## Lake Ontario St. Lawrence River Social Vulnerability and Economic Loss Survey

Compiled February 24 ${ }^{\text {th }}, 2020$

## WHO ARE THEY - Social Vulnerability:

- $\mathbf{N}=\mathbf{7 4 0}$ households / 49\% Ontario, 51\% New York / 63\% Primary residents
- $97 \%$ own their home, $3 \%$ rent.
- 2.54 people live in the home on average, Mode $=2$
- MALES - AGES:
- $19 \% 70$ YRS + / 39\% 60-69 YRS $=58 \%$ OVER THE AGE OF 60
- 41\% 18-59 YRS
- FEMALES - AGES:
- $14 \% 70$ YRS / 42\% 60-69 YRS $=52 \%$ OVER THE AGE OF 60
- 38\% 18-59 YRS
- $18 \%$ of households have children under the age of 17 yrs .
- $6 \%$ of households are single parents
- $24 \%$ have someone in the home with disability that impacts their ability to respond to flood
- $7.3 \%$ of homes are in receipt of government financial assistance (welfare, disability supports, unemployment).
- $49 \%$ retired, $27 \%$ FT employed, 6\% PT employed, $12 \%$ self employed
- 9\% own a business or farm dependent on Lake Ontario Levels
- $50 \%$ of households earn less than 125 k combined last year.
- $20 \%=125 k-200 k+$ and $30 \%$ prefer not to say.
- $5 \%$ of respondents do NOT have ready access to transportation
- $40 \%$ said potential flooding impacts their community's evacuation route
- 3\% face language barriers
- $39 \%$ live on a well.
- $65 \%$ live on a septic system.
- 5\% high school or less, $8 \%$ some college, $22 \%$ college, $28 \%$ bachelors, $30 \%$ graduate degree, $7 \%$ prefer not to say
- ONLY 11\% HAVE OVERLAND FLOOD INSURANCE. 22\% cannot afford it, and $89 \%$ said it is not available. $28 \%$ were unsure.
- $26 \%$ do not have access to adequate Extended Medical Benefits (52\% yes, $13 \%$ don't know, $9 \%$ prefer not to say)


## How have they been impacted? (See comments page 3)

- $21 \%$ had contaminated drinking water in 2017 or 2019
- $20 \%$ had compromised septic systems in 2017 or 2019
- $36 \%$ had their "domestic water use" impacted (drinking, laundry, bathing, etc.)
- $21 \%$ high water has impacted their retirement funds "A great deal", $14 \%=$ "A lot", $25 \%=$ "A moderate amount", $21 \%=$ "A little", $12 \%=$ "None at all".
- Severe or significant impact:
$15 \%$ on ability to earn an income
23\% on physical household damages
- 51\% on Environmental / Ecological damages
- $66 \%$ on shoreline property loss
- $55 \%$ on property value loss
- Severe or significant impact:
$26 \%$ on physical health damages
- $43 \%$ on mental Health Damages
- $53 \%$ on overall sense of Safety and Security
- $53 \%$ on overall sense of wellbeing
- $16 \%$ received financial support from government during the flooding to help offset losses. $74 \%$ did not, $10 \%$ were unsure.
- Estimated losses from 2017 and 2019 are $\$ 67,658,320$ for 576 respondents, averaging a loss of $\$ 117,462.36$ per home (remember, half of all households earn less than 125 k combined annually).


## Lake Ontario St. Lawrence River Social Vulnerability and Economic Loss Survey (Cont'd)

Compiled February 24th, 2020

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Can they independently battle flooding? (See comments page 5)
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- $70 \%$ reported that they do NOT have the resources, knowledge and ability to independently build effective sandbags walls in preparation of flooding.
- $55 \%$ said their property, safety and security depends heavily on their NEIGHBOURS ability to defend against flood.
- $23 \%$ have NO access to government emergency services and supports to prepare for imminent flooding.
- 46\% have limited access (being given sand and bags, no to assistance in preparation or deployment)
- $12 \%$ have ready access (full emergency support in flood preparation and response)
- $65 \%$ do NOT have the resources or money to make their home more flood resilient.
- $41 \%$ do NOT have the knowledge required to make their home more flood resilient.
- $58 \%$ do NOT have the ability to make their home more flood resilient.


## CONFIDENCE IN GOVERNMENT:

- $63 \%$ do NOT feel that their Conservation Authority or DEC enables them to make their home more flood resilient.
- $57 \%$ do NOT feel supported by their local government in striving for readiness / resiliency.
- $77 \%$ do NOT feel supported by their PROVINCIAL / STATE government in striving for readiness / resiliency.
- $86 \%$ to NOT feel supported by their FEDERAL government in striving for readiness / resiliency.


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## Is there any more information you would like to share:

- I'm facing the reality that I can loose my home and we dont have enough money to start over
- The past three years have been very stressful on me especially because of my disability. I'm unable to do the work myself. It's expensive to pay for the work being done. My disability money only goes so far
- If the water goes to 250 ' above sea level, I will loose my house.
- Head of household is 76 and age-related decline makes it extremely difficult to respond effectively. Also, father lives a few homes from our location. He is 93 and it is IMPOSSIBLE for him to respond to flooding!
- I am 71 years old and alone (widowed) and feel anxious all the time wondering what the spring of 2020 will bring.
- I am almost 66 years old caring for my disable wife, i need help filling carrying and placing sandbags, both next door neighbours are older and would need help
- My husband has health issues-heart attack, cancer, wife-terminal illness, son-special needs
- My 82 year old husband has heart issues, so I permanently damaged both knees filling, carrying, and installing $19,000 \mathrm{lbs}$ of sandbags in a futile attempt to protect our rental property from unremitting high water wave damage. Because the public access road was flooded by huge waves, my rental property was inaccessible by vehicle between late May to mid July, after which we had to hire a bulldozer to gain access to our driveway and rental home. My business is destroyed since it is not safe to have tenants when the high water wave action and damage is so unpredictable. Huge trees are constantly falling and logs and small boulders are still being washed across and blocking our driveway and access road.
- Having just retired at 701 am now on very limited financial resources. Stress levels have been tremendous and increasing over the past 3 years. Depression and anxiety issues are ever present.
- This situation is taking a horrendous tole on my stress level.
- We are a retired couple with health issues. We are financially and emotionally drained. We have both worked in the service industry for over 50 years in Ontario and now we face complete bankruptcy because of 2017 and 2019.
- Too old to do any more sandbags. Ran pumps $24 / 7$ to keep water out. Shorewell was full of dirty water. Lost $50^{\prime}$ of waterfront and property as well as trees and yard unusable all summer. Had a four foot shorewall put in and was over it by a foot. Most of the summer residents weren't up all summer. Stressful to say the least. My husband hurt his back with sandbags and still not recovered.
- DUE TO MY AGE AND HEALTH, I AM NOT ABLE TO EFFECTIVELY PROTECT MY PROPERTY FROM RISING LAKE LEVELS.
- We are blowing all our saving to raise our house. It was supposed to be our full time home once my husband retires. Now we can't even sell the place. And raising it is only a temporary solution because we are at $20^{\prime}$ erosion already (and never before). We have only $40^{\prime}$ before the house is in the lake. Conservation authority will not let us build anything or even place a few large rocks to break the waves. Our lot has never had erosion before - we know this as the area was expropriated for military training in WW2 - and they had very detailed maps and drawings at the archives. The erosion is new since 2017
- I am 70 and will try to. protect my home but we need govt help plus breaks on our property taxes.
- We are seniors who have been devastated both financially and emotionally with past flooding. It played severe havoc on our health.
- My home must be raised to avoid flooding. I can not afford nor can I raise my own home. Sandbagging is ineffective. I can't afford to move. My children and I are building an access door through a window to prepare for flood 2020 because we won't be able to use our doors.
- Even if we could have a permanent structure built our neighbours will not, so money would be wasted. we are stressed as this is our only home. this is our asset. we banked on the sale of this property to allow us to move to a home closer to amenities and town services. this no longer seems to be an option for us which scares us. at our age we don't have years to wait this out and see what happens.
- At risk living alone. Thankful for neighbours and occasional family visits to help
- 2 single females-unable to afford the continual erosion of our property, sinking boathouse with damages and severe damage to our waterfront and concrete walkways which are sinking and crumbling-very stressful, this is our retirement home which is losing value each year b/c of the high water in 2017 and 2019 and probably again in 2020 as we've never seen the water this high in the winter!
- My Marina business lost its entire years business in 2017 \& 2019. Our docks and some of the property were submerged for most of the boating season. I am concerned that one more year of flooding with result in the loss of my business completely. Due to the continued higher than normal water levels I have been unable to asses the structural damage to the docks but know there is damage. This is a nightmare!!!!!!
- the septic tank and leach field is flooded!My husband has Alzheimer's which has progressed significantly from the stress of the flooding. Both of us are older and can't do as much as we used to. We will need help!!
- I have been the one helping my elderly neighbors with sand bags etc; but I just retired 2 yrs ago and basically have punished my body trying to keep up each year putting in sandbags for myself and the neighbors because each year the water has gone up 1 ft more than the previous years. I am figuring that I will have to put in 800 more sandbags this year depending on how high the lake level comes up. After last year I have severe tendonitis in both elbows and my left knee has constant pain from when I twisted it carrying sandbags thru the mud and a foot 2 feet of water
- I'm a 62 year old male and my 50 year old brother lives with me and has Down's syndrome. Our complete backyard was flooded and along wit my new dug well installed in 2018. We don't have the means or the money to fight this. We definitely need help!
- house been in the family for over 77years all will be gone We are in our sixties and semi Retired. The high water levels in 2017, 2019 \& going into 2020 has been and continues to be extremely stressful for us and expensive. We had to have a contractor add additional rock in Nov 2019 to the rebuild revetment that was installed in Nov 2018 due to additional damage in 2019.
- Sand bags were carried away overnight. Sand bags are very heavy for seniors to deal with. There are no neighbours to help as they are looking after their own property an sand bags need to be filled lifted into a vehicle removed and brought to your back yard and stacked. They didn't work. They disappeared within 24 hours . I know as I watching the water destroy my yard and creep towards my home
- We live on an island with ferry service. This service has been severely compromised in the past two flood years and will be even more so if the level is a foot higher this year. We may lose use of one ferry altogether and be down to $1 / 3$ usage of the other one. On top of shoreline damage and some with actual damage to homes and cottages This could very well affect our employment if we can't get to work. My husband is self employed and does most of his work off the island so if he can't get off and on with his equipment he makes NO money and will lose contracts. I can't seem to make the local government understand the severity of this flooding on the lives of their residents.
- We have a resort this is our livelihood if flooding continues we will loose our income guests will not return our cottages will be damaged. Sandbanks provincial park beaches will be washed away destroy which will result in a collaps the tourism destination Prince Edward County as a whole people will loose their businesses as. I tourist will be coming this is devasting for many families
- Please help us by lowering the lake! We are seniors, and have been stressed out about these floods. This lake has never flooded like this before, and we cannot put any more money out !! Our home is our equity !! HELP !!
- We are too old to adequately prepare for a flood emergency.
- I do not have the funds or resources to protect my property
- My greatest threat is total loss of property and home due to erosion, not flooding.


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## COMMENTS ON FLOOD PREPARATIONS AND FLOOD RESPONSE (sample only):

- I'm 72 and filling and moving and placing the barely adequate sandbags last year was VERY taxing on my vehicle and my own body. I'm not sure that I could do it again. I will have to do some expensive remediation sometime soon or my deficiencies will badly impact my neighbours' shorelines
- Our town offers bags ready to go, but we are required to load, transport, off-load, deliver from driveway to hillside, down 20 steps to water, carry into place and arrange. We're over 70 yo and only have a car with capacity of maybe 10 bags. So far we have placed over 300 bags with no support whatsoever. It's been a struggle and painful.
- Our town says they have no money to help us!
- Considering my age and the age of my friends and neighbours, having to fill, lift and place sandbags is a concern. I cannot do it alone and feel I am putting the health of my friends in jeopardy when I ask for their help
- At our ages and health, carrying, loading, unloading and placing the sandbags is difficult and dangerous.
- They say they have no money to help
- Our small municipality has limited funds to provide emergency assistance. We have only a volunteer fire department. Sand and bags will be provided at several locations but we are unable to fill sandbags and build our own wall anymore with our advancing age. We did it in 2017 and with help in 2019.
- In 2017 and 2019, the fire department was amazing in helping to protect properties as best they could (helping with sand bagging and checking pumps when residents were away. However, our municipality will no longer be providing this assistance in 2020 and beyond due to their limited financial resources. Two years of flooding has depleted any funding that was available for flood relief since the government has not increased their assistance to my and other municipalities.
- Town provided bags and sand but had to fill them ourselves... I am 77. No one from the town came during flooding of 2019. Lived surrounded by water for $6 / 52$ with only my dogs for company. Tremendous metal stress.
- We have placed nearly 2000 sandbags in these past 3 years. We have to load them into our truck, haul them to a marine that is in major trouble with the high water carry the bags down sunken docks covered with cold water and slime and into our small boat. Drive the boat that can only carry about 20 bags at a time at crawling speeds as the "no wake" boat laws are in effect because of the flooding, haul them off the boat and place them and return for another 20 bags. Over and over and over and over
Fire department city workers neighbours family and friends came both years
- We are not provided any support by local, provincial and federal government.
- I have been told that no services will be available in 2020 due to NY budget issues.
- Limited support usually becomes somewhat available after the horse is out of the barn.
- No financial support offered for cost of materials to limit the destruction of buildings or limited property if existent.
- This entirely depends upon the height that will be needed to build the sandbags. A vacant lot to our west has no barriers around it so flooding waters can easily circumvent it and intrude upon our structure. Also, although the town does provide filled sandbags, they tie the strings tightly. Even their own instructions specify that this should NOT be down. It is important to be over to overlap the bags to provide an air tight barrier. When they tie the bags, a point is created greatly reducing durability. The agencies whose purpose is to aide us need to better educate themselves.
- The Town of Greece and National Guard has assisted in sand bag preparation and occasional deployment in the past. However, there is no guarantee of such future assistance. Sand bags only provide surge protection as they are not water proof and allow water to penetrate, causing flooding. Only lowering the lake water level will provide relief.
- our community has access to sandbags but we have to get together and place them as good as we can
- Removing the bags after use is even more problematic.
- So far no form of government has been forthcoming with any kind of information regarding possible flooding measures. We have a lot to learn.
- In 2017 the town provided filled sandbags and assistance loading into vehicles. In 2019 they provided filled sandbags but no assistance loading into vehicles. We had to unload and place on the property both years.
- According to our Mayor at the meeting there are not enough homes in our municipality that are affected. He also stated that he does not feel it was the correct approach in his office to be our voice and call MP's, Premiers Office to be our voice?...
- Am on an isolated single residence 3 acre island in the Navy Group of the 1000 Islands 5 miles east of Gananoque. Family does visit occasionally and are my main source of assistance
- As Premier Ford said at a Mayors meeting "the shore owners are best on their own". It seems our county representatives feel the same. At my age it is difficult filling and laying sandbags. Of coarse PEC decide that sand bags could only be used for major dwellings. Forget shorelines, boathouses, etc.
- I know how to properly build sandbag walls, but I am not able to do all the physical labor alone. Help has only been offered after flooding has done damages. There isn't any help to prevent flooding until after flooding or damages occur and then it is too late.
- The Town of Deseronto made sand bags available last year but no help filling them or instructions on there usage
- We have been advised by Brighton township that we are completely on our own. They will dump gravel at locations. No assistance with filling bags, delivering or placing them. We are completely abandoned by the govt. we pay taxes for nothing. Am not capable of doing this ourselves. Firefighters will not be available to assist. They are a disgrace.
- we are told that sandbags won't help protect our home if the sandbag wall is not built properly. we know how to do it correctly. we are not physically able to fill sandbags. move them to our property from one of the designated filling sites, and then build a sandbag wall. we have no other family in this area to help us.
- we are not physically able to fill, transport, and lay sandbags on our property
- in 2017 flood they spent more time trying to convince me to evacuate my home than trying to help me save it
- This is new this year as the Town of Brighton Fire Department were outstanding in the last 2 flood seasons. It makes me a bit nervous to know that they will not be available this year
- Local government provides filled sand bags only. Since my wife has a bad back I had to call one of my nephews and we spent two days working on our sandbag wall. And then helped a couple of neighbors that were even more senior to me. They could not do sandbags at all. Fortunately I have a small pick up and we were able to make multiple multiple trips for days. I left most of my sandbag wall up after 2019 to limit how much I would have to do for 2020.
- Lansdowners offer sand bags but you have to come a distance to get them and for a senior that is very difficult and there is no physical assistance
- The city of Pickering informed us last year that they would not be providing any assistance against flooding in 2019. We live on Frenchmans Bay and need a proper break wall if this keeps up however the TRCA will not allow it and our neighbours (including vacant lands) would also have to do the same otherwise it would do no good.
- We were told by our community emergency help line that "we are on our own". They will not help.
- We live in a waterfront condo. Several roads surrounding us were closed due to flooding. Our below grade level parking garage was flooded a couple of times last year. It was dealt with by our property management at the time but I am concerned that it will be at risk again. Our shoreline took a beating and devalues our property. It was sandbagged but still damaged.
- The support we do have is a function of volunteer services, whose funding is being stretched to the limit by flood mitigation/protection activities. Every hour they spend working on flood zones, is an hour of an unmanned fire house and ambulance bay. Given that we also recently lost our local hospital, we can't afford to have fire department personnel permanently occupied by flood response.
- Our Fire Dept. has stepped up to the challenge. We worry that the town will cut back on resources due to cost.
- The Municipality of Clarington has implemented a flood response plan to assist in case of flooding which is very helpful.
- We have relied heavily on friends and family to assist with sandbagging. We suffered physically from the backbreaking exertion of filling and placing over 700 sandbags - and it still wasn't enough.
- NYS National Guard
- Assistance is needed to help protect from flooding. Many people are seniors and physically unable to protect their property, homes and businesses.
- i can go pick up sand bags if they are available and no other assistance
- We get sand and bags need to fill the bags ourselves an at offsite location transport them to our waterfront we had 550 sandbags in 2019 if water levels will be higher in 2020 we need 1000
- There needs to be more education on how to build sandbag walls, etc-With each wind event the waves wash away what we have done to prepare leaving us worse off than before

