contractor responsibilities

The Association hires an outside contractor who is responsible for all operational elements of the marker program

The contract is awarded annually by the association board of directors.

The following describes the responsibilities of the approved contractor.

1. **Annual marker placement and removal** – All markers are placed in position in accordance with the approved location map prior to the Victoria Day weekend. All markers are removed during the week immediately following Thanksgiving Day.
In addition to the annual placement and removal cycle the contractor is responsible to make two full inspections of the installed markers during the course of the boating season. This is necessary to make any placement adjustments due to fluctuating water levels and to replace any markers that may be missing. These inspections and any required maintenance are to occur during the week immediately prior to the Canada Day holiday (which roughly corresponds to the end of the TSW conservation period) as well as during the week prior to the Civic holiday weekend.
2. **Procurement, maintenance and storage** – The association has transitioned the type of markers used away from painted Styrofoam blocks to inflated moulded plastic spheres purchased from an outside supplier. The contractor is responsible for procuring the supply of new markers in accordance with quantities as directed by the board.

The contractor is also responsible for ensuring that all weights, cables and connectors are attached and maintained in a manner that ensures that the markers remain in place and can withstand the effects of water currents where they are a factor and a reasonable level of physical abuse from boat contact. Connectors are to be fastened in a manner that it would be difficult for a marker to be removed by unauthorized parties.

During the off season the contractor is required to collect and store all markers. In cases where markers are stored onshore, or on islands nearby, the contractor will report to the association at the beginning of each boating season regarding any losses that may have occurred due to theft or any other reason and if such losses occur at an unacceptable level the contractor will work with the association to develop a more secure method of storage.

3. **Response procedure for missing or shifted markers** – As stated previously the Shadow Lakes Association marker program is recognized by our members as one of the most, if not *the* most, important benefits of membership. Since the presence of markers and the accuracy of marker placement significantly reduces property damage and as well increases boating safety it is imperative that missing or misplaced markers are addressed expeditiously.

This section lays out the process and service level that the contractor is to follow:

- i) **Response Process** – The contractor’s name, telephone number and e-mail address will be published in the Association spring newsletter and posted on the Association website.
Members will be encouraged to report any missing or shifted markers directly to the contractor.
The contractor will acknowledge receipt of the concern directly to the member who reported it and copy the association board at info@shadowlakes.on.ca
- ii) **Response timing** – The contractor will acknowledge the initial member’s e-mail or telephone call within 24 hours of receipt.
The contractor will exercise his best efforts to replace a missing marker or re-position a shifted marker within 72 hours of receipt of the member’s report. The association recognizes that severe weather conditions or other unforeseen circumstances may preclude the ability to meet this target however given the importance of the markers to boating safety and the protection of members’ watercraft the contractor should operate within this timeline target in the majority of cases.
- iii) **Response to member reports related to issues other than missing or shifted markers** – In the event that a member contacts the contractor to request placement of a new marker where none existed previously, or for any other issue, the contractor will acknowledge the report as above and advise that the the issue will be referred to the board for consideration.

Contract terms and pricing

Fixed price items – The contractor will provide a fixed price quote for board approval prior to the first directors' meeting in early May of each year. The fixed price quote will cover the following items:

- Placement and removal of markers at the beginning and end of the boating season
- Two inspections during the course of the boating season
- Up to 16 hours on water addressing missing or shifted markers in response to member concerns
- Procurement of new markers (labour only)
- Maintenance and repair of markers as necessary (labour only)
- On- going updates to marker location map
- Storage of markers and associated material during the off-season

The contractor will invoice the approved fixed price amount to the association in two installments. 50% of the fixed price amount will be invoiced after all markers are placed prior to the Victoria Day weekend. 50% of the fixed price amount will be invoiced after the markers are removed at the end of the season. In both cases the association will issue payment to the contractor within 10 business days after receipt of the contractor's invoice by the association's chief financial officer or his designee.

Variable cost items - The contractor will invoice the association for all variable cost items as incurred. Variable costs will include but not necessarily be limited to the following items:

- All new markers and materials purchased in quantities approved by the board. If requested the board will authorize cash advances as necessary to ensure the contractor does not bear unreasonable carrying costs.
- Any additional on-water hours in excess of 16 required to replace missing markers or re-position shifted markers during the course of the season at a mutually agreed hourly rate.
- Payment of invoices for variable cost items less any cash advances will be issued within 10 business days of receipt of the invoice by the association's chief financial officer or his designee.