



2020 Flood Preparation Committee Final Report prepared for TICA

Reviewed by Committee Members at the final meeting June 24, 2020, and presented to TICA by
Tony Farebrother

Committee Members:

- Tony Farebrother (TICA Liaison)
- Liz McClelland (Co-Chair)
- Jane Davidson-Neville (Co-Chair)
- Mike French
- Kristin Basmadjian
- Philly Chatterton
- Kate Shepherd
- Laura Shepherd
- Bill Jackson
- Roger Abbott

Members who retired during the season:

Steven Whitfield, Bennett Milbourne, Samantha Mills & Inese

Graveljs

Additional meeting attendees when requested:

Lynn Robinson, Jamie Smith, Sharona Freudman, Chris Jackson

The first meeting of the committee was held on January 5, 2020, initiated by Tony Farebrother, who discussed with the volunteers what the scope of the Committee's work was to be;

- co-ordinate community flood work
- work with the City and TRCA on their mitigation work and plans
- manage communication
- help those that might need assistance in preparing for the flood and are unable to do so on their own

We were on our way!

It was considered as part of the flood preparation work that many vulnerable and elderly Islanders may not be able to help themselves in the event of an ordered evacuation of the Islands. The Committee reached out to TICA's EMS liaison team to jointly find out from the City whether there is an effective evacuation plan, and when/if that would be initiated. The Red Cross Society was also approached to learn what their protocol is if any community is under an evacuation order, and were advised that they would assist once the order had been given. Meetings were held with staff from our Councillor's office, together with the City Emergency office. Progress was made through these meetings. The Committee also consulted with the Island's vulnerable islanders' support group who had determined that there are 38 island households where varying levels of assistance would be required.

Committee/Island resident/other stakeholder communication was managed in the following ways:

- Delivered an All Island Residents Community meeting on February 23, 2020
- Issued three Community notices; one in advance of the meeting and two following
- Published a special Flood Edition of the Community Newsletter
- Published 7 Flood Bulletins (final one to be published shortly)
- Maintained a "Flood" page on TICA's website
- Provided written outline to the Church for flood fundraising
- Regular meetings held between Parks, TRCA, and reps from Flood Committee
- Harbourfront community groups held a meeting in the Brigantine Room of the Harbourfront Centre on March 3rd; the Island Flood Prep group was part of this
- Lynn Robinson updated Committee at every meeting on lake levels and flood potential

The Flood Committee met either weekly or bi-weekly from January 5 to June 24. Agendae for and Minutes of meetings have been archived by co-chair Jane Davidson-Neville and are available for review if required. All other relevant documentation including the Inventory and Financial reports, will be held in a Flood Committee folder on the TICA website.

At the large community meeting in late February, chaired by Mike French, the existing plans for sandbagging of 6 specific areas were laid out, the fundraising drive initiated, and sign up sheets for volunteers explained and exhibited. There were approximately 140 people in attendance. The six areas of major concern where sandbagging events were to be held, were:

- 1) AIA – March 15
- 2) First Street – March 22
- 3) Seneca – March 29
- 4) Nottawa/Omaha – April 5
- 5) Bayview – April 19
- 6) Cibola – April 26 (advised later this work would be done by Parks Department)
- 7)
- 8) Later on it was determined that the Cove was to be treated as a separate area of major concern as many residents in that area wanted to participate in both the decision making and the execution. The project management and work was subsequently taken over by the neighbourhood residents, led by Chris Jackson.

The first sandbagging event was extremely well attended on March 15, with approximately 100 volunteers turning out to fill sandbags, place sandbags, and provide food and drink. The estimate of being able to fill 1,000 sandbags per hour was exceeded, as over 2,200 sandbags were filled and placed in just over 2 hours, testament to Roger Abbott's work-flow plan that had been drawn up to maximize volunteer efforts, with the sandzookas built by Bill Jackson.

Unfortunately, all the following planned large community sandbagging events were cancelled due to the Covid-19 pandemic. The Committee decided to take a 2-week break at that time to reconsider and revamp its plans, but continued to fundraise.

With small teams and with an elongated time-frame, all sandbagging and other flood mitigation tasks were completed by the first week of June.

In abbreviated detail, the mitigation work performed is as follows:

AIA property- lead Kristin Basmadjian:

AIA purchased 54 meter bags of sand, 44 of which were installed in machine-accessible areas of AIA property, as City flood management plans did not extend to it. The remaining 10 were installed east of Wyandot. Sandbags were used in forested areas and where the water taxi

authorized loading areas are, volunteers installed flood protection in the shape of stairs to allow passengers on and off the water taxis without damage to the walls.

Seneca Wall – lead Kristin Basmadjian:

At the height of the pandemic, 'germ' units were organized over 4-6 weeks to fill and distribute 25 sandbags every 10' along the length of Seneca, so that the wall builders could assemble a wall using the old bags (that were fixed up in spots). Plastic vapour barrier was then draped completely over the sandbag wall and bibbed out, with sandbag weights on the outer edge and a solid row at the base of the wall to help with wave wash and bag erosion.

The Cove – lead Chris Jackson:

This is the lowest lying area in the community directly adjacent to the water and is not Park land. Not knowing if and when the City would build a more lasting berm, it was decided to use meter bags in this location. Less Mess was hired to place 28 of their meter sand bags in a row along the Cove and that provided a significant wall between the water and the community. In addition, along the rock hardening wall facing the harbour, a sandbag wall was built behind the city wall ending at the meter bag wall as a backup wall. The same thing was done at the other end heading towards First Street beach. Approximately 1000 sandbags were filled and placed. Had the water risen higher, it was planned to add a further sandbag wall behind the meter bag wall. The possibility of setting up hoses and pumps to pump out the cistern in the Cove was explored, some donated materials were gathered, and the Committee bought an electric pump for that purpose. However, this equipment was not required this year and has been stored with the rest.

First Street Beach, 4 Channel Ave., and the harbour – lead Tony Farebrother:

2000 sandbags were filled and placed in this area. A wall 3 bags high was built from the shore along beside 4 Channel Ave to keep water away from the community in the possible event where water breached the rock hardening wall along the shoreline. From the start of First Street to First Street beach we added two layers of sandbags on top of the rock hardening. To complete the protection, at First Street beach with the assistance of vapour barriers a 4-layer pyramid style sandbag wall was made. It is hoped that these walls will hold up for two more years to allow time for the City to plan and build a berm or other protection in that area.

Drainage west of Wyandot – lead Kristin Basmadjian

A culvert was installed under the AIA pathway in order to eliminate flooded entranceways and sidewalks. Designed with drilled drainage pipe embedded in gravel it was then covered with landscape fabric to keep out weed and root encroachment, which will allow water to flow freely into the cistern. It is envisaged that the culvert will need to be cleaned out every 3-7 years, dependent upon its use.

Nottawa/Omaha – lead Kate Shepherd

Flood preparation work at the Nottawa/Omaha corner was done by 4 neighbourhood pairs, working independently of one another, and consisted of repairing the existing wall along Omaha and the boat launch area, filling sandbags and adding another 2 rows of height to wall. Bags were also stock piled beside the QCYC entrance, in case of extreme flooding from the club's boat launch area.

Bayview – lead Laura Shepherd

To protect the neighbourhood along Bayview, the Committee loosely organized a roving band of volunteers who, over a period of weeks, cleared and prepped the 3 wall sites, filled and staged hundreds of bags, rebuilt the berm sandbag wall and the area around the cistern, rebuilt a new, improved sandbag wall streetside, and built a third sandbag wall inside the outer stone/cement wall to prevent the outer meadow from instant flooding. Neighbourhood knowledge/input and energy resulted in flood protection far more comprehensive than our original plans.

Ground Water Management Project – lead Philly Chatterton

To manage ground water around homes in low-lying areas, the committee also invested time and knowledge into a water management program. The team and concerned residents developed a framework for a network of hoses that could provide a backbone pumping system. A pilot project on Nottawa was created to assist with pumping along the shared QCYC fence and island homes. However the water levels were never sufficient to test the plan.

20 mini aqua dams were also purchased as a secondary flood defense, as they were available at a much reduced price from TRCA, but the 'no-flood' situation deemed them unnecessary for utilization this year.

An inventory report of the remaining equipment that was purchased, built, and donated will be provided to the community in our final bulletin, as well as the final financial report. These documents are appended as Appendix 1 & 2. The equipment is stored in two shed areas of the AIA, kindly provided to the Flood Committee, and unused donations are currently being held in both the TICA and the Church accounts.

Prepared by 2020 Flood Preparation Committee Members
July 3, 2020

2020 Flood Preparation Committee Wrap Up Report Appendices

Appendix 1 – Inventory

Items as listed are stored in two areas of the AIA sheds, except where noted:

1. 2,550 sandbags
2. 1x 4” gas pump with gas can, intake and exhaust hoses*
3. 1 x 2” electric pump**
4. 20 mini aqua dams
5. 18 full & 1 partial x rolls of vapour barrier
6. 19 prs x work gloves
7. 10 shovels
8. 5 Sandzookas – 2x3-station and 2x1-station stored outside shed; 1x1-station at Bill Jackson's
9. 4 x lengths weeping tiles (porous hose piping) approx. 200 linear feet

Notes

*A second gas pump was personally purchased by Mike French, which can be used if/when required.

**There are other electric pumps within the community that have been loaned/donated.

Appendix 2 – Financial Report

Income

\$10,000 donated by Toronto Island Trust

\$ 6,000 donated by AIA

\$13,387 donated by individuals

Total:

\$29,387*

Expenditures

\$ 4,350.50 - sandbags

\$12,723.80 - filled meter bags of sand

\$ 1,342.07 - vapour barrier

\$ 297.73 - weeping tiles

\$ 1,600.00 - mini aqua dams

\$ 135.59 - electric pump

\$ 649.70 – gravel

\$ 112.62 – tarps

\$ 55.50 – AIA shed shelving

\$ 338.23 – black cloth, hose, and various miscellaneous items

Total:

\$21,606*

Balance held forward

\$ 7,781*

***Figures rounded to nearest dollar**