



FORMAL REPORT

To:	Mayor Strathdee and Members of Council
From:	Richard Anderson, Director of Emergency Services / Fire Chief
Date of Meeting:	11 April 2017
Subject:	FD 05-2017 Rapid Deployment Craft (RDC)

PURPOSE

The purpose of this report is to provide Council with a proposal to request an additional variance to the Fire Department's 2017 Operational Budget. The information provided will help Council to make an informed decision regarding the adjustment of funds in order to purchase a Rapid Deployment Craft (RDC) for Water and Ice rescue.

RECOMMENDATION

THAT Council approves a 2017 operating budget variance to the Fire Department to purchase a rapid deployment craft for water rescues from Canadian Safety Equipment and a further \$4,442 in equipment both to be funded from the General Capital Reserve.

BACKGROUND

In 2016 it was identified that the Town of St. Marys Fire Department personnel were not NFPA 1006 Water and Ice rescue qualified. With drowning being one of the leading causes of accidental death in Canada, water rescue training is essential for first responders so they can take appropriate action when responding to water incidents.

The Town of St. Marys Fire Department's protection area has numerous types of water systems, including but not limited to, Thames River, Trout Creek, two quarries and Wildwood Lake. Given the probability of having a water related call, it was determined to be important that the firefighters receive these qualifications immediately to face unique challenges when it comes to water and ice rescue equipment, training, and operations. Town Council approved an increase Operational funding of \$5000 in 2016 so that the Fire Department could purchase Water and Ice rescue equipment. As well the Fire Department received an increase in funding for professional development to have the firefighters trained in water and ice rescue.

REPORT

The Fire Department currently have three qualified NFPA 1006 Water and Ice rescue Instructors and the Fire Department will receive water rescue training this coming spring/summer. Ice rescue training will take place in the Fall/winter of 2017.

As a new response program, the Fire Department was required to purchase all of the necessary rescue equipment including: dry suits, floatation devices, helmets, throw bags, carabiners, ropes, awls, a rescue basket, and a floatation collar. The department was able to make strategic and cost

effective purchases by procuring all of this equipment at a cost of \$4,442 compared to the normal list price of \$7,733.

Now that the above mentioned items have been purchased it has been recommended by the current instructors, the Access Rescue School and other fire departments that to complete our equipment list what is needed is a Rapid Deployment Craft (RDC). Presently, there are no funds in the 2017 approved operational budget to fund this purchase. However, after review I would recommend that Council approve an adjustment in funds for this purchase.

The RDC, Rapid Deployment Craft, is the safest, most durable, easiest to use, rescue boat ever made. It works in many applications and is the only non-motorized boat a fire department will need. The RDC is a radical departure from the practice of drafting recreational craft into rescue service.

It is designed for:

- Ice Rescue
- Mixed waters and transition
- Low head dam rescue
- Patient litter, body retrieval
- Towable behind a personal water craft

The RDC has extremely rockered (upturned) ends. They allow the rescuer to "drive" the boat's open end over the victim while the victim's head remains above water at all times. It also allows a rescuer to reach forward into a pour-over while still safely centered in the boat. The floor is open at each end, allowing 2 entry points. The freeboard height is only inches, enabling a rescuer to easily pull a victim into the boat. This also allows a rescuer, if in the event he was in the water, to pull themselves into the craft with minimal effort. The two entry portals on either end also act as carrying points which provide a perimeter of safety in case of sudden ice failure or mud sinking. These carrying points are comfortably on the sides. Carrying the RDC is like using a litter or basket with long handles, which, is one of its many uses. The RDC can be stored either deflated or bagged. The RDC will store in a 2' cube. This will give you fast access, less chance of damage and will lengthen the life of the rescue boat. It will be stored in a dry area, out of direct sunlight. It will inflate quickly and can easily be carried by one person. The most common way to carry it is deflated and stored in a vehicle.

Various images are included below to show the craft:

Image 1. The RDC is displayed in an ice water rescue situation. This boat was designed and built to take the stresses incurred by those who need to work in demanding, ice and water related rescue situations.



Image 2. The craft surrounds one or more rescuers in an ultra-buoyant and protective inflated perimeter. The RDC allows a rescuer or rescue team to quickly reach a victim and safely retrieve them through the ice or water cold water rescue scene. While on the ice, they are protected from falling through a fracture into the water. In a combination ice and open water situation, the RDC can be paddled across open water or broken ice and water by one or two rescue technicians.



Image 3. Swift water rescue is safe and sure with Oceanid's RDC Rapid Deployment Craft inflatable rescue raft. The RDC allows a rescuer or rescue team to quickly reach a victim and safely retrieve them in swift water, whitewater, floods or low head dam entrapment situations. The RDC is easy to control, very stable and is self-righting in potential overturn situations. It paddles and ferries like a canoe and is suitable for class or grade 5 whitewater.



Image 4. The RDC Rapid Deployment Craft is built to take the stresses incurred by those who need to work in demanding, water-related rescue situations. The standard package includes carrying bag, floor top carpet, two paddles, paddle bag, tow strap assembly, air fill manifold and repair kit.



MATERIALS:

The RDC is designed to withstand severe use conditions for many years. Each rescue craft is assembled with the finest, most advanced materials available using the best time tested construction techniques. The RDC fabric is the most durable in the Industry. It is a PU/PVC/polyester alloy material with all the seams being welded and taped for ultimate strength and air retention. No glue or adhesive is used so seams attain the same strength as the fabric which means there are no weak links in our rescue boats. The urethane coating also contains more UV inhibitors than any other material on the market. This allows prolonged sun exposure with no fabric degradation, as occurs with traditional rubber boats. The floor has an I-Beam Design that, with very little air pressure, can become rock hard. This enhances stability and makes the RDC an excellent litter for carrying an incapacitated victim.

All manufacturers consulted indicated that the rescue boat can last a decade or more.

I have consulted with Access Rescue Canada (training school for Ice and water rescue) and several Fire Departments (Stratford, London, and Kitchener); everyone I spoke with indicated that this piece of equipment is an integral part of completing our rescue needs.

The three vendors that I have consulted have provided me with the following quotes for the RDC. The cost is expected to be in the range of \$6,441 - \$7,198.

SUMMARY

In order for the Fire Department to keep up with advancements in water and Ice rescue procedures we need to purchase the RDC, Rapid Deployment Craft. Staff is recommending that Council approve an adjustment in funds for this purchase.

FINANCIAL IMPLICATIONS

The forecasted cost for a Rapid Deployment Craft is \$6,441. It is proposed to purchase this apparatus from Canadian Safety Equipment.

OTHERS CONSULTED

Brent Kittmer, CAO/Clerk
Fire Chiefs from local municipalities
AJ Stone
Inland Marine
Canadian Safety Equipment

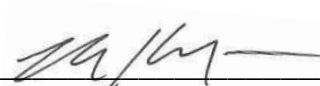
ATTACHMENTS

None

Respectfully submitted,



Richard Anderson
Director of Emergency Services/Fire Chief



Brent Kittmer
CAO / Clerk