

**Leeds and the Thousand Islands Township
St Lawrence River
Nautical Speed Zone Assessment and
Recommendations**



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Table of Contents

<u>Title</u>	<u>Page</u>
Intent	3
Legal Authority	4
Recommendations	14
Canadian Middle Channel	16
Lost Channel	18
Pine Island to Benson's Rift	22
Needle's Eye	24
Gananoque Narrows	26
Hay Island	28
Wanderer's Channel	30
Raft Narrows	34
Canadian Small Vessel Channel	36
Tar Island Narrows	38
30 Meter from Shore 8 km/hr Zone	40
Moving Forward	42
References	44

Intent

This report is being compiled to expand on the Speed Zone Assessment previously provided. I will explain the legal authority for the current speed zones and the signage requirements to enable enforcement of these zones. I will provide my professional observations and assessments of the current speeds and zones, and recommend changes that would improve the zones; make them more effective, increase consistency, increase public awareness, re-enable enforcement and ultimately gain compliance. These recommendations will also prevent overlap with other current legislation, which would reduce the number of zones and therefore the amount of signage required.

There are eleven nautical speed zones on the St Lawrence River within the Township of Leeds and the Thousand Islands. The original intention in the creation of most of these zones and similar ones throughout the country was to restrict a vessel's speed with the goal of reducing the wash created by the movement of a vessel through the water. This wash or wave action is commonly referred to as wake. The goal was to prevent property damage, limit shoreline erosion and increase public safety. This is somewhat hampered by the fact that there are a total of 5 different maximum speeds contained within the 11 zones. These maximum speeds range from 9 to 40 km/hr. Some of these chosen speeds, if adhered to, actually increase wave action instead of reducing it. Two of the zones in the Thousand Islands have higher speed limits and were intended to provide a safe speed in a restricted area with less concern over restricting the vessel's wash.

Each zone will be explained in detail later in the report.

Legal Authority

The authority for these zones is contained within Federal legislation. Specifically the Vessel Operator Restriction Regulation ((V.O.R.R.) of the Canada Shipping Act 2001 (C.S.A). The specific locations, geographical limits and speeds of each zone are listed within Schedule 6 of this regulation.

Section 2 of the V.O.R.R. provides restrictions on vessel operations within Canadian waters and sub-section 5 (shown below) is the authority for the offence of operating a power driven vessel in excess of a maximum speed on waters listed in Schedule 6.

(5) No person shall operate a power-driven vessel or a vessel driven by electrical propulsion in the waters described in columns 1 to 3 of Schedule 6 in excess of the maximum speed set out in column 4 of that Schedule, except as indicated in that Schedule.

The speed restrictions for each zone contained in Schedule 6 are listed in column 4 of the schedule and are stated in kilometers per hour. These speed limits are to be properly posted under the authority of Sections 5 and 6 of the Regulation.

5 No person shall place a sign anywhere for the purpose of restricting the operation of any vessel in Canadian waters unless

(a) the placement has been authorized by the Minister under subsection 6(1) and the sign complies with sections 8 and 9, except in the case of a sign that provides information with respect to a restriction under subsection 2(7) or section 14; or

(b) the placement is authorized under an Act of Parliament other than the [Canada Shipping Act, 2001](#).

6 (1) The Minister may authorize in writing any person or class of persons to place a sign in an area for the purpose of

indicating that a restriction on the operation of vessels has been imposed by any of subsections 2(1) to (6) and 11(2).

(2) The person who places the sign shall

(a) bear all costs of construction, placing, maintenance and removal; and

(b) maintain the sign in the form required by sections 8 and 9 while the sign is in place.

(3) If a restriction in any of the schedules is removed, the Minister shall cancel the authorization and inform the person of the cancellation.

(4) On being so informed by the Minister, the person who placed the sign shall immediately remove it as well as any support erected for it.

Sections 8, 9 and 10 of the V.O.R.R. are where the specific requirements for posted signage are found. The areas highlighted pertain to signage for speed zones found in Schedule 6.

8 (1) A person authorized to place a sign shall ensure that the sign is in one of the following forms, according to the restriction applied:

(a) the symbol shown under letter C of Table 1 to Schedule 9, to indicate an area in which vessels are prohibited;

(b) a disc bordered by a band coloured international orange, as shown in Figure 1 of Table 3 to Schedule 9, in conjunction with two of the symbols shown in Table 1 to that Schedule, to indicate a single restriction;

(c) an elongated circle bordered by a band coloured international orange, as shown in Figure 4 of Table 3 to Schedule 9, in conjunction with two or more of the

symbols shown in Table 1 to that Schedule, to indicate multiple restrictions; or

(d) a half-disc bordered by a band coloured international orange above a black line surmounting a half-rectangle bordered by a band coloured green, as shown in Figure 5 of Table 3 to Schedule 9, in conjunction with, in the half-disc, the appropriate symbols shown in Table 1 to that Schedule and, in the half-rectangle, the symbols shown in Table 2 to that Schedule, to indicate the applicable conditions to the restriction.

(2) A directional disc bordered by a band coloured international orange, as shown in Figure 2 or 3 of Table 3 to Schedule 9, may be substituted for the disk referred to in paragraph (1)(b) to indicate the boundary of the waters to which the restriction applies and, by means of the directional disc pointer, the side on which the restriction applies.

(3) An information rectangle bordered by a band coloured international orange, as shown in Figure 6 of Table 3 to Schedule 9, may be placed underneath the sign referred to in subsection (1) to provide any additional information on the restriction indicated on that sign.

(4) The width of the band coloured international orange referred to in this section shall be one twelfth of the width or diameter of the sign.

(5) A sign that is authorized by the Minister, or one that was authorized under the *Boating Restriction Regulations* and that is replaced, shall be marked at the lower edge in black with the words "TRANSPORT CANADA" and "TRANSPORTS CANADA".

9 (1) Where it appears on a sign referred to in section 8,

(a) the diagonal bar shown under letter B of Table 1 to Schedule 9 crossing behind one of the other symbols shown in that Table indicates a prohibition of the usage or activity indicated by the symbol being crossed by the diagonal bar;

(b) the propeller symbol shown under letter D of Table 1 to Schedule 9 in conjunction with the diagonal bar shown under letter B of that Table indicates that no power-driven vessel or vessel driven by electrical propulsion shall be operated on the waters in respect of which the sign has been placed;

(c) the symbol shown under letter E of Table 1 to Schedule 9, consisting of a propeller superimposed by a gas pump in conjunction with the diagonal bar shown under letter B of that Table, indicates that no power-driven vessel shall be operated on the waters in respect of which the sign has been placed;

(d) the symbol consisting of a number shown under letter A of Table 1 to Schedule 9 above the expression “MAX kW” shown under letter F of that Table indicates that no power-driven vessel with an engine whose power exceeds the power in kilowatts represented by that number shall be operated on the waters in respect of which the sign has been placed;

(e) the symbol consisting of a number shown under letter A of Table 1 to Schedule 9 above the expression “MAX km/h” shown under letter G of that Table indicates that no power-driven vessel shall be operated at a speed in excess of the speed over the ground, in kilometres per hour, represented by that number on the waters in respect of which the sign has been placed; and

(f) the symbol consisting of the word “SKI” shown under letter H of Table 1 to Schedule 9 in conjunction with the diagonal bar shown under letter B of that Table indicates that no power-driven vessel shall be operated for the purpose of towing a person on water skis or on any other sporting or recreational equipment, or for the purpose of allowing a person to wake surf, on the waters in respect of which the sign has been placed.

(2) If a prohibition referred to in subsection (1) applies only during specified periods, the following symbols shall appear on a sign referred to in section 8:

(a) if the prohibition applies to certain hours of the day, the clock shown under letter A of Table 2 to Schedule 9, to indicate, in red, the hours during which the prohibition applies and, in green, the hours during which it is permitted to practise the activity otherwise prohibited by the sign;

(b) if the prohibition applies to certain days of the week, the series of seven squares shown under letter B of Table 2 to Schedule 9 in which appears in English and in French the first letter in white of each day of the week, to indicate, in red, the days on which the prohibition applies and, in green, the days on which it is permitted to practise the activity otherwise prohibited by the sign; and

(c) if the prohibition applies to certain months of the year, the series of eight squares shown under letter C of Table 2 to Schedule 9 in which appears the first letter in white of the months of April to November inclusive, to indicate, in red, the months during which the prohibition applies and, in green, the months during which it is permitted to practise the activity otherwise prohibited by the sign.

(3) If a prohibition referred to in subsection (1) applies only to a sector of a body of water from a marked geographical point or line in the cardinal direction of that sector, the person authorized by the Minister to place a sign shall place it at that point or line together with an additional sign bearing the black compass rose shown under letter D of Table 2 to Schedule 9 within a square, with one or more sections coloured international orange.

(4) For the purpose of subsection (3), the following sections of the compass rose, coloured international orange, indicate the cardinal directions of the sector to which the prohibition applies:

(a) upper right and left corners, north;

- (b)** upper right corner, northeast;
- (c)** upper and lower right corners, east;
- (d)** lower right corner, southeast;
- (e)** lower left and right corners, south;
- (f)** lower left corner, southwest;
- (g)** upper and lower left corners, west; and
- (h)** upper left corner, northwest.

(5) If a sign authorized by the Minister is placed directly on a buoy, a horizontal band shall be marked immediately above and immediately below the sign such that each band

- (a)** is one twelfth of the sign width;
- (b)** is coloured international orange; and
- (c)** extends all around the buoy.

10 No person shall

- (a)** remove any authorized sign unless the authorization has been cancelled;
- (b)** alter, conceal, damage or destroy any authorized sign; or
- (c)** use any authorized sign or any support erected for it as a mooring.

The symbols referred to in the above sections, specific to speed signage, are shown in Schedule 9 of the Regulation.

SCHEDULE 9 / ANNEXE 9
(Sections 8 and 9 / Articles 8 et 9)
TABLE 1 / TABLEAU 1



F

MAX kW

G

MAX km/h

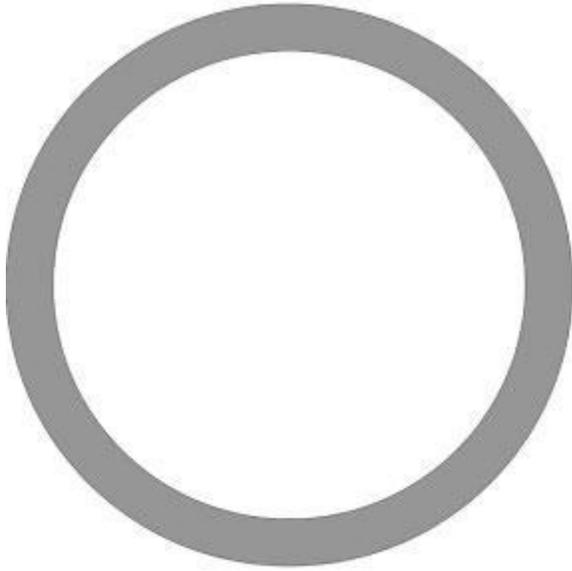
H

SKI



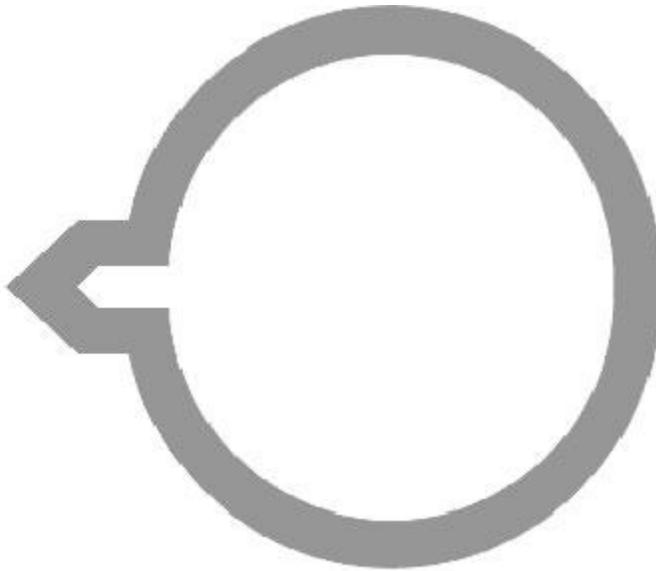
INTERNATIONAL ORANGE
ORANGE INTERNATIONAL

**TABLE 3 / TABLEAU 3
FIGURE 1**



■ INTERNATIONAL ORANGE
ORANGE INTERNATIONAL

FIGURE 2



■ INTERNATIONAL ORANGE
ORANGE INTERNATIONAL

FIGURE 3



It was stated earlier that there is some overlap with other current legislation.

Section 2 (7) V.O.R.R. provides a speed limit of 10 km/hr for all vessels traveling within 30 meters of any shoreline on any waterway within the Province of Ontario. There are some parameters to this speed limit and some exemptions. This speed limit does not need to be posted to be enforced. However there is a provision within the section that states that it does not pertain to any waters already covered by restrictions within Schedule 6.

(7) No person shall operate a power-driven vessel at a speed in excess of 10 km/h within 30 m of the shore in the following waters:

(a) the waters of Ontario, Manitoba, Saskatchewan and Alberta;

(b) the rivers and lakes in British Columbia;

(c) Nitinat River and Nitinat Lake, upstream of Nitinat Bar, in British Columbia;

(d) the rivers and lakes in Nova Scotia; and

(e) Bras d'Or Lake in Nova Scotia, inland of a line drawn between Coffin Point and Red Head in Great Bras d'Or Channel and the inland end of St. Peters Canal.

(8) Subsection (7) does not apply

(a) in respect of a vessel that is operated for the purpose of towing a person on water skis or on any other sporting or recreational equipment, if the vessel follows a course away from and perpendicular to the shore; and

(b) in respect of a power-driven vessel that is operated

(i) in rivers that are less than 100 m in width or in canals or buoyed channels, or

(ii) in any waters referred to in Schedule 6 in respect of which a maximum speed is set out.

Section 16 of the V.O.R.R. provides the authority for the enforcement of Section 2 and lists the persons and agencies allowed to carry out this enforcement.

Enforcement in this area is the primary responsibility of the Ontario Provincial Police. The Royal Canadian Mounted Police can also provide enforcement.

Enforcement takes place by way of issuing an Offence Notice under the authority of the Contraventions Act. There is one set fine for the offence of exceeding a maximum posted speed. This fine does not increase based on the amount the posted speed is exceeded, unlike a Highway offence.

Recommendations

My previous assessment of the speed zones states that the current signage is no longer adequate. All of the previously posted signs are either missing or in very poor condition. This has been the state for a number of years. This is due to a number of factors. Transport Canada has replaced some of the large navigational aids that were the host to some of the posted signs. Vandalism and theft has occurred over time. The sun and weather have deteriorated the remaining signs. In fact, two of the zones were never posted with signage. The result has been a lack of public awareness, compliance and the ability for enforcement. However, I do not feel that simply replacing the original signage to restore the zones is a prudent action.

I noted earlier that there are a total of 5 different maximum speeds contained within the 11 zones within the Township. These selected speeds range for 9 to 40 km/hr. Some of these chosen speeds, such as 15,18 and 24 km/hr, if adhered to, actually increase wave action instead of reducing it. It is recommended that each zone be reassessed and legislative changes made to the speeds, and in some cases geographical parameters of the zone, to better meet the intended goal and enable more compliance. This should be done prior to spending funds and resources on replacing signage. It would delay the process but rectify some long-standing issues with the speed zones in the area. This would make the zones more effective, lead to more compliance and ultimately be more cost effective.

I also feel that it is easier for the public to understand and comply with laws if they are consistent. It would be beneficial to have one speed with the intent of reducing wave action, consistent with the speed limit for 30 meters from shore. Speed zones intended to provide a safe speed should be suitable for most vessels to maintain a state of plane and safe maneuvering. This would increase safety and provide a reasonable expectation of compliance.

In the following pages I will address each individual speed zone in the order stated within Schedule 6 of the V.O.R.R. I will note my assessment of issues with the selected speed and/or the geographical parameters of each zone. This will be followed by recommendations and options to correct these issues.

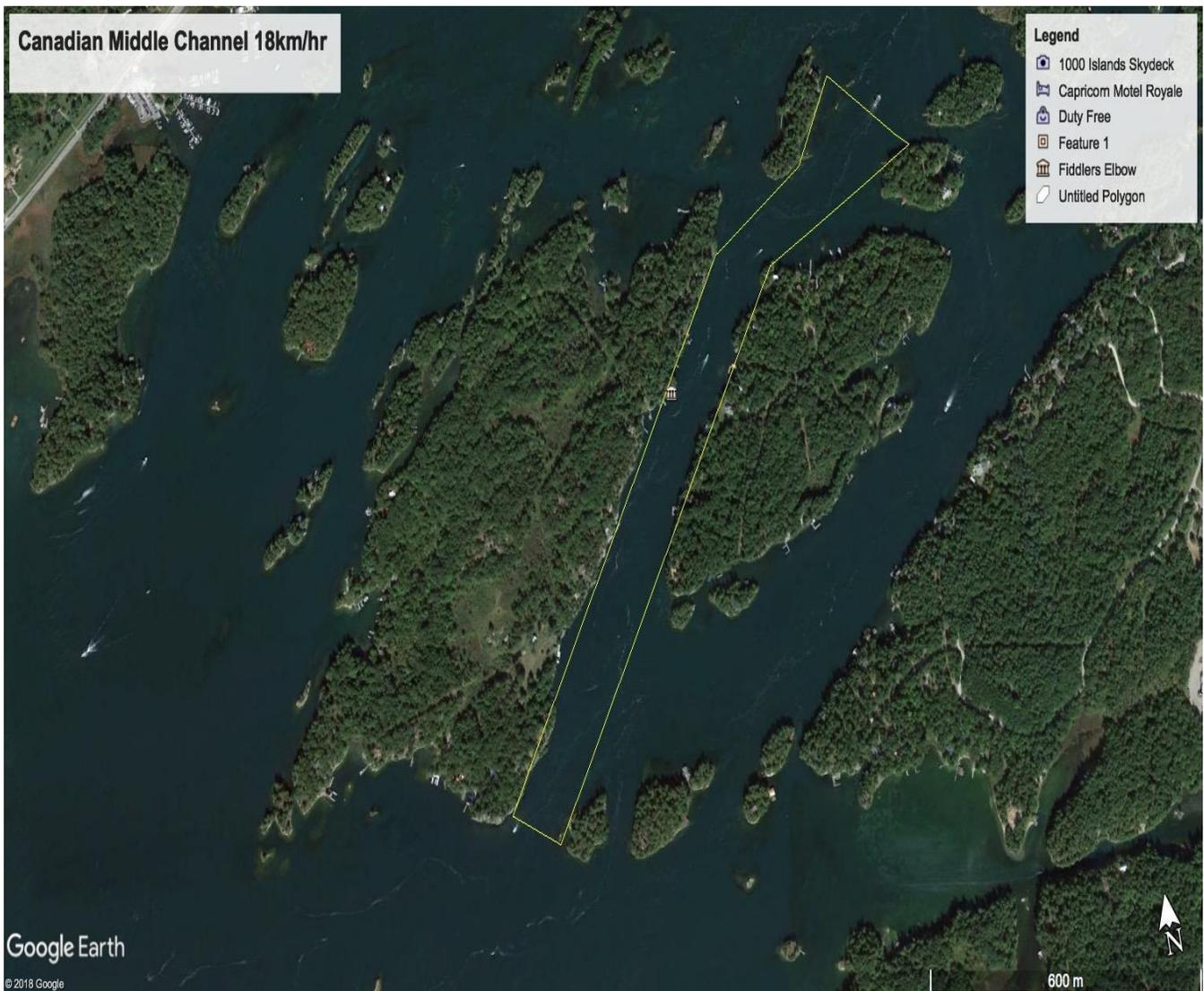
In cases of a number of options, the recommended course of action for each area has been highlighted.

Canadian Middle Channel

That part of the St. Lawrence River known locally as the “Canadian Middle Channel”, commencing at the eastern tip of Wood Island at the charted location of red spar buoy H-16, thence southwesterly along that channel between Ash and Wallace Islands to the southwestern tip of Ash Island at the charted location of green spar buoy H-17

44°21'33.5" N, 75°59'33.5" W to 44°20'56.5" N, 76°00'21.5" W

18 km/hr Zone



Assessment:

This portion of the Canadian Middle Channel is one of the most heavily used areas of the Thousand Islands portion of the St Lawrence River. Lying just up river of the Thousand Islands Bridge flanked by Ash and Wallace Islands. It is a deep and relatively narrow channel with a swift current and mainly steep rocky shoreline. It is a main travel route for tourism based commercial traffic and pleasure craft.

The goal of a speed limit here should be to limit wave action from traveling vessels and provide a safe speed within a busy restricted waterway. The current speed for this zone is 18 km/hr. This does provide a safe speed but does not effectively reduce wave action. Almost all manner of vessel will throw a large wake if operated at this speed.

The geographical limits of the zone are good. But original signage was limited and is all but gone.

Recommendations:

Actions should be taken to have the speed limit changed to 10km/hr. This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit.

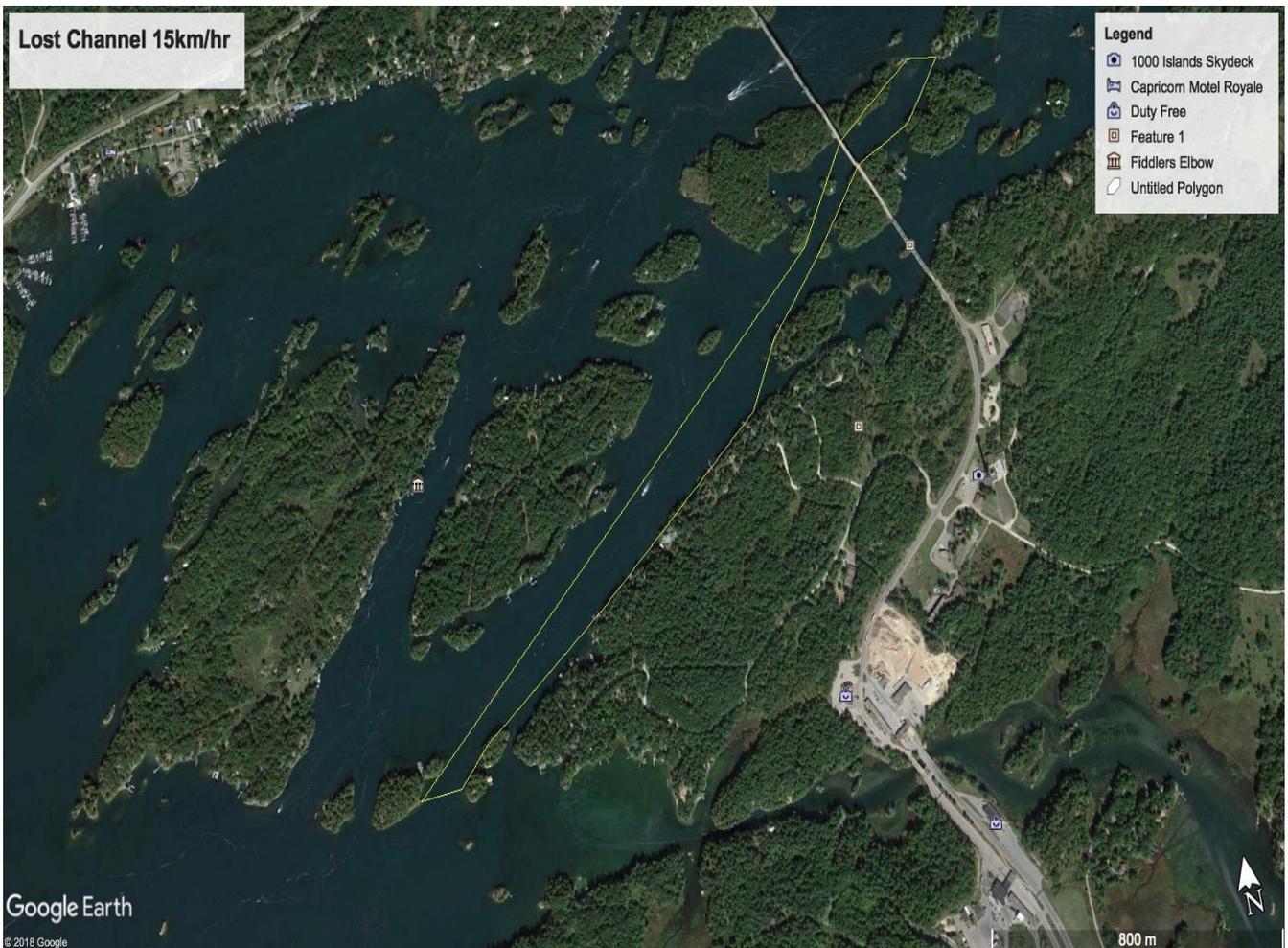
Once this legislative change is made, signs would need to be clearly posted at both ends of the zone with a clear view to all approaching traffic. Additional signage should be posted on both sides in the middle of the zone due to its length.

Lost Channel

That part of the St. Lawrence River known as The Lost Channel, commencing at the eastern end of The Lost Channel to the north of Sunset Island, thence southwesterly along The Lost Channel to the south of Georgina Island under the Thousand Islands International Bridge, thence between Constance Island and Island 92, thence between Rabbit and Tom Thumb Islands, thence west-southwesterly between Hill and Wallace Islands to the north of Needle Island and thence between Palm and Butts Islands and terminating at the southwestern tip of Butts Island

44°21'45" N, 75°58'36" W to 44°20'54" N, 76°00'09" W

15 km/hr Zone



Assessment:

This portion of the Thousand Islands is frequented by both tourism based commercial traffic and pleasure craft. It is a relatively long zone, 1.27 Nautical Miles (Nm) or 2.34 km, which winds its way through the heart of the islands near the Thousand Islands Bridge. It is a deep channel with a rocky shoreline and ranges in width from approximately 32m at the narrowest point to 247m at the widest point. The current varies through the area from moderate to swift.

The goal of a speed limit here should be to both limit wave action from traveling vessels and provide a safe speed within a busy restricted waterway. The current speed for this zone is 15 km/hr. This does provide a safe speed but does not effectively reduce wave action. Almost all manner of vessel will throw a large wake if operated at this speed. The length of the zone also complicates the issue. Not only does it pose a difficulty for effective signage, it is also difficult to gain compliance from the public in a long zone. The operator becomes impatient.

Recommendations:

This zone should be improved in one of following ways:

1. Actions should be taken to have the speed limit changed to 10km/hr for the entire length of the zone. The description of the southwestern part of the channel should also be changed to better include the area between Wallace and Hill Island, as follows:
(Traveling southwesterly between Rabbit and Georgina Islands, thence west-southwesterly between Hill and Wallace Islands to the north of Needle Island and south of Trident and Lyndoch Islands, thence between Palm and Butts Islands and terminating at the southwestern tip of Butts Island)
This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit. This could still cause compliance issues because of a slow speed over a long zone.
2. Actions could be taken to have the speed limit changed to 10km/hr for just the narrow portion of the channel and change

the geographical boundaries of the zone reducing its length. The zone would then be limited to the following:

“The eastern end of The Lost Channel to the north of Sunset Island, thence southwesterly along The Lost Channel to the south of Georgina Island under the Thousand Islands International Bridge, thence between Constance Island and Island 92, thence between Rabbit and Tom Thumb Islands.”

This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit. This would not leave a safe speed area for the rest of the current zone, which does have a large amount of traffic.

3. The zone could be broken into two different areas and speeds. The narrow portion of the channel described in option 2 would be a 10 km/hr zone, limiting wave action, providing a safe speed and be consistent with the 30 meter from shore limit. The remainder of the area, with the description change mentioned in option 1, would become a 60 km/hr zone, providing a safe speed. The reduced length of the slow area would increase overall compliance.

(Option 3 shown on next page)



Once this legislative change is made signs would need to be clearly posted at both ends of the zone with a clear view to all approaching traffic. Additional signage would need to be posted throughout the zone due to its length.

It should be noted that any one of these options could result in concerns from the local residents of the area.

Pine Island to Benson's Rift

That part of the St. Lawrence River commencing at a point between the northern tips of Pine and Reveille Islands, thence southerly, thence west-southwesterly between Wisser and Kittner Islands, Carnegie and Hill Islands, and Reciprocity and Hill Islands, thence under the Thousand Islands International Bridge, thence between Trois and Hill Islands, thence along Benson's Rift between Rabbit and Hill Islands and terminating at the western tip of Rabbit Island

44°21'48" N, 75°58'06" W to 44°21'21" N, 75°59'08" W

9 km/hr Zone



Assessment:

This is a long, winding channel of the St Lawrence River in the heart of the Thousand Islands underneath the Thousand Islands Bridge. It is narrow with varying depths and very narrow with swift current in the area of Benson's Rift. It is close to 1 Nm or 1.8 km long. It has moderate pleasure craft traffic and is usually limited to boaters with local knowledge. However, this is changing with the use of electronic navigational aids such as chart plotters, GPS and some new smart phone applications. This zone was never properly signed with no signage at the eastern entrance at Pine Island.

The goal of a speed limit here should be to both limit wave action from traveling vessels and provide a safe speed in this narrow winding channel.

Recommendations:

This zone should be changed in one of following ways:

1. Actions could be taken to have the speed limit changed to 10km/hr. This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit.
2. It should be eliminated completely as much of the zone would be subject to the 30 meter from shore limit. This would eliminate the requirement of posting signage. This would, however, open up a portion of the current zone to no speed limit.
3. It could be left as is with a 9 km/hr speed limit. It is my opinion that there would be a higher level of compliance if the speed limits were more consistent. That is the reasoning behind option 1.

If recommendation 1 or 3 were chosen, this zone would require a significant increase in signage. It would need to be clearly posted at both ends and in a number of locations within the channel to enable a reasonable opportunity for both compliance and enforcement.

Needle's Eye

That part of the St. Lawrence River known as the Needle's Eye, between the southern shore of Needles Eye Island and the western tip of Hill Island

44°21'00" N, 75°59'53" W

9 km/hr Zone



Assessment:

This is a very short, narrow channel at the southwestern corner of the Lost Channel. It is a deep channel with swift current and rocky shoreline. The goal of a speed limit here should be to both limit wave action from traveling vessels and provide a safe speed in a narrow confined channel.

Recommendation:

Actions should be taken to have this speed zone removed from the regulations. This channel is only 24 meters wide at its widest point and a total of 41 meters long. The 30 meter from shore speed limit would cover this area, once the current zone is eliminated from schedule 6.

This would eliminate the need for posting signage.

Gananoque Narrows

That part of the St. Lawrence River known as the Gananoque Narrows, commencing at a line drawn between Princess Charlotte and Blueberry Islands at the charted location of green spar buoy J1, thence northwesterly between Prince Regent Green Light L.L. 365 and the Gananoque Narrows East Red Light L.L. 364.9, thence westerly between the charted location of red spar buoy J2 and Prince Regent Island to a point midway between the Gananoque Narrows West Light L.L. 365.2 and the shore of Prince Regent Island

44°19'26" N, 76°04'44.5" W to 44°19'24" N, 76°05'12" W

15 km/hr Zone



Assessment:

This area is at the eastern end of the Gananoque small craft channel. It is frequented by both tourism based commercial traffic and pleasure craft. It is a short, narrow, deep-water channel with rocky shoreline that is heavily used. There is currently no remaining signage at this location. The goal of a speed limit here should be to both limit wave action from traveling vessel and provide a safe speed in a narrow confined channel. The current speed for this zone is 15 km/hr. This does provide a safe speed but does not effectively reduce wave action.

Recommendation:

This channel has a blind approach at its east end and, therefore, a safe speed is of the upmost importance here.

Actions should be taken to have the speed limit changed to 10km/hr. This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit.

Once this legislative change is made signs would need to be clearly posted at both ends of the zone with a clear view to all approaching traffic.

Hay Island

That part of the St. Lawrence River commencing at a point 100 m north of the charted location of red spar buoy JE10 between Hay and Forsyth Islands, thence southerly between the charted location of red spar buoy I-2 and Hay Island, thence southwesterly between the charted locations of red spar buoy JE14 and green spar buoy JE13

44°18'40" N, 76°09'30" W to 44°18'22" N, 76°09'37" W

24 km/hr Zone



Assessment:

The Hay Island channel is the south entrance to Gananoque at the west end of Hay Island. It is an L shaped deep water channel that is approximately 530 meters long. It is frequented by both tourism based commercial traffic and pleasure craft. It is heavily used as an approach and departure from Gananoque.

Similar to most of the other zones, the goal of a speed limit here should be to both limit wave action from traveling vessels and provide a safe speed in a narrow confined channel. The current speed for this zone is 24 km/hr. This is a very awkward speed and if adhered to causes a large wake from most vessels, although it does serve the purpose of limiting the speed in the channel to a safe level. Most of the signage has disappeared and the single sign that remains is obscured from view by vegetation.

Recommendation:

Actions should be taken to have the speed limit changed to 10km/hr. This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit.

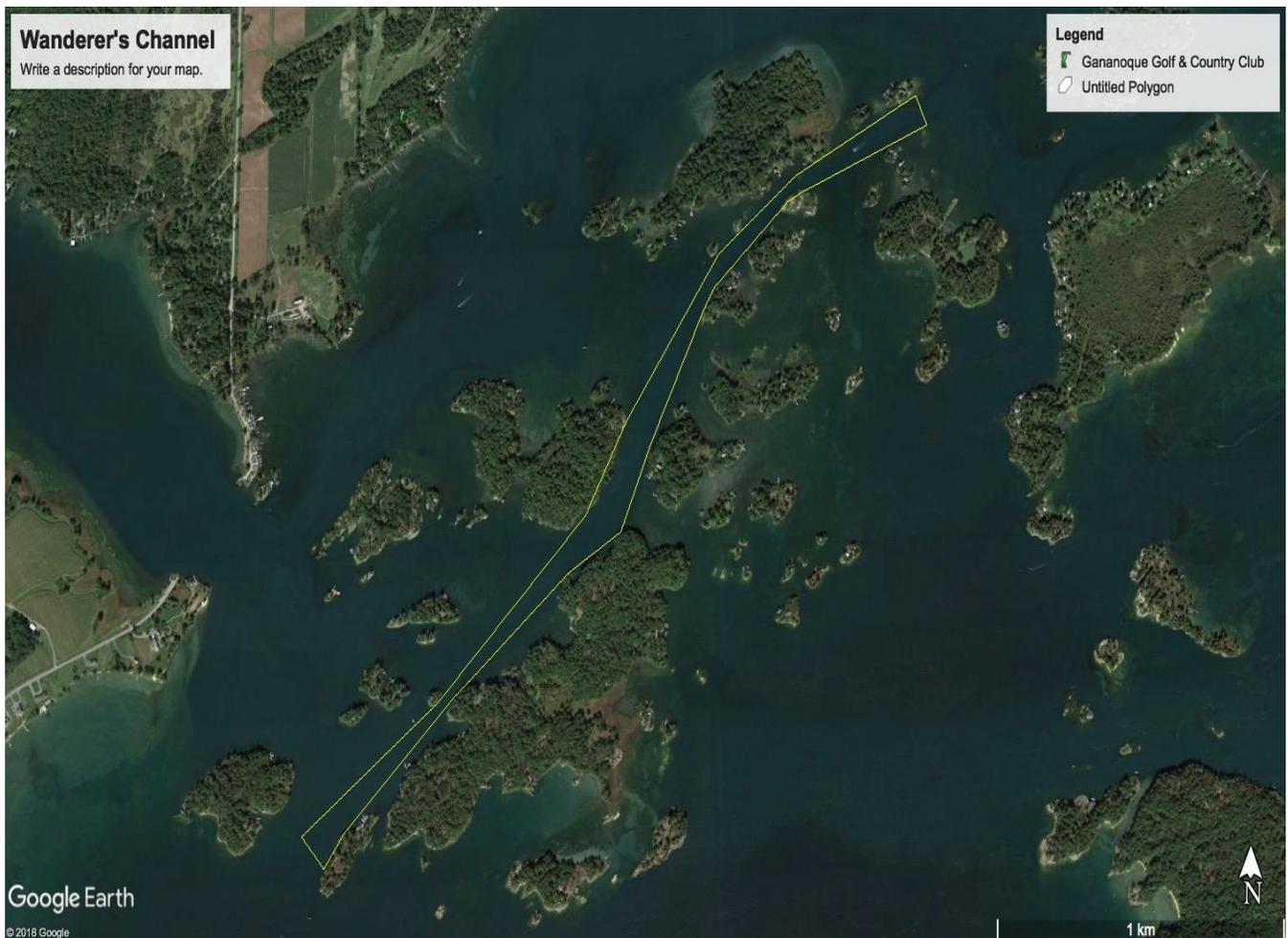
Once this legislative change is made signs would need to be clearly posted at both ends of the zone with a clear view to all approaching traffic.

Wanderer's Channel

That part of the St. Lawrence River known as Wanderer's Channel, commencing at a line drawn between White Calf Island and the charted location of green spar buoy JE-8, thence west-southwesterly between Little White Calf Island and Island D, thence between Water Lily and Burnt Islands, thence between Stonestrow and Pitchpine Islands, thence between Lindsay and Sagastaweka Islands, thence along the northern shore of Bostwick Island between Bostwick and Indiana Islands and terminating on a line drawn between the southwestern tips of Aubrey and Mermaid Islands

44°18'52" N, 76°09'44" W to 44°17'38" N, 76°11'30" W

9 km/hr Zone



Assessment:

This speed zone is in the heart of the Admiralty Group of islands, just up river from Gananoque. It consists of a long narrow channel, of varying depths, that winds its way through several islands.

It is frequented by both tourism based commercial traffic and pleasure craft.

The goal of a speed limit here should be to limit wave action from traveling vessel and provide a safe speed in a narrow confined channel. This zone has only one remaining sign at its west end and was never properly signed. Historically, compliance has been difficult here due to the length of the zone and the low speed of 9 km/hr. It is a popular travel route for local cottagers who tend to not want to spend the time of traveling the entire distance at such a slow speed.

Recommendation:

Once again there are a number of options that can be considered with this zone.

1. It could be left as is with a 9 km/hr speed limit and the current geographical limits.
2. Actions could be taken to have the speed limit changed to 10km/hr and keep the current geographical limits. This would limit wave action, provide a safe speed and be consistent with the 30 meter from shore limit, although the problem of compliance over the length of the zone would still remain.
3. Actions could be taken to eliminate the zone completely. Most of the narrow areas of the generally traveled route are close to one side of the channel. The 30 meter from shore speed limit would control this once the zone is removed from Schedule 6 of the regulations. This would still leave a large area of the current zone with no speed control.

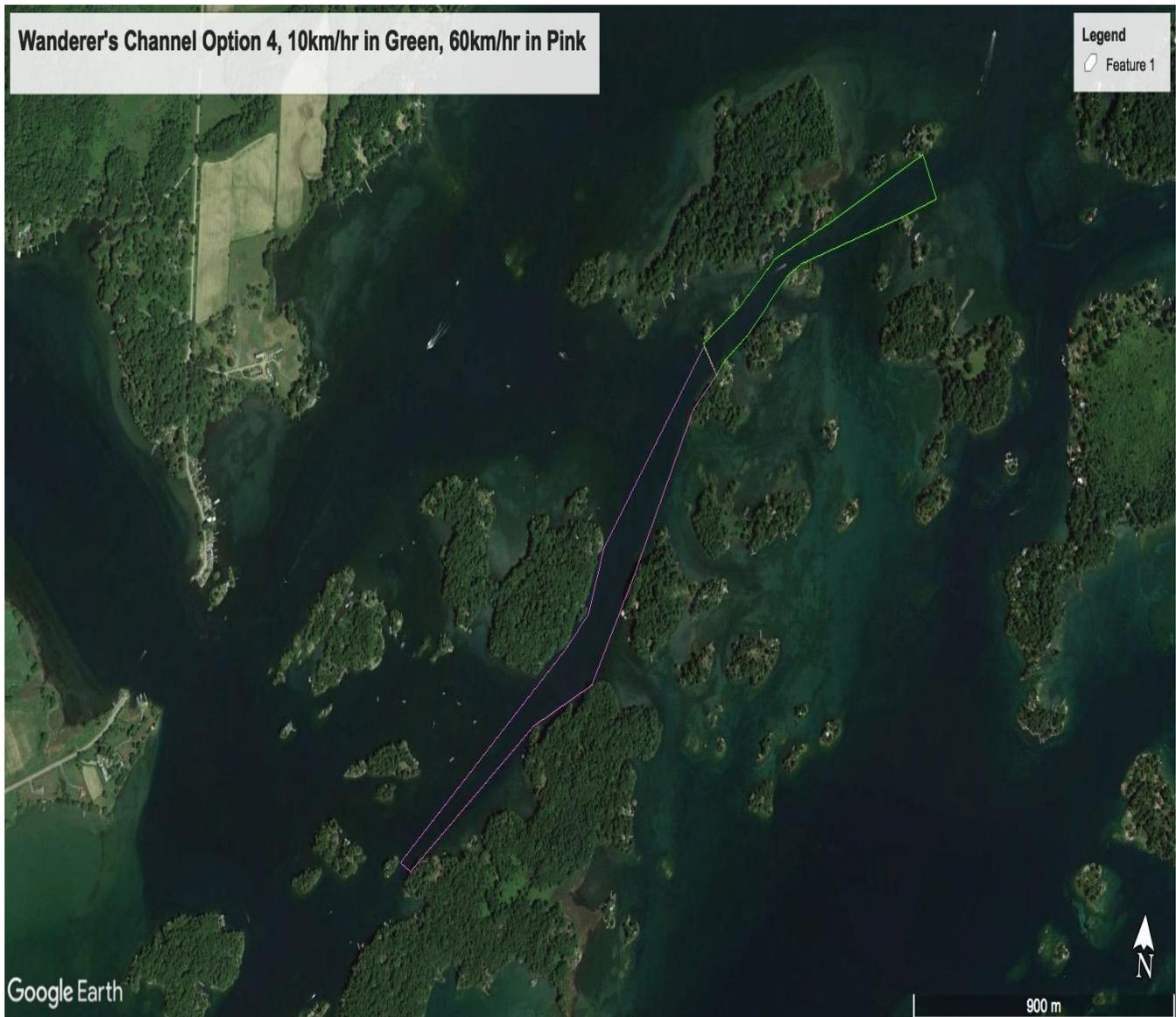
4. Actions should be taken to break the zone into two sections with different speeds.

“The area commencing at a line drawn between White Calf Island and the charted location of green spar buoy JE-8, thence west-southwesterly between Little White Calf Island and Island D, thence between Water Lily and Burnt Islands, thence between Stonestrow and Pitchpine Islands” could remain as a 9 km/hr zone or be changed to a 10 km/hr zone for the reasons already discussed. This would provide a safe speed and limit wave action from vessels.

The area proceeding west from “Stonestrow and Pitchpine Islands, thence between Lindsay and Sagastaweka Islands, thence along the northern shore of Bostwick Island between Bostwick to Indiana Island” could be changed to a 60 km/hr zone. This would provide a safe speed for the relatively narrow and well used waterway.

The area west from “Indiana Island to the southwestern tips of Aubrey and Mermaid Islands” could be eliminated. Most of the wave action in the channel comes from vessels traveling in the small craft channel that continues to the north and is not covered by this speed zone.

(Option 4 shown on next page)



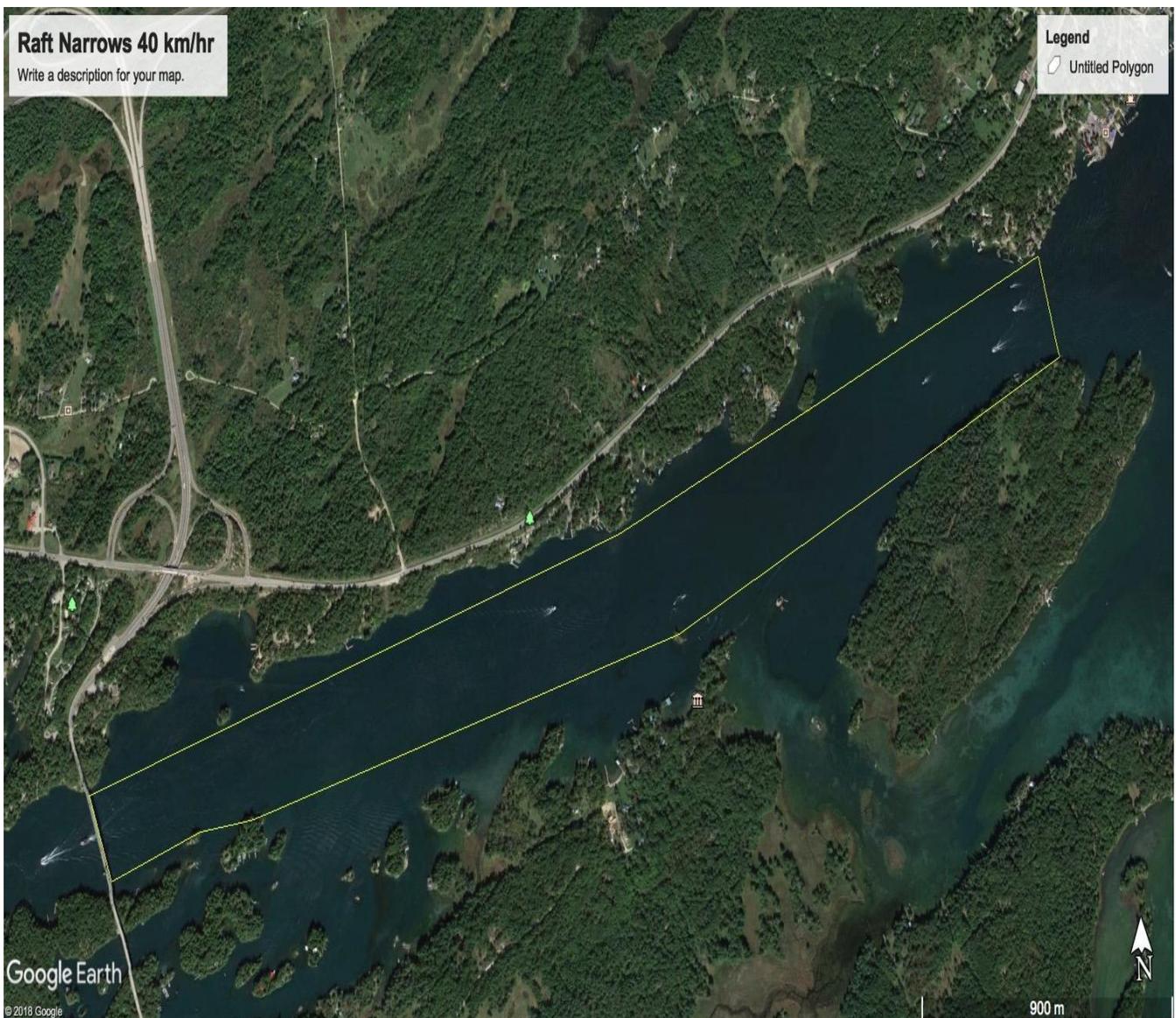
Proceeding with option 1,2 or 4 would require a significant increase in signage. It would need to be clearly posted at both ends and in a number of locations within the channel to enable a reasonable opportunity for both compliance and enforcement.

Raft Narrows

That part of the St. Lawrence River known as Raft Narrows, extending westerly between Club Island and the mainland, thence between Hill Island and the mainland to a point under the Thousand Islands International Bridge

44°22'30" N, 75°55'54" W to 44°21'48" N, 75°59'00" W

40 km/hr Zone



Assessment:

Raft Narrows is the portion of the Canadian Middle Channel of the St Lawrence River from the Thousand Islands Bridge downstream to Rockport. It is a long wide deep-water channel with rocky shoreline and moderate current. This is the busiest area of the Thousand Islands in Canadian waters. It is frequented by both tourism based commercial traffic and pleasure craft.

This speed zone is noted in Schedule 6 of the regulations but was never posted and, therefore, has never been able to be enforced. This is possibly due to the geographical size of the zone. It would be very difficult to effectively post the area in a way that could be observed by the boating public.

With a selected speed limit of 40 km/hr, the goal would have been to provide a safe speed with no concern for wave action.

Recommendations:

There are two options to consider with this zone:

1. Actions could be taken to change the speed to 60 km/hr. This would provide a more reasonable safe speed, allowing vessels to travel through the zone while being able to maintain a state of plane.
This would require a significant investment in signage. Effectively posting this area would be difficult given the size and mainly the width of the channel.
2. The legislation should be changed to have the zone removed. This would effectively be no change as the zone has never been posted and is unknown to most of the boating public.

Canadian Small Vessel Channel

That part of the St. Lawrence River known as the Canadian Small Vessel Channel, commencing at the charted location of green spar buoy U-17 and, thence southwesterly between Goose and Grenadier Islands, thence between Van Buren and Grenadier Islands, thence between Tar and Grenadier Islands, thence between Tar and Buck Islands, thence between Tar and Little Grenadier Islands, thence between Tar and Doctor Islands and terminating at the flashing intermittent red light

44°24'30" N, 75°53'06" W to 44°22'46" N, 75°55'20" W

40 km/hr Zone



Assessment:

This zone covers the area of the Canadian Small Craft Channel that proceeds down stream from Rockport between Tar and Grenadier Islands. The zone is approximately 2.3 Nm or 4.3 km long and receives a moderate amount of mostly pleasure craft traffic. With a selected speed of 40 km/hr the goal was to provide a safe speed with no concern over wave action.

Historically this zone had limited signage that was posted on the large Transport Canada aids to navigation located at each end of the channel. These navigational aids have since been upgraded and replaced so there is no current signage for the zone.

Recommendation:

There are two options to consider with this zone:

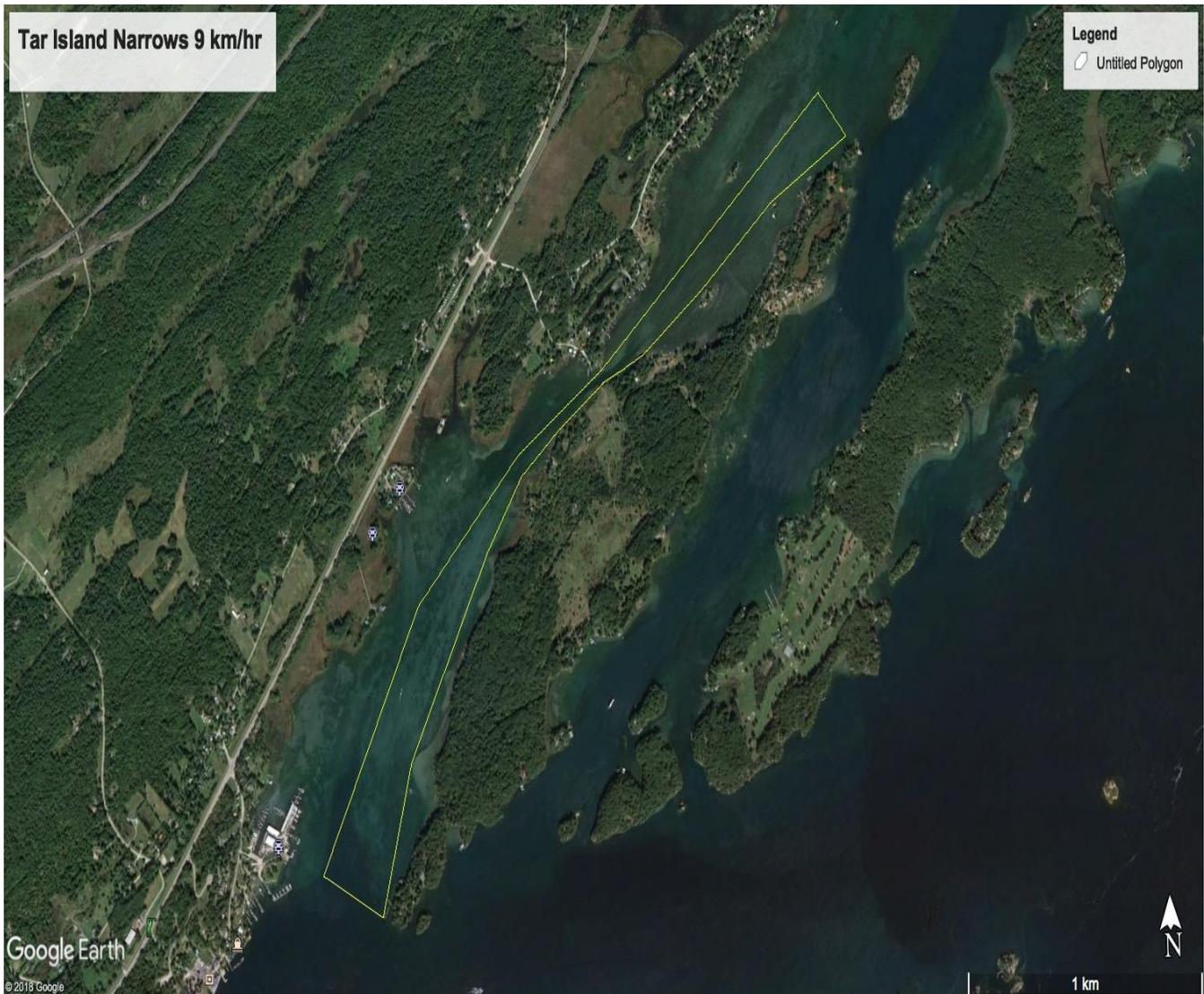
1. Actions should be taken to change the speed to 60 km/hr. This would provide a more reasonable safe speed, allowing vessels to travel through the zone while being able to maintain a state of plane.
This would require new signage posted at each end and the mid-point of the channel.
2. The legislation could be changed to have the zone removed.

Tar Island Narrows

That part of the St. Lawrence River known as the Tar Island Narrows, commencing at the northeastern tip of Tar Island and extending southwesterly between Tar Island and the mainland to the southwestern tip of Tar Island

44°24'12" N, 75°54'00" W to 44°22'48" N, 75°55'36" W

9 km/hr Zone



Assessment:

This zone covers a shallow water channel east of Rockport between the mainland and Tar Island. The channel is approximately 1.9 Nm or 3.5 km long. It is wide at both ends with a very narrow navigable channel in the middle. It receives a minimal amount of local pleasure craft traffic.

This zone was never properly signed with only one sign posted at the narrowest point, which is no longer there.

Recommendations:

Actions should be taken to have this zone removed from the regulations.

This channel does not receive a significant amount of traffic and most of the boaters that do use the area are local residents.

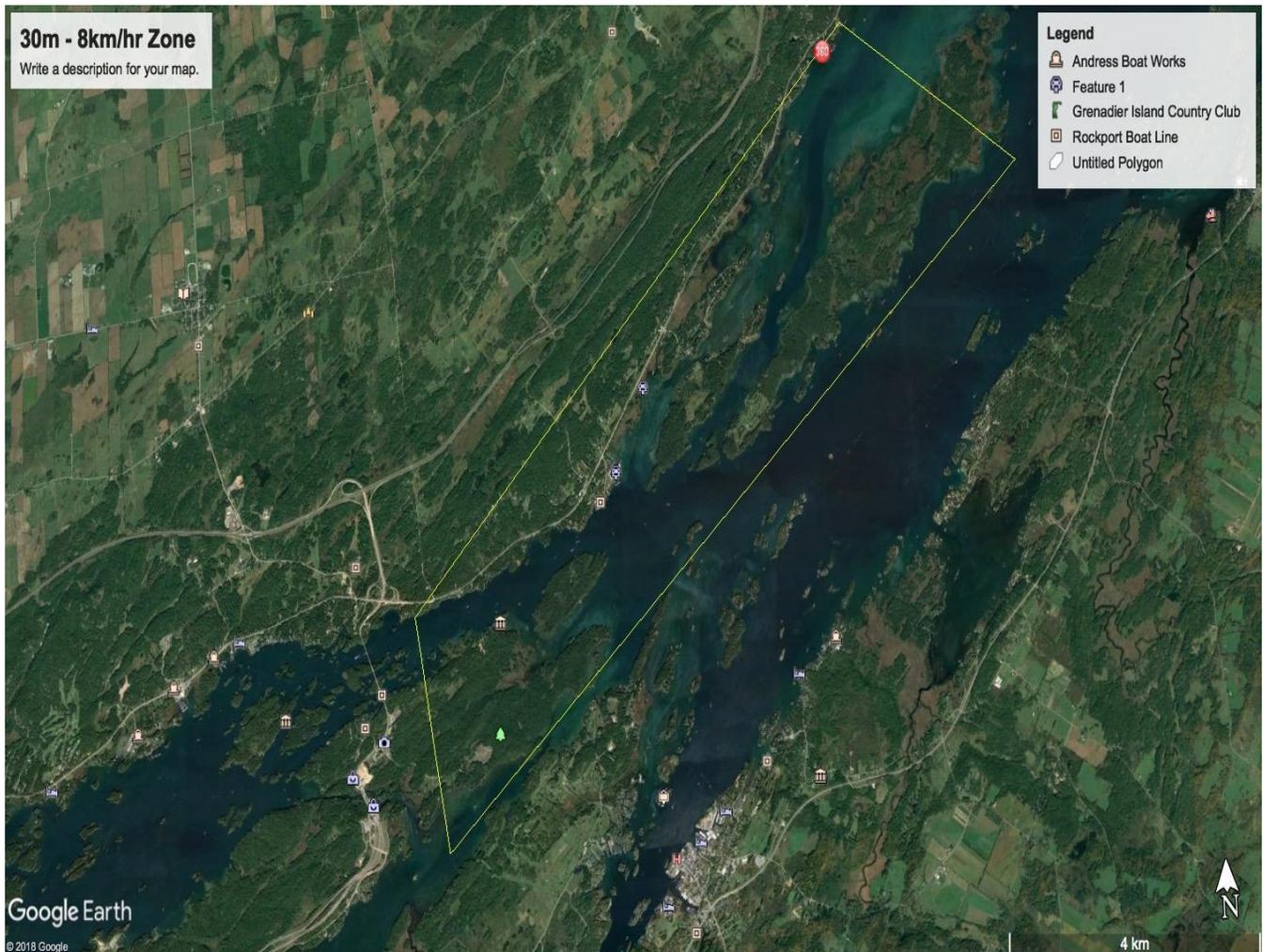
The navigable channel at the narrowest point is very close to the Tar Island shoreline and would be covered by the 30 meter from shore speed limit, once the current zone is removed from the regulations.

30 meter from shore – 8 km/hr Zone

That part of the St. Lawrence River within Leeds and the Thousand Islands Township, Leeds County

44°22'03" N, 75°58'16" W to 44°20'38"N, 75°57'57"W to 44°24'34" N,
75°51'09" W to 44°26'12" N, 75°52'30"W

8 km/hr within 30 meters of shore



Assessment:

This zone covers a very large area of the St Lawrence River and includes all Canadian waters from just east of the Thousand Island Bridge to Mallorytown Landing. It is approximately 6.6 Nm or 12.2 km long and 2 Nm or 3.6 km wide at its widest point. It only pertains to vessels traveling within 30 meters of the shoreline.

This zone is redundant because of the 10 km/hr within 30 meter of shore speed limit stated in Section 2 (7) of the V.O.R.R.

This zone was never posted and it would be impossible to do so. In fact its existence is largely unknown.

Recommendations:

Actions should be taken to have this zone removed from the regulations.

Once this zone is removed from Schedule 6 of the regulations the Section 2 (7) speed limit can be enforced without a need for posted signage.

Moving Forward

After taking into consideration the aforementioned recommendations for each of the 11 speed zones within the Township, decisions must be made as to how to move forward.

It is the writer's opinion that there are three courses of action available:

Options:

1. It is my understanding that the Township has not recently received a large number of complaints from the local stakeholders concerning the speed zones, current limits or lack of enforcement of same. The local Ontario Provincial Police Marine officers also state that complaints have been minimal and tend to be concentrated around local events such as the Poker Run. It should be noted that pleasure craft traffic has changed over the years. The amount of overall traffic is down from its high point in the early 2000's but the vessel size of some of this traffic has increased.

The Township could choose to leave things as they stand until there is a more public voice to have the issue considered.

2. The existing speed zones could remain unchanged and new signage could be purchased and erected.

This course of action would be the most expedient choice but would do nothing to rectify the historic problems with the chosen speeds for some of the zones as noted in the assessments.

3. The Council could weigh the recommendations provided and choose a course of action based solely on the value of the report. An appropriate change for each zone could be chosen and changes to legislation made. Once these changes have been processed and enacted by the government, appropriate signage should be purchased and erected.

This course of action would rectify the historic problems with the speed zones and eliminate redundancies. It would reduce the number of zones that would require signage and therefore reduce expected costs and responsibility. It would take time for the legislative changes to pass and therefore cause a delay in replacing signage.

4. Local stakeholders could be consulted and presented with the proposed changes. Once this is completed an appropriate course of action may present itself.

This would delay any action and could cause confusion as it may be difficult to gain a common consensus with the concerned parties.

References

Transport Canada (www.tc.gc.ca)

Canada Shipping Act 2001

Vessel Operation Restriction Regulations (SOR/2008-120)

Google Earth Pro