From: Sent: To: Subject: Attachments: Megan Crowley March 15, 2025 3:20 PM Office of the Legislative Counsel Written Submissions to the Public Bills committee- bills 1, 6, 11, 12, 24 Written Submissions to the Public Bills committee\_Crowley.pdf

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#### Written Submissions to the Public Bills committee

Nova Scotians ask you to rescind (or vote no) to Bills 1, 6, 11, 12 and 24. These bills represent vast government overreach and working to dismantle democracy in Nova Scotia.

I do not support Bill 1 and reducing transparency by allowing freedom of information requests to be denied, dismantling communications NS, limiting debate in the legislature, and granting authority for non-unionized government workers to be fired without cause. N.S. information commissioner Tricia Ralph states that "the legislation [in bill 1] could diminish government accountability" and "is calling on the governing party to withdraw legislation that she says weakens the public's right to access government records and documents." (from CBC). This is a significant withdrawal of transparency and accountability and should not go through.

I do not support lifting bans and community consent on uranium mining and fracking in Bill 6. Removing requirements for community consent for fracking is alarming and an irresponsible way to proceed with something that can cause so much harm. Nova Scotia has the densest rural population in Canada. Over 40,000 families and houses depend on well water for drinking. In Saskatchewan, uranium mines are 600 km away from communities and towns. Before you vote on this, I would ask if you are comfortable having a uranium mine or fracking site close to your house and your family? I implore you to vote no to Bill 6. Tim Houston is greenwashing Nova Scotians about the ability to safely mine and frack, and the science backs up the dangers. Studies have found that fracking and uranium mining are linked with contaminated water, lung cancer, respiratory diseases, congenital birth defects, childhood asthma & leukemia, cardiovascular and respiratory disease, higher overall mortality rates and reduced life expectancy. This is completely against the health care platform that the Conservatives ran on and will cost more in health care dollars in the long run. The rights and voices of KMK and the Assembly of NS Mi'kmaw Chiefs need to be heard and consulted on well before any legislative changes are made.

Uranium mining also adds in health risks from radioactive dust and potential water contamination. It is also fiscally irresponsible as the mining and milling waste are a perpetual health hazard (far more toxic than uranium) that will need to be monitored and managed at the public expense for thousands of years with significant and severe water contamination risks.

Jobs that benefit our province and its people are one that are forward looking and green. Climate change has been listed as the greatest global health threat of the 21st century and the forest fires, floods, and storms we have seen in the last decade make it clear we should not be promoting fracking and uranium mining. Retired geologist Dr. Elisabeth Kosters wrote in the Halifax Examiner "Does Nova Scotia have a large uranium reserve? We don't really know, because Nova Scotia has had a ban on uranium exploration for decades. But we do know that our reserve is completely insignificant compared to that of Saskatchewan...Nova Scotia uranium is not now and never will be economic on any scale whatsoever and that's leaving out whether it's desirable to produce uranium or not. "

Retired University professor, Gillian Thomas, in another Halifax Examiner article, "painstakingly debunks all the claims about the benefits of uranium mining that MANS touts in its report, one by one. Among other things, she noted:

- Uranium is not universally agreed to be a "critical mineral," essential for the transition to a clean energy. It is not
  designated as a critical mineral in Nova Scotia, nor is it in the UK and France, although both depend heavily on
  nuclear power.
- MANS relies almost entirely on the Canadian Nuclear Safety Commission to argue that uranium mining is "safe" for both humans and the environment, although the Canadian Nuclear Safety Commission, officially the regulator, has been shown to have an "institutional bias" in favour of the nuclear industry, something the Canadian Environmental Law Association has frequently condemned.
- MANS ignores numerous peer-reviewed studies showing clear health and environmental risks of uranium mining and contamination, including the 2011 book, 'Uranium Mining in Virginia: Scientific, Technical, Environmental, Human Health and Safety, and Regulatory Aspects of Uranium Mining and Processing in Virginia.'"

Another point raised was If uranium mining is only allowed in arid states in the USA [due to safety concerns and Virginia has had a supreme court upheld ban due to its high rainfall and intense storms], why would Nova Scotia be suitable when it has a higher precipitation rate than Virginia (and much higher than Saskatchewan) and a history of intense storms that are only going to increase in intensity and frequency with climate change?

It does not make sense financially, environmentally or socially to lift these bans. Nova Scotians do not want you to lift these bans. This is backed up by Dr. Steven Emerman, who is a mining expert and also a retired university professor and geophysicist who is world renown. "Emerman told the Halifax Examiner that <u>the ban on uranium mining in Nova Scotia</u> <u>should stay in place</u>, and that among many other things, the high precipitation in the province alone should preclude safe uranium exploration or mining."

I also oppose the ability to override the authority of municipal governments to make decisions about transportation (bill 24) and having government overreach in academic settings that influence research and education (bill 12). Universities need academic independence for excellence and impartiality. It is not okay to control and force change on institutions or government bodies that do not agree with you. This is not democratic.

I also disagree with changes in Bill 11 that allow health providers to charge more to private insurance than MSI pay limits. This is a playbook from Doug Ford. I am worried that instead of strengthening public health care, Tim Houston is working to divert public funds to for-profits private companies. This breaks the system by underfunding it and forces people to seek private care when they don't have any other options and pushes Tim Houston's privatization of health services agenda. Provinces that outsource care have longer wait times, and higher costs. Please direct public money into the public health system.

Tim Houston's conservative government may have a super-majority, but this is not because the majority of the people of Nova Scotia are behind him. Tim Houston broke his own law to call an early election in a mail strike and when the political climate was advantageous. It is the MLAs job to vote in the best interest of the people of Nova Scotia, not special-interest industry associations that have a poor track record in Nova Scotia, or for bills that overstep authority. These changes were not included in the platform of the Conservatives and significant changes should not be passed quickly through an omnibus bill and without listening to the concerns across party lines from Nova Scotians throughout this province.

Sincerely,

Megan Crowley

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Sincerely,

Megan Crowley

From: Sent: To: Subject: S McKim March 14, 2025 4:27 PM Office of the Legislative Counsel Submission on Bill 1 for Public Bills Committee

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Dear Members of the Public Bills Committee,

With the bills being put forth, I fear the Nova Scotia Government is moving down a very dangerous path to autocracy.

I urge you to withdraw Bill 1 and engage in meaningful consultation with Nova Scotians and the Mi'kmaq before tabling or passing any major pieces of legislation, including Bills 1, 6, 12, and 24.

Limiting Freedom of Information requests, legislating the ability to fire non-unionized civil servants without cause, interfering with the independence and impartiality of the Auditor General's Office, repealing fixed election dates, and replacing Communications Nova Scotia with communications under partisan control were never mentioned during the election campaign and do not have public support.

This is not what Nova Scotians want and not what we expect. We deserve better.

It's your responsibility to represent our interests and concerns. And while we appreciate the government removing the clauses pertaining to the Auditor General's Office, major concerns remain, and must be addressed.

A healthy democracy requires the media to be able to do their jobs effectively, keep Nova Scotians informed, and help hold governments accountable. I strenuously object to any clauses that would unfairly limit transparency of the provincial government, including clauses 16-21 (pertaining to the Freedom of Information and Privacy Act), clauses 29-34 (pertaining to the Municipal Government Act), clause 34 (Privacy Review Officer Act), and clause 67 (Effect of Certain Amendments).

#### In 2019, Tim Houston said:

"Any time a government tries to hide information and avoid scrutiny, the taxpayers need to be suspicious [...] secretive government is incompatible with good government."

On that point, we agree, or at least, we did. If this government has nothing to hide, then it should be easy for members to represent your constituents and stand up for democracy by voting against Bill 1.

Sincerely,

Sheila McKim

From: Sent: To: Subject: Spencer Morgan March 17, 2025 3:24 AM Office of the Legislative Counsel NS Public Bills Committee - 17 Mar 2025 - comment on proposed changes

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Hello Public Bills Committee,

I am writing out of concern for the many "overreach" measures the Tim Houston government is proposing all at once, without public consultation, legislative debate or any mention in their recent election platform.

The PC election campaign did not mention, and therefore no one voted for:

- Repealing fracking & uranium bans,
- 25% MLA pay raise,
- making auditor general reports private,
- intimidation of the auditor general,
- firing non-union employees without cause,
- abolish hospital ER closure report and doctors wait list dashboard,
- abolish Communication Dept.,
- restrict freedom of the press,
- limit opposition party question period,
- remove public participation and the power to amend laws from the Law Amendments Committee,
- abolish municipal consultation on transportation,
- take control of university boards and funding,
- while ignoring affordability, housing, climate change, Chignecto Isthmus, etc.

The Premiere's plans are government overreach, too much, too fast, too sloppy (throw-everything-to-see-what-sticks), and veer too far into anti-democratic areas.

Most of these changes, if not outright undemocratic, could certainly be used that way and weakens our system of government at a time when our democracy should be strengthened. We shouldn't respond to Trump's chaos with even more chaos.

Premiere Houston speaks of "resounding mandates" and hearing the people "loud and clear," while calling those who oppose his omnibus bulldozer legislation "special interest groups" and "paid protesters." I assure you, I am on no one's protest payroll, belong to no activist groups, and am speaking on my own behalf as a registered voter and concerned citizen.

I would like to remind the current government that they campaigned mainly on fixing health care and removing Halifax bridge tolls, and were elected by just 24% of eligible voters and 52% of the popular vote, hardly a "resounding mandate." It is far more likely that heavy industry and foreign lobbyists are the "special interests."

Knowing Tim Houston's personal eagerness to support Everwind's green hydrogen subsidy grab, I can only assume that the taxpayers will be subsidizing these new industries as well, then paying for the cleanup after the subsidies dry up and those enriched declare bankruptcy and leave, as seems to be the pattern.

Many years ago, the PC party self-described as socially responsible, fiscally conservative government for the people. What happened?

I'm asking you to have the "mature discussion" that Houston is promising, otherwise it just feels like backroom sellouts and bulldozer legislation.

Thank you very much for your understanding and representation. Best regards,

Spencer Morgan

-

From: Sent: To: Subject: Kathy Richards March 24, 2025 4:05 AM Office of the Legislative Counsel I do not support Bill 24 ...

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Dear Members of the Public Bills Committee,

I am writing today, as I have serious concerns about Bill 24 and the overwhelming legislative powers it will grant the provincial government, at the expense of the municipality's choices and independence. I strongly urge you not to vote for this bill.

The municipalities are better equipped to deal with decisions on transportation and infrastructure within their municipality. They have the experience, the know how and the ability, as well as the connection with the citizens to know what is needed. This also takes away the citizen's voices, when they speak up about concerns they have about developments and infrastructure in their area that will have an impact on their lives. Who is going to listen to the people when they have serious issues and legitimate concerns? The province does not seem to be able to hear the people's voices now!

I feel this is not, nor should it ever be, the concern of the provincial government! The province has enough roadways. bridges, and infrastucture to concern itself with!

Giving the Public Works Minister the authority to order any municipality in the province to build or remove infrastructure is a downward spiral. Allowing the Minister to then bill the municipality for projects they may not support or be able to afford is an irresponsible way to govern. It's no wonder that the Nova Scotia Federation of Municipalities has deemed some of the clauses in Bill 24 "tremendously concerning."

By voting for this bill, you are voting to take the "joint" out of the Joint Regional Transportation Agency. That is not cooperation and is not how we work together! Nova Scotians will not support over reach or interference by the provincial government on municipal decisions. Nova Scotians have proudly spoken up against Bills 1, 6, 11, 12, and 36. I have been impressed with the knowledge, the inspiration and the dedication with which they have voiced their concerns. It is very troubling that this government has ignored almost all of their concerns. You may not be paying attention to us now, but come next election, you will! As we will not forget who has been eroding our democracy. Taking away the rights of Nova Scotian's bit by bit. My biggest question is to what end? You are not the same Conservative Party, I used to vote for.

Some may believe that the party does not matter, but the party matters very much when they are threatening our democracy, eroding our rights and that is exactly what is happening here. All of these bills take away the rights of Nova Scotians!

You have heard from many Nova Scotians and have not listened. That is your job to listen to the people you represent!

This is still a democracy and we will continue to voice our concerns! That is still our right!! There is no obvious reason to be taking away these rights that Nova Scotians have fought hard for. It is just a grab for power! A way to consolidate it and to exclude community input! We will not condone it! We did not vote for this and we were not consulted on any of it! Could this be why Tim Houston needed a super majority? So all of these changes can be pushed through, at lightning speed, as they were likely all ready to go! You must have known they would be unpopular! At least that is the way it seems to this observer!

So, is this what the Conservative Party is now? You no longer are interested in hearing your constituents' concerns? You are just going to tow the party line? You might like to rethink which direction you want to go with these new party lines. I will certainly never vote Conservative again in my lifetime!

As George Orwell once warned us. "We know that no one ever seizes power with the intention of relinquishing it."

Sincerely,

Kathy Richards

Sent: To: Subject: cat fergusson March 23, 2025 11:03 PM Office of the Legislative Counsel Submission Against Bill 24

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Date: March 23, 2024

Dear Members of the Public Bills Committee,

I am writing to formally submit my concerns and opposition to Bill 24.

Municipalities are best positioned to understand and respond to the unique needs of their communities. Local governments are familiar with their residents' priorities, challenges, and opportunities. Allowing the provincial government to override municipal decisions pertaining to infrastructure and transportation compromises the very foundation of local democracy. The autonomy of municipalities is essential for fostering responsive, effective, and accountable governance.

Municipalities are elected by their residents to make decisions that directly impact their communities. Bill 24 introduces the possibility for provincial interference in local governance, which undermines the democratic process. Granting the Minister of Public Works the authority to order any municipality to build or remove infrastructure under Bill 24 raises several concerns, particularly about local governance, accountability, and the balance of power between provincial and municipal authorities.

Additionally, it was particularly alarming that despite receiving many informed and well-reasoned submissions from concerned citizens and experts during last week's Public Bills hearing, no significant changes were made. This demonstrates a concerning lack of responsiveness to public input, which further deepens the concerns about the provincial government's disregard for local perspectives and needs.

Pertaining to Bill 6, this government's track record on environmental protection and public health raises significant doubts about its ability to effectively manage critical issues surrounding uranium mining and fracking. The ongoing situation with the Donkin coal mine -- where long-standing concerns about the noise from methane-venting fans and the resulting chronic sleep deprivation and deteriorating health of nearby residents persist-- highlights the government's failure to protect the well-being of its citizens. Given their failure to address this existing issue, I have little confidence that this government would adequately protect Nova Scotians if uranium mining and fracking were to resume.

I trust that you will take these concerns seriously and act in the best interests of Nova Scotians by voting against Bill 24.

Sincerely, Catherine Fergusson

From:
Sent:
To:
Subject:

Paul Strome March 23, 2025 7:18 PM Office of the Legislative Counsel Keep the Bans on Fracking and Uranium mining.

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# I oppose the lifting of the bans on hydraulic fracturing and uranium! There is a littany of logical reasons why these bans were instituted in the first place and they need to stay in place.

Adventure On Paul Strome



The Mi'kmaw name for Antigonish is "Nalikitquniejk", which translates to "place where branches are torn off".

II feel honoured to live and work in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq people.

Je me sens honoré de vivre et de travailler à Mi'kma'ki, le territoire ancestral et non cédé du peuple Mi'kmaq.

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From: Sent: To: Subject: Katy Shotton March 23, 2025 5:40 PM Office of the Legislative Counsel Fw: Concern over Bill 24

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Hi,

I would like to voice my concern over Bill 24 and the removal of decision making from municipal organizations.

Kind regards,

Katy

Katy Shotton Resident of Nova Scotia

Sent from Outlook for Android

Sent: To: Subject: Corinne Duffy March 23, 2025 4:50 PM Office of the Legislative Counsel Bill 24

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I am writing to express my opposition to Bill 24 as presented. Do you not see the irony? You shirk your responsibility by refusing to enact the Coastal Protection Act, an act developed with public consultation that had all-party support. This is where your strength and unified voice is needed. We need one integrated plan for managing our coast, not piecemeal municipal rules and regulations. Not private property owners making their own "informed" decisions.

And then you turn around and table this bill, which represents undemocratic provincial overreach into municipal infrastructure planning. All without Consultation. Lacking Transparency. You were elected to represent the people, the everyday citizens of Nova Scotia. Not your "special interest groups".

Sincerely, Corinne Duffy Halifax, NS B3L3C4 (902)209-0939 From: Sent: To: Subject: Kathleen Naylor **Annotation and Annotation** March 23, 2025 4:37 PM Office of the Legislative Counsel; Danielle Barkhouse; Premier Regarding Bill 24

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MLA Barkhouse, Premier Houston and members of the Public Bills Committee;

I am writing to express my concerns about the implications of Bill 24 enabling the provincial government to proceed with transportation related infrastructure projects without the consultation or partnership of municipalities.

As worded, it appears the bill would allow for the province to unilaterally complete projects in municipal jurisdictions, then charge municipalities for that work.

As a municipal taxpayer, I know that what happens next is, my municipal taxes increase.

MLA Barkhouse, I imagine that you have good insight into how this may be received at the municipal council chambers in the District of Chester, where you got your start in politics and represented your constituents well.

I understand that municipal officials across the province are confused and concerned, especially in light of the fact that the report of the Joint Regional Transportation Agency has not even been shared with stakeholders...yet Bill 24 appears to want to consolidate decision making g power with the ministry.

Nova Scotians benefit from clear areas of responsibility among the three levels of government. More importantly, we benefit from democratic processes of acting in right relationship, with appropriate consultation and partnership.

I hope you will use the opportunity to take the feedback and amend the legislation to restore the faith of your constituents in due process.

Sincerely,

Kathleen Naylor

Kathleen Naylor

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From:	
Sent:	
To:	
Subject:	

Lindsay Lee March 23, 2025 3:21 PM Office of the Legislative Counsel Submission on Bill 24

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Dear Members of the Public Bills Committee,

I have grave concerns about Bill 24 and the sweeping legislative powers it will grant the provincial government, at the expense of municipal decision-making and autonomy. I urge you not to vote for this bill.

There are different levels of government for a reason. One level of government cannot do it all—and shouldn't try to. Decisions on municipal transportation and infrastructure must be left to the governments of those municipalities, who have the experience, expertise, and capacity to serve their communities' needs.

Granting the Public Works Minister the authority to **order** any municipality in the province to **build or remove** infrastructure is a very slippery slope. Allowing the Minister to then bill the municipality for projects they may not support or be able to afford is an irresponsible way to govern. It's no wonder that the Nova Scotia Federation of Municipalities has deemed some of the clauses in Bill 24 "tremendously concerning."

By voting for this bill, you are voting to take the "joint" out of the Joint Regional Transportation Agency. Nova Scotians would undoubtedly support a collaborative, provincial approach to improving efficient transportation in the province. But we do not support government overreach and interference.

Watching the Public Bills hearings, I have been impressed with the wealth of knowledge, dedication, and passion that Nova Scotians have displayed on Bills 1, 6, 11, 12, and 36. I've also been deeply disturbed that this government has chosen to ignore most of these concerns. So, while I know this letter is likely to fall on deaf ears, I feel compelled to participate. Because democracy doesn't just mean voting every four years. It requires our active participation, especially when democracy is threatened.

Studied individually, the bills put forward this session are concerning as they appear to be either illconceived or ill-intentioned. But considered collectively, they present a clear threat to transparency, collaboration, and the public good. It is clear that Nova Scotians do not condone this pattern of consolidating power while excluding the voices of concerned citizens, experts, or anyone else who might dare to disagree.

Flooding the zone with overarching legislative changes that no one asked for, taking the public by surprise with major pieces of legislation that were never mentioned during the election campaign, and encroaching on the autonomy of communities, municipalities, universities, and research... Is this really how you want to govern? Are you really on board with putting the party line ahead of the public good?

I'll leave you with the words of lawyer, author, and political leader Robert Ingersoll:

"Nothing discloses real character like the use of power... Most people can bear adversity. But if you wish to know what a man really is, give him power."

Sincerely,

Lindsay Lee (Yet Another) Concerned Citizen From: Sent: To: Cc: Subject:

March 23, 2025 2:48 PM Office of the Legislative Counsel melissa.mlaoffice@gmail.com; allcouncil@westhants.ca Submission regarding Bill 24

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Jan

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Dear Committee Members,

Here in West Hants we have had recent and direct experience with provincial interference in the functions of the West Hants Municipal Council. I respect that Council respected its citizens and conducted a rigorous consultation in regards the environmental assessment of the proposed Bear Lake Wind Project as submitted by the government. Citizens were overwhelmingly concerned about certain aspects of the assessments. Council listened to the citizens and approved the project subject to conditions - that there be a greater set back distance from dwellings than that in the provincial assessment. That attention be given to concerns about visual impact that would be experienced by local residents..

The Provincial Government response was to not only overrule Council's conditions of 2.5 Km set back but changed the set back from its own original assessment to even closer to the dwellings. In the correspondence from the Provincial Planning Director Christina Lovitt wrote that not only was WH Council's request overruled but it was amended " to bring Municipal Planning Strategy closer in alignment with provincial interests".

Minister John Lohr stated that he had rejected the WH Council's concerns in part because based on "very subjective opinion" and that province's requirements would become "minimum requirements for all municipalities".

I note that all this took place before the presentation of Bill 24 and other assaults on our democracy. This bill erodes democracy by overriding decisions made after consultation with the citizens. It gives the province the right to change municipal decisions and even enforce provincial interests and charge municipal tax payers for carrying them out.

This Premier and MLAs no longer have my trust. I urge the committee to withdraw this bill from the legislature.

With Respect, Janet Morrell

Sent from my iPad



Anne Bishop March 23, 2025 2:04 PM Office of the Legislative Counsel MLA Office; Hants West Council Re: Bill#24

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Submission to Public Bills Committee Anne Bishop West hants

Re: Bill#24

Members of the Public Bills Committee:

I am writing to express my opposition to the clauses in Bill #24 that give greater powers to the Province to overrule the decisions of municipal councils. We elect our municipal counsellors because we trust them to make decisions for us at the local level. Being closer to the community, knowing many of their constituents personally, they are well equipped to express the overall will of the people at the local level. The province, from its more distant position should not be able to turn over these decision.

We had a recent example in West Hants. After ample community consultation, our council set up bylaws to make a wellsupported compromise between the Bear River Wind Farm development and its nearby neighbours. The provincial government then overruled the council with no consultation whatsoever. This is a discouraging case of government overreach. The provincial government has no mandate to give itself this degree of power over local decisions.

Please withdraw Bill #24.

With respect, Anne Bishop From: Sent: To: Subject: Attachments: Denise Forand March 23, 2025 2:41 PM Office of the Legislative Counsel Stop Bill 24 SMU\_2009 LiDAR\_Flooding Hazards Report.pdf

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Bill 24

Committee Chair,

Municipal planning involves year-round public consultation, allowing Nova Scotians the right to participate and provide feedback on how their municipalities are shaped. To take this away is an undemocratic and a troubling consolidation of power.

I cannot stress enough the Need for areas of Exemption for this build build build initiative by Minister John Lohr under Premier Houston.

My community knows what land floods, you don't.

To have a "As of right" pushed on municipalities to build and reduce parking in a 4 block radius off our waterfront in downtown Windsor which happens to be 250 years old is unacceptable.

We downtown residents are now being told with a maybe minimum 10 to 20 year potential expensive fix of our still combined sewer/water ancient infrastructure is needed to stop the flooding downtown even with the overflow going in the fake polluted Lake called Pisiquid.

The causeway gate keepers don't allow the natural flushing of the tide no more.

Thanks for more damage John Lohr and his fake EMO.

Downtown basically ( the architectural Zone in Windsor) is a mix , some homes were build around 1830 but majority the homes downtown in the flood zone are built after the great fire in 1897. So my home is roughly 125 years old. Our homes are built close together, on the sidewalks with extreme limitations on parking as it was not in the initial designs of towns way back then. They had horses.

Also disappointing is that they looked at the sewer infrastructure of Cunival Creek before the great fire, and still in 100 years never fixed the system properly.

Your mandated overreach is wrong on so many levels. Public consultation is there for a reason. You cannot and do not know every area of our province like the people that live and vote there. Do not take local knowledge away from basically free Public Advisory Committees ! Listen to the people you serve.

Remember, the Avon River is at the end of the mighty Bay of Fundy (one of the natural wonders of the world) and continues right up the Minas Basin and along to the Avon River/St Croix River connection at Windsor.

It's very important you Remember, We lost 4 souls to our Floods a couple of years ago., One poor child was lost in our area and was located around Parsboro, the opposite side of the Basin. Look it up on a map. Think about that,

We live at the gateway to the Annapolis Valley with its rich fertile soil because of the tides. We must learn to live with the rising sea level and our ever increasing changing storm patterns, so building and increasing density in low lying historic districts is not the solution for moving forward.

I expect much more consultation before any such directives can be followed, let alone pass as a Bill. Also I see huge gaps in actually achieving affordable homes in your plan.

Below is the study on just this area of flooding along the 101. look where the dykes failed. See where we shouldn't build. Rebuild the dykes and berms.

Sincerely, Denise Forand

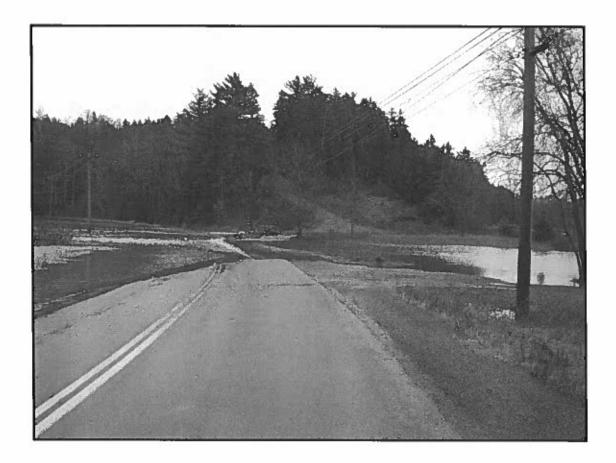
https://novascotia.ca/tran/highways/3\_Mile\_Plains\_to\_Falmouth/SMU\_200 9%20LiDAR\_Flooding%20Hazards%20Report.pdf

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## Assessment of Flooding Hazard along the Highway 101 corridor near Windsor, NS using LIDAR



Final Report submitted to the Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR)

> Prepared by Dr. Danika van Proosdij Department of Geography

> > October 22, 2009

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## **EXECUTIVE SUMMARY**

The purpose of this project was to assess the impacts of 'natural' processes (e.g. storm surge, freshwater flooding and coastal erosion) on highway infrastructure in the region. The section of the Highway 101 twinning project that will run along the Windsor Causeway and across the Avon River will be highly vulnerable to both coastal and overland (freshwater) flooding. Flood risk was assessed using ArcGIS 9.3 and a high resolution LIDAR elevation survey of the area conducted in April 2007. The LIDAR was flown by the Advanced Geomatics Research Group at the Centre of Geographical Sciences (COGS) as part of a collaborative research exercise with Saint Mary's University, NS Department of Agriculture (Land Protection Section) and NS Department of Transportation and Infrastructure Renewal. In addition, the IKONOS satellite was tasked by the Maritime Provinces Spatial Analysis Research Centre (MP\_SpARC) at Saint Mary's University to capture a high resolution image of the area in October 2007 as part of a research project studying the intertidal morphodynamics of the Southern Bight.

Normal and flood water levels were chosen based on Canadian Hydrographic Service data, information from NS Agricultural personnel at the Windsor tide gate and existing tide gauge records at that location as well as published rates of sea level rise. Flood levels were modeled for four tide scenarios which included a 1 in 20 year storm surge above higher high water large tides (HHWLT) of 0.6 m, a storm tide (8.6 m CGVD28) which occurred in January 10, 1997 (van Proosdij & Baker, 2007), a 1 in 100 year surge event (1.2. m) (8.77 m CGVD28) and then the 1 in 100 year event coupled with a rise in sea level by 0.7 m (total 9.4 m CGVD28) (IPCC, 2008; Parkes et al., 2006; Bindoff et al., 2007; Vasseur & Catto, 2008). Additional analyses were performed to simulate freshwater flooding events based on critical overtopping at the Falls Lake and Forks Dams. In all cases care was taken to ensure connectivity to either a coastal or riverine source of water similar to other coastal flooding studies (e.g. Webster et al., 2004).

Seven areas of concern were identified and in most cases the areas along the 101 highway corridor will only be at risk during large precipitation events at high tide when the aboiteau cannot adequately discharge water or during storm conditions in the future. Specific areas of concern include highway conditions at Exit 6 (tidal) and Exits 5 (freshwater) & 8 (tidal and freshwater). The area adjacent to the St. Croix coastal restoration project near Exit 4 may be at risk of bank failure during storm conditions due to the proximity of the highway to flooding

waters. The flooding situation at Exit 8 may be able to be mitigated in part by repairing or replacing the existing broken aboiteau structure at the mouth of Halfway River. The eastern and western sections of the causeway, particularly the eastern on ramp near Exit 6 are at risk of storm surge overtopping within the next decade given current rates of sea level rise. It is advised to consider increasing the elevation of these sections during the twinning process. In addition, the western section will be highly vulnerable to the impacts of sea level rise and storm surge given the orientation of the main tide gate channel with the dominant fetch. Both sections should be raised to minimum of 9.75 m. Careful attention will need to be focused during the bridge construction process on the placement of the bridge abutments as the area around the tide gate channel is highly susceptible to erosion and at a high risk of flooding. The entire area surrounding the proposed location of the bridge is in a flood hazard zone therefore additional fill and shore armouring will be required.

Removing the tide gate will cause significant flooding to occur within the town of Windsor, even during 'normal' spring tide conditions. The majority of the original protective dyke works have been removed over time as they were no longer maintained after the causeway was built in 1971. As a result, all of the original marshland areas would flood as well as a considerable section of the downtown Windsor waterfront area. Water Street and the old rail bed would provide a partial restriction during normal spring tides however during storm conditions, once breached, would permit almost continuous flow of water into the low lying regions behind the rail bed. Floodwaters would cross King St. and join the NS68 Tregothic marshbody. These low lying areas are also at risk from flooding from freshwater flooding events when prolonged precipitation events exceed the capacity of the tide gate to discharge adequate amounts of water to lower the lake and river levels to a safe level (e.g. timing at high tide). As a result, further development should be restricted in low lying areas and any roads crossing these areas should be raised where possible.

## ACKNOWLEDGEMENTS

This research would not have been possible without the continued support of the Nova Scotia Department of Agriculture, Resource Stewardship Division, Land Protection Section personnel, specifically Ken Carroll, Darrel Hingley and Hank Kolstee.

Special thanks is extended to Greg Baker, research instrument technician at the Maritime Provinces Spatial Analysis Research Centre (MP\_SpARC), at Saint Mary's University for coordinating the IKONOS satellite image capture. In addition this project would not have been possible without the geomatics infrastructure available through MP\_SpARC. This centre was funded by the Canada Foundation for Innovation, Nova Innovation Trust Fund and various industrial partnerships.

The LIDAR data acquisition could not have been possible without the assistance of Tim Webster and Chris Hopkinson of the Advanced Geomatics Research Group at COGS who collected and post processed the data. The LIDAR acquisition was a joint research funding endeavor between AGRG (in-kind), Saint Mary's University, NS Department of Transportation and Infrastructure Renewal and NS Department of Agriculture, Resource Stewardship, Land Protection Section.

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## Assessment of Flooding Hazard along the Highway 101 corridor near Windsor, NS using LIDAR

#### Introduction

To date, a number of reports have been published that focused primary on the direct and indirect impacts of the Highway 101 twinning project on the intertidal ecosystem both up and downstream of the Windsor Causeway (e.g. Daborn et al., 2003; van Proosdij et al. 2004; 2006; 2007). The purpose of this project was to assess the impacts of 'natural' processes (e.g. storm surge, freshwater flooding and coastal erosion) on highway infrastructure in the region. The section of the Highway 101 twinning project that will run along the Windsor Causeway and across the Avon River will be highly vulnerable to both coastal and overland (freshwater) flooding. In addition, the proposed bridge across the Avon River will be at risk from coastal erosion and this process will need to be considered during both design and construction phases in order to ensure the long term sustainability of the structure. Furthermore, some sections of the highway through the study area will be at risk of freshwater flooding due to inadequate drainage through standard culverts.

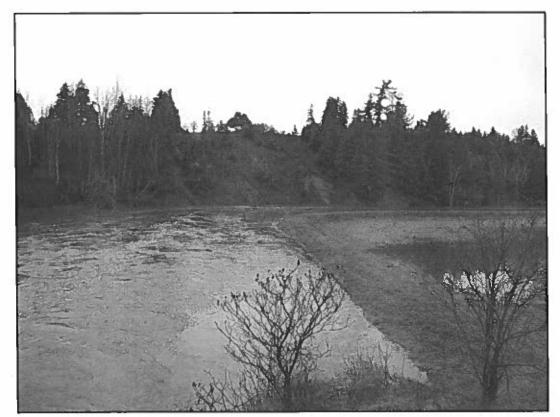
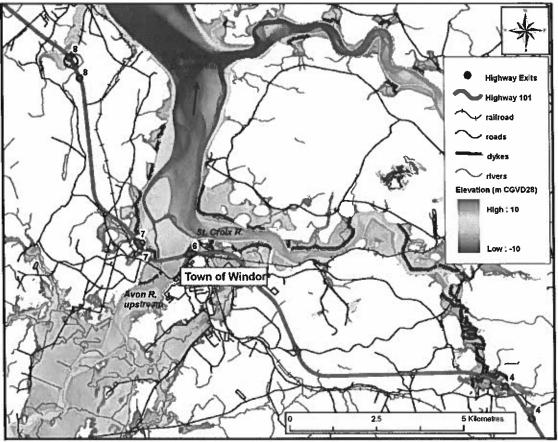


Figure 1: Bankfull conditions along the St. Croix river near Wentworth Rd.

This issue will be particularly compounded in areas near dykelands where freshwater drainage is dependant on existing aboiteau structures. These structures can only drain during low tides since they are designed to prevent salt water intrusion. Therefore, a high rainfall event that takes place during a high spring tide can cause areas behind the dyke to flood considerably. Moreover, despite the fact that the sections of the highway that cross low lying topographic areas are for the most part protected by dykes, there is a real risk of flooding when these dykes are overtopped.

This project focused on assessing the risk to infrastructure within the study area (Figure 2) from marine and freshwater flooding as well as from coastal erosion. The study focused primarily on the section within and surrounding the town of Windsor, however also identified vulnerable areas along the Highway 101 transportation corridor between Exits 4 and 8 and will provide recommended elevations to minimize the risk of flooding. Effective assessment of this vulnerability is dependent on the accuracy of the digital terrain model employed.



Created by D. van Proosdij, Saint Mary's University, MP\_SpARC, 2008. Lidar flown & processed by AGRG at COGS. Figure 2: Study area with digital elevation model depicted up to 10m elevation contour.

In order to fully appreciate the potential risk to the region, it is important to have a basic understanding of the mechanics of tidal processes, historical storm activity and climate change.

#### Tides

The Bay of Fundy is renowned for its large tidal range, which reaches a maximum of 16.3 m at Burntcoat Head in the Minas Basin. Tidal range in the Avon River estuary varies from 8.2 m Chart Datum at neap tide and 15.6 m CD at lunar perigee spring tide (CHS 1976, predictions for Hantsport). Tides are strongly semidiurnal (twice a day) with a diurnal inequality that is almost always less than 0.6 m (Lambiase, 1980).

Tides produce strong currents which are the main agents of transportation and deposition of sedimentary material in the Bay, effectively transporting, creating, and remolding surface and geological features. A recent publication by Desplanque and Mossman (2004) provides a comprehensive overview of the mechanics and impacts of Fundy tidal processes on the geology of the region. Due to the relatively shallow nature of the Avon River Estuary, the rising limb of the tide will be compacted within a shorter period, whereas the period of the falling tide will increase (Carter 1998). However, this process will vary depending on the lunar cycle. At neap tide, the tidal curve is generally symmetrical with both the ebb and the flood flow lasting around 6.5 hours. In contrast, the tidal curve for spring tides is slightly asymmetric at the mouth of the estuary with ebb flows lasting 0.5 hours longer than flood. This asymmetry increases as one travels up the estuary, where there can be as much as 8.5 h of ebb flow with only 4 h of flood flow (Lambiase, 1980). As mentioned previously, the tidal prism is the volume of water flowing in and out of the estuary with the rise and fall of the tide. Because tides are variable in strength, the tidal volume and tidal prism are variable, as is the wetted cross sectional area. In addition, during low water, sections of the estuary south of Hantsport are completely drained since bottom elevations are higher than the lower tidal limit.

Cycle	Period	~ Tidal range
Diurnal cycle due to relation of moon to earth	0.517 days (12 hr 25 min)	11.0 m
Spring/neap cycle	14.77 days	13.5 m
Perigee (high) / apogee (low)	27.55 days	14.5 m
206 day cycle due to spring/neap and perigee/apogee cycles	206 days	15.5 m
Saros cycle (last peaked in 1994-95 predicted peak in 2012-2013 AD)	18.03 years	16.0 m

 Table 1: Summary of characteristics of major constituents of tidal cycles in upper sections of the Bay of Fundy (Desplanque & Mossman, 2004).

In general, higher water levels are recorded during spring tides and lower water levels are recorded during neap tides although, due to the tidal asymmetry in the Bay of Fundy, this is not always the case. In addition, the absolute elevation of the tide will vary depending on the relative position of the sun and the moon and orbital cycles (Table 1). The most favorable combination of factors to produce strong tides in the Bay of Fundy occurs when the perigee coincides with a spring tide and other cycles to produce Saros tides every 18.03 years (Desplanque & Mossman, 2004). Based on Desplanque & Mossman's (2004) calculations, the peaks of the Saros cycles within the last century occurred in 1904-1905, 1922-1923, 1940-1941, 1958-1959, 1976-1977, 1994-1995, and the next will occur in 2012-2013. In addition, detailed tidal records over several decades show that there will be slightly higher maximum monthly high water marks in a 4.5 cycle year, examples being the peaks in 1998 and 2002 (Desplanque & Mossman, 2004).

The only permanent tide gauge operated by CHS is located in St. John, New Brunswick, therefore one must depend on predicted tides at Hantsport for most historical calculations. Data were located for both Windor and Hantsport stations for limited two month time periods. However, detailed tide records have been maintained by Maritime Marshland Rehabilitation Administration (MMRA) and Department of Agriculture personnel at the Windsor Tide gate from the mid 1980s. In addition, MMRA and NSDA personnel routinely recorded tides at select marsh bodies throughout the region for short time periods. These data provide an idea of the difference in water level elevations between different marsh bodies. For example, a large tide on April 4, 1958 was recorded as 8.23 m CGVD28 (26.96 ft ) at the Windsor bridge and 8.18 m at Burlington marsh (across from Hantsport), but 8.23 m at Herbert River and Chambers. Fortunately, the MMRA had recently increased the height of dykes in the region but this had not received extensive support at the time.

"The highest tide recorded by the MMRA at the Windsor Bridge was 26.96 geodetic on April 4<sup>th</sup>, 1958, when the tide height predicted (tide table) for Saint John, New Brunswick was 29.1 low water datum. Note that this was the highest predicted tide for the region at least since 1932. The actual height reached at Saint John on this occasion was 29.0. The tide in the upper end of the Falmouth Great Dyke, above the Windsor Bridge, reached 26.85 geodetic, approximately one-tenth of a foot lower than the Windsor bridge peak.

Many of the dykes constructed by this Administration around the inner perimeter of the Bay of Fundy were overtopped in sections by this tide which was sufficiently above our predictions to puzzle us. There were meteorological conditions favouring this particular occurrence and subsequent tides of the same predicted magnitude verified this as having been unusually severe.

These tides, of 1958 and 1959, as peaks of the very definite cycle of approximately 18 years proved to us the adequacy of our dyke construction grades. It may be of interest to note that marshland owners at Falmouth were of the opinion dyke grades were too high when construction was in progress. It is believed that this 18 year cycle is not generally realized and that past occurrences are attributed to other factors or are forgotten."

> Portion of letter from J.D. Conlon, Chief Engineer, Dept of Agriculture, MMRA to Mr. J.A. Brown, District Engineer, Habours & Rivers Engineering Branch, Department of Public Works on Oct 12, 1961in response to file No. 1411-11 re Windsor Tidal Flooding.

To date, the highest tides recorded at the causeway tide gate were 8.87 m (29.1 ft) (date unknown) (pers com. K. Carroll, 2007) and 8.6 m CGVD28 (28.2 ft) on January 10, 1997. These tide levels reflect the Saros cycle or the 4.5 yr cycle mentioned previously. Examining the digital record between April 2002 and September. 2006, a total of 121 tides exceeded the HHWLT elevation (7.57 m CGVD28). Eleven of these dates were greater than 8.0 m (Table 2) with the highest recorded tide on February 1, 2006 (8.2 m) which overtopped dykes in many areas (Figure 3).

Date	Recorded Tide Height (m CGVD28)
Feb 1, 2006	8.211
Nov 25, 2003	8.206
Feb 09. 2005	8.170
Feb 10, 2005	8.129
Feb 11, 2005	8.129
Dec 25, 2003	8.082
Dec 13, 2004	8.046
Dec 24, 2003	8.040
Dec 12, 2002	8.004
Aug 21, 2005	8.004
Feb 28, 2006	8.004

Table 2: Record of tides greater than 8 m geodetic at the Windsor tide gate between April 2002 and Sept. 2006.

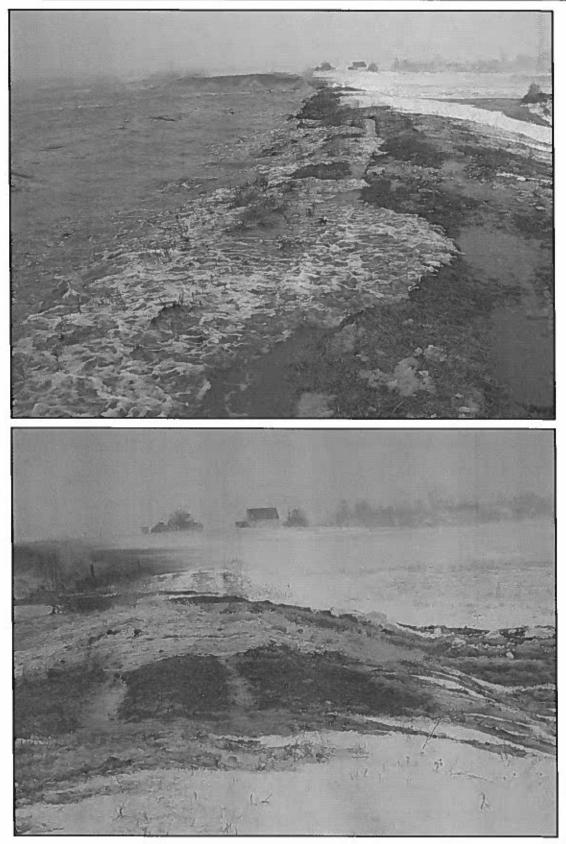


Figure 3: Storm impacts on Feb 1, 2006 at the Avonport Dyke. a) storm waves battering marsh; b) storm surge reached upper limits of dyke and dyke overtopped. Photo by T. Hamilton, 2006.

### Waves & Storms

Due to the large tidal range, the time period during which waves can exert a significant influence is limited. Lambiase (1980) reports that waves are not an important hydraulic process on intertidal sand bodies in the Avon River estuary since waves tend to be small due to the limited fetch. These waves are believed to be the cause of small-scale slumps observed on sand bodies in the Avon and Cobequid bay (Darlrymple, 1979). Observed wave heights did not exceed 1.3 m in Lambiase's (1980) study and most ranged between 0.3 and 0.6 m. However, during high water the foreshore is covered with a significant amount of water, and a much larger percentage of wave energy reaches the shoreline than when the tide is at low water. Waves can exert a significant influence in exposed areas on the edges of marsh cliffs and foreshore, causing erosion and local re-suspension of sedimentary material. In addition, it can cause considerable damage to dykes in exposed areas that are not protected by a vegetated foreshore. This was evidenced on August 23, 2009 when Hurricane Bill passed offshore Nova Scotia. Waves caused significant damage to the dyke at Noel despite the presence of shoreline armouring (Figure 4a). Some of this rock material was transported over the top of the dyke into the low lying region behind (Figure 4b). It is likely that another storm would have completely breached the dyke at the eroded location if it had not been rapidly repaired. The section of dyke protected by a section of marsh received minimal damage since once waves travelled over the marsh surface their energy was rapidly dissipated (e.g. Möller & Spencer, 2002). Therefore marshes can serve as natural forms of coastal defense. The extensive marsh which has developed downstream of the Windsor causeway offers a natural form of shore protection for the causeway, although limited protection is provided in the tide gate channel itself. In other areas such as along the outer bend of river channels, strong tidal currents will be the primary forces causing foreshore and marsh erosion.

Storm surges are a large rise in water level which can accompany a coastal storm, and are caused by strong winds and low atmospheric pressure. Conversely, a negative storm tide can result from higher atmospheric pressure producing lower water levels than predicted. Compared to the Atlantic coast, storm surges exert less of an influence on the intertidal zone in the Upper Bay of Fundy due to the large tidal range. For example, a hurricane in July 1975 (recorded speeds of 130 km/h) only generated waves around 1.25 m in height and caused minimal changes to the morphology of sand waves in the Avon River Estuary (Lambiase, 1980). However, when a storm tide coincides with an exceptionally high astronomical (e.g. perigeen or Saros tide) tide the results can be significant, causing extensive coastal flooding and damage to infrastructure.

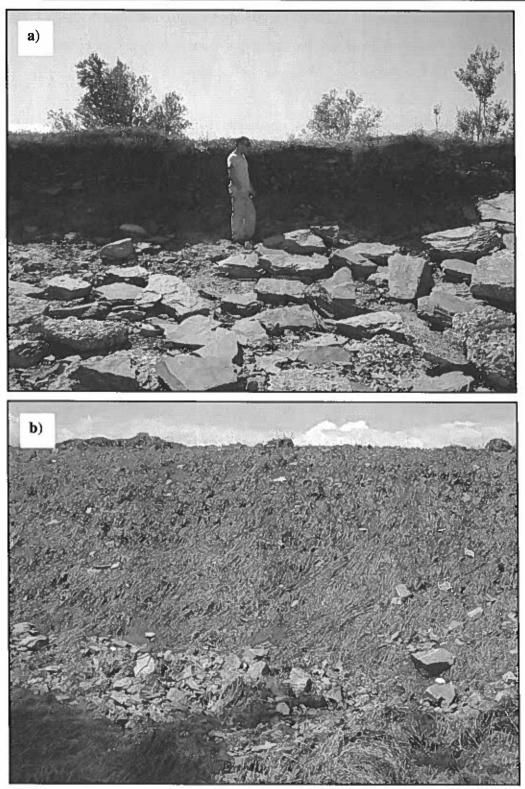


Figure 4: Impacts of Hurricane Bill on dyke at Noel in August 2009. a) erosion and undercutting of earthen dyke structure and removal of shoreline armouring, b) armouring rocks transported to the landward side of the dyke by wave action and overtopping. Photo by K. Carroll, 2009.

The heavy rainfall accompanying such an event can also cause extensive overland, freshwater flooding since the numerous aboiteaux and tide gates cannot discharge water at high tide. This has been seen in Truro, Nova Scotia on a number of occasions.

Historically, a number of significant storm events have occurred in the Bay of Fundy. Desplanque and Mossman (2004) provide a detailed account of the events surrounding them. One of the most notable storms was the Saxby Gale (or "Saxby Tide") which occurred on October 4<sup>th</sup>, 1869. Severe coastal flooding and wind damage occurred all along the North American seaboard. By 1:00 am on October 5<sup>th</sup>, the Saxby tide overtopped dykes by at least 0.9 m. In the Cumberland Basin, the tides were such that two fishing vessels were lifted over the dykes bordering the Tantramar marshes and deposited 5 km from the shoreline. At Moncton, the water level rose about 2 m higher than the next highest tide on record (Desplanque & Mossman, 2004). While damage in the Minas Basin was less severe, dykes were breached throughout the region, cattle and sheep drowned, and in many areas travel become impossible since the transportation lines (e.g. rail and road) were washed away. Desplanque and Mossman (2004) estimate that the Saxby Tide was at least 1.5 m higher than astronomically caused high tides.

The 'Groundhog's Day' storm (February 2<sup>nd</sup>, 1976) is a classic example of the difference in impact due to timing with tide levels. Significant damage and coastal flooding were reported in Maine where water levels rose more than 2.5 m above the predicted level, heavily eroding the shoreline (Desplanque & Mossman, 2004). The strong SSE winds which had been blowing for five to six hours over the open water resulted in a storm surge up Penobscott Bay, and much of Bangor, Maine was flooded. Water levels rose to 3.2 m above predicted tides in fifteen minutes (Desplanque & Mossman, 2004). Fortunately for those in the Bay of Fundy, the tide was an apogean (e.g. lower) spring tide, therefore, although there was a recorded surge of 1.46 m, the damage was limited. If the storm had occurred during the perigean spring (sixteen days later on February 18<sup>th</sup>), the damage would have been significant (Desplanque & Mossman, 2004). It is estimated that if the Goundhog's Day storm had occurred on April 16<sup>th</sup>, 1976 it would have had the potential of "causing calamity on the scale of the Saxby Tide" (Desplanque & Mossman, 2004 p. 102).

If such an event were to occur in the present day it would result in billions of dollars of damaged infrastructure and potentially loss of life, given the amount of development which has occurred

Final Report

behind the dykes (Shaw et al., 1994). Desplanque & Mossman (2004) suggest that the probability that a 'Saros' tide would coincide with an astronomically high spring tide is about 3%. However, postglacial sea-level rise significantly influences this probability. With every repeat of the 'Saros', an increase of the high tide mark of at least 3.6 cm (2 mm/yr for 18 yrs) can be expected (Desplanque & Mossman, 2004).

"Since the Saxby Tide more than seven 'Saros' ago, sea level has risen eustatically nearly 25 cm. Added to the minimum 1.5 m by which the Saxby Tide exceeded high astronomical tides, a height is calculated that that is more than sufficient to overtop the present dyke system"

(Desplanque & Mossman, 2004)

## Methods

This study used topographic data from a LIDAR survey flown in early April 2007 (Figure 5) by the Advanced Geomatics Research Goup (AGRG) using an ALTM3100 with a vertical precision of 15 cm. A detailed overview of LIDAR technology and use for coastal flood mapping can be found in Webster et al. 2004 and will not be repeated here. Data were verified and processed at AGRG and the resultant digital elevation and digital surface models provided at a 1m ground These data were complimented by a IKONOS Satellite image (1 m pixel resolution. panchromatic) acquired in October 2007 through the Maritime Provinces Spatial Analysis Research Center at Saint Mary's University. These data were collected as part of a larger ongoing research project examining the ecomorphodynamics and historical evolution of the Avon River estuary. This project compliments on-going research investigating the spatial and temporal variations in the intertidal geomorphology of the Avon River Estuary (van Proosdij and Baker, 2007) and the impacts of engineering structures on these processes. Data collected and analyzed within this project are shared by Saint Mary's University, NS Department of Transportation and Infrastructure Renewal, NS Department of Agriculture (Land Protection) and the Advanced Geomatics Research Group at COGS.

The risk of flooding from both overland (e.g. riverine source) and tidal sources was analyzed using the 3D analyst extension within ArcGIS 9.3<sup>tm</sup> (ESRI, Redlands, CA) at the Maritime Provinces Spatial Analysis Research Centre (MP\_SpARC) at Saint Mary's University. This study is also concerned with low lying areas that will not drain as a result of heavy rainfall coinciding with high tide which prevents the one way aboiteau from properly draining.

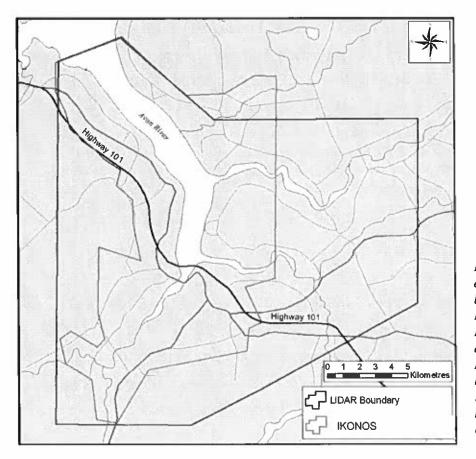


Figure 5: Map depicting the boundaries of the LIDAR survey and IKONOS image new data collect. Note the IKONOS image boundary was restricted by the maximum swath width of the satellite.

The flood levels chosen for this analysis are based on a combination of information gathered from the Canadian Hydrographic Service, NS Department of Agriculture Windsor tide gate personnel and scientific literature regarding sea level rise for the region. Nova Scotia, as with much of the land in Atlantic Canada, is currently undergoing tectonic subsidence (lowering), as a response to the post-glacial uplift that took place for much of the last 10 000 years. This translates to a relative sea level rise of 20-30 cm per century. Using current climate models, scientists predict an additional global increase of approximately 50 cm due to human-induced climate change. This results in a situation where the coastline of Atlantic Canada could be inundated with 70-80 cm of higher sea-level by the end of the 21<sup>st</sup> century (Parkes et al., 2006; Bindoff et al., 2007; Vasseur & Catto, 2008). Coastal flood levels were modeled for four different water levels (at a common vertical datum CGVD28): higher high water large tides (HHWLT) (7.57m CGVD28) with a 1 in 20 yr storm surge of 0.6 m (Webster et al., 2004); a storm tide (8.6 m CGVD28) which occurred in January 10, 1997 (van Proosdij & Baker, 2007);

HHWLT with a 1 in 100 yr storm surge (1.2 m) for a probable maximum flood level of 8.77 m CGVD28 and the 1 in 100 year storm with sea level rise (SLR) of 0.7 m (9.47 m CGVD28). It is also anticipated that there will be an increased frequency of high intensity (> 80 mm) rainfall events and storm surges. It is possible that a significant rainfall event coupled with high lake levels and high tide (which would prevent freshwater from draining at the tide gate) can create a scenario where the capacity of the hydro dams upstream (Forks and Fall Lake Dams) would be exceeded. Two probable maximum freshwater flood scenarios were chosen based on the Emergency Preparedness Plan for the Avon Hydro System (Oct 1998). The Falls lake dam would flood up to the 7.1 m contour (CGVD28) whereas a Forks Dam flood would exert a more significant impact at 8.4 m.

The extent of flooding was determined using standard methods of analysis for coastal flooding using the ground LIDAR digital elevation model (e.g. Webster et al. 2004; Webster and Forbes, 2005). The flood limit for each water level was converted to a vector polygon and used to select sections that were contiguous with and open to flooding from either the river or coastal waters. Culverts were assumed to exist in areas that contained a defined stream network passing under Highway 101. Smaller culverts that may exist along smaller roads were not included in this analysis due to lack of field validation. Most of the dykes contain aboiteaux with gates to allow for freshwater drainage but prevent tidal waters from entering therefore these locations did not allow coastal flooding. The only exception to this rule were aboiteaux that were known to be missing a gate or in disrepair based on consultation with Department of Agriculture personnel. Most of these were located under CN rail lines. In addition to the extent of inundation for each flood level there are also concerns regarding the depth of water that would result over the surface which influence the level of damage to infrastructure in the region. To determine this, the flood layer raster was assigned a geodetic flood elevation and the ground DEM was subtracted by this layer using map algebra to produce a map of water depth. This raster was reclassified to exclude negative values and show only depth at 0.5 m intervals for coastal flooding. In the case of freshwater flooding, water depth was expressed at 0.2 m intervals relative to the high lake level of 2.9 m CGVD28 (pers comm. Ken Carroll August 2009). It should be noted that this analysis does not take into account the residence time, or time for floodwaters to drain nor does it take into account friction effects or length of time of flooding in the case of dyke overtopping.

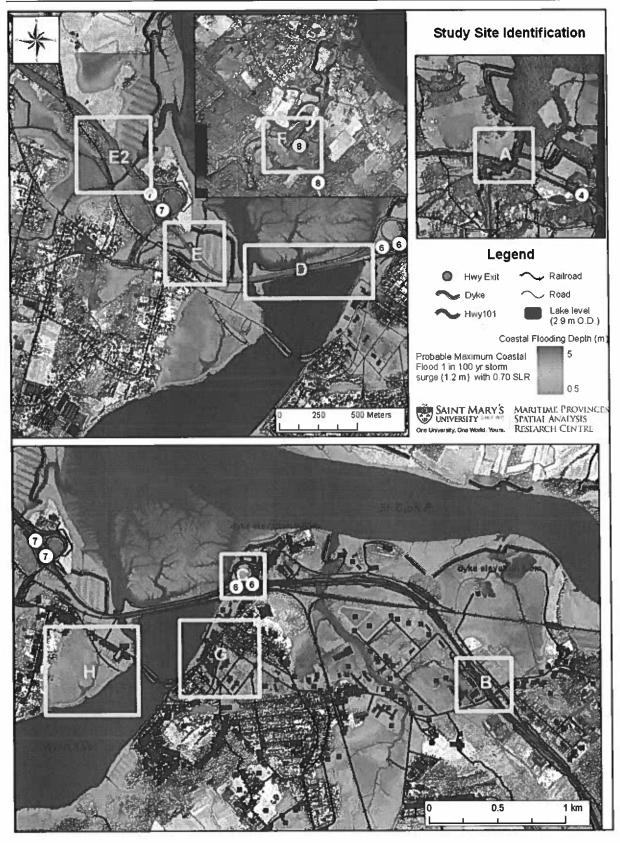


Figure 6: Location of study sites to be used in the analysis.

The purpose of this project was to assess the risk to department of transportation infrastructure from flooding therefore most of the analysis focused along the 101 highway corridor. Specific areas of concern are indicated on Figure 6. Site A near St. Croix and exit 4, Site B near Exit 5, Site C at the on ramp near Exit 6 at Windsor, Site D along the causeway, Site E immediately west of the Windsor tide gate and near NS3 Elderkin Marsh, Site E2 west of Exit 7, Site F at Exit 8, Site G downtown Windsor and Site H along the western side of Lake Pisiquid. In addition, since there are questions regarding the feasibility of modifying or removing the tide gate during the twinning process, a brief assessment of the resultant flooding was performed. These results are preliminary and qualitative in nature. A more in-depth analysis of the flood risk to specific infrastructure (e.g. schools, hospitals) in the town of Windsor both from freshwater and hypothetical tidal sources is beyond the mandate of this contract and should be performed in the future.

## **Results & Discussion**

In order to get an overview of the spatial extent and connectivity of both coastal and freshwater flooding, a series of maps were derived to illustrate these effects. The initial analysis of the impacts from a 1 in 20 year surge on HHWLT (8.1 m CGVD28) showed that these impacts were limited to coastal erosion along dykes not protected by a marsh foreshore and situated in areas exposed to wave action rather than coastal flooding. The 8.1 m event would not overtop any dykes in the region. Most of the damage from the 8.6 m storm event from 1997 was limited to the boundaries of marshland boundaries and did not have a significant impact on infrastructure in most areas with the exception of some minor roads. The main marshbodies affected were NS14 Elderkin and the eastern tract of NS68 Tregothic (Figure 7).

The Probable Maximum Flood taking into account climate change is a different scenario. A Probable Maximum Flood is defined as the flood expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonable in a particular drainage area. From the coastal flooding perspective, a 1 in 100 yr storm surge (1.2 m) coupled with a minimum 0.7 m sea level rise (= 9.4 m CGVD28) would have the potential to cause significant damage to infrastructure. This level is sufficient to overtop all of the dykes in the region by 0.8m on average (Figure 8). Most of the floodwaters would then be able to travel through existing

culverts to flood into surrounding areas. The area most impacted would be those areas adjacent to the NS68 Tregothic marshbody. This marsh historically was part of a larger tract of marshland that extended into what is now the downtown core of Windsor (Figure 8). The impacts of this coastal flood would be exacerbated by precipitation which would most likely cooccur with the surge event, further confounding the situation. Sections of Highway 101 would be flooded as would large tracts of the rail line. Details will be provided in subsequent sections.

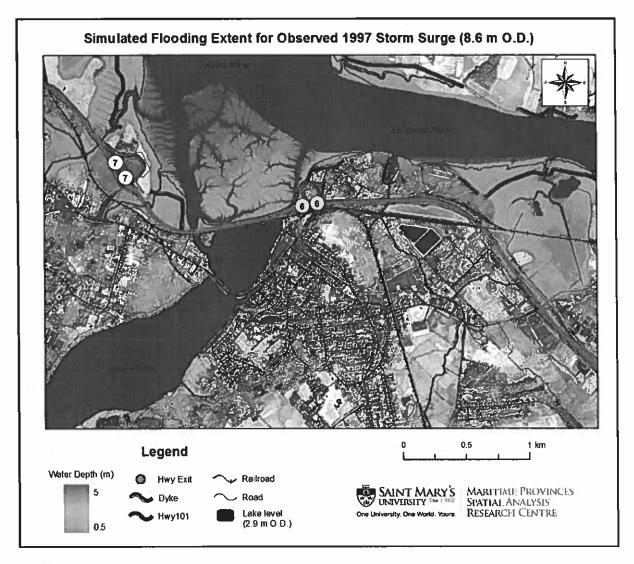


Figure 7: Overview of the extent of flooding derived from the 8.6 m storm event from 1997. Basemap IKONOS 2007 panchromatic satellite image.

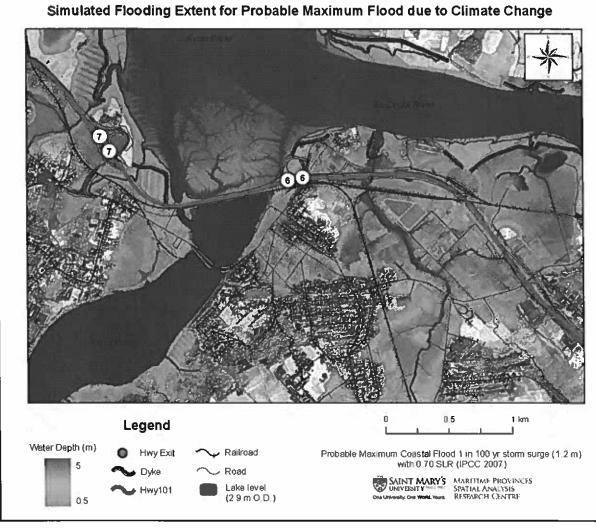


Figure 8: Simulated flooding extent and water depths for a 1 in 100 year storm surge (1.2 m) with a SLR of 0.7m.

Figures 9 and 10 illustrate the flooding extent and depth associated with probable maximum floods at the Falls Lake and Forks Dams. In both cases, the majority of marsh bodies upstream of the causeway would be flooded, including NS3 Falmouth, NS69 Martock, NS104 Sunny Slope and NS75 Armstrong. Most of this is due to the fact that dykes within these areas have long been removed after the causeway was constructed or not maintained. In the case of the Falls lake flood, the levels of Pisiquid lake would rise less than 0.5 m above base level (2.9 m CGVD28) and cause only minor localized flooding along the waterfront. A Forks Dam flood however has the potential to cause significant damage as the elevation of neither Water St. nor Turner Lane are sufficiently high to block the flow of water (Figure 10). Water would flow past King St. and join the larger Tregothic marshbody behind.

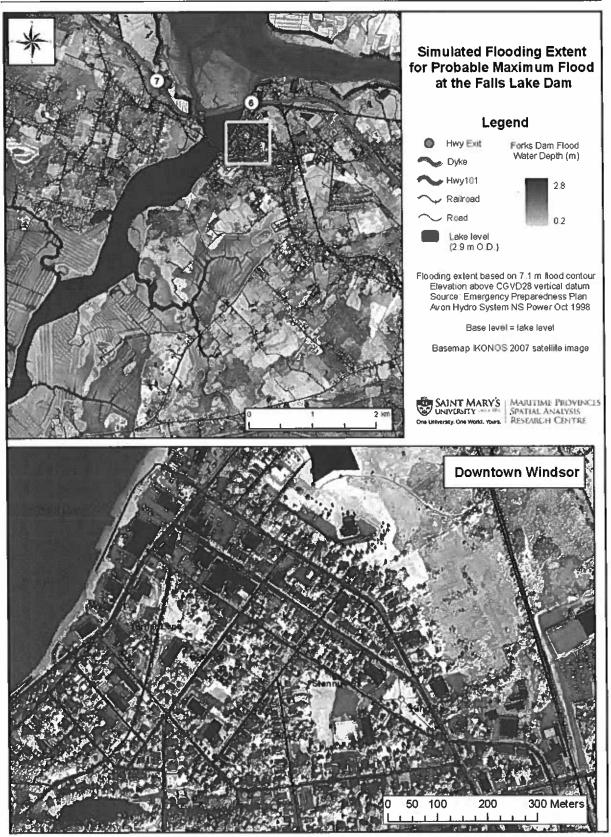


Figure 9: Predicted impact a Falls Lake Dam flood event based on a 7.1 m flood elevation (CGVD28).



Figure 10: Simulated flood event for a probable maximum flood at the Forks Dam depicted damage to the Town of Windsor.

Site A is located approximately 1 km west of Exit 4 where the St. Croix River passes under Highway 101. The site is bordered on the northern edge by the MMRA marsh body NS38 St. Croix with a mean dyke elevation of 8.38m. NSTIR has currently breached sections of the dyke in order to restore high salt marsh and coastal flood marsh habitat. During storm conditions flooding will occur on the service road to the north of the highway; however there is minimal risk of flooding to the highway itself due to its elevation greater than 10 m (Figures 11 & 12). There is risk however of undercutting the seaward side of the road and subsequently slumping of fill during a storm event despite its relatively sheltered location.

At Site B, north of Exit 5 (Figures 13 & 14), there is a risk of flooding both from freshwater sources and tidal sources given the right conditions. A low zone (elevation 8.02 m) was identified along Highway 101 (Figure 13, 14a). If the Tregothic dyke were to breach during a storm tide (dyke elevation 8.53 m) and the duration of the tide was long enough to allow enough water to pool behind the dyke there could be some flooding issues. The rail bed will provide protection up to 8.2 m. However, the likelihood of tidal waters reaching this location given the distance from the St. Croix river is minimal. The greatest risk is from flooding from the combined influence of a tidal breach and freshwater flooding from the small stream draining at the southern edge of the study site (Figure 13).

Site C is located at Exit 6 near the Tourist bureau and has the potential to be highly impacted by marine processes due to its proximity to the Fundy coast. High water levels associated with storm waves will have the potential to erode the banks of the causeway but the causeway itself it not in imminent risk from flooding. However, the model suggests that it is at risk of overtopping given the current rates of sea level rise (SLR) during storm conditions (Figure 15). Given a maximum road elevation of 9.48 m from cross sectional profile 1 (Figure 16) and current rates of SLR, it is feasible that the on ramp section of the causeway could flood within this decade, particularly due to wave overtopping. The salt marsh will offer some protection however will not completely decrease all risk. Risk from freshwater flooding is minimal except in low lying areas where water will pool during high precipitation events. A Forks Dam flood would not significantly affect transportation infrastructure within the section.

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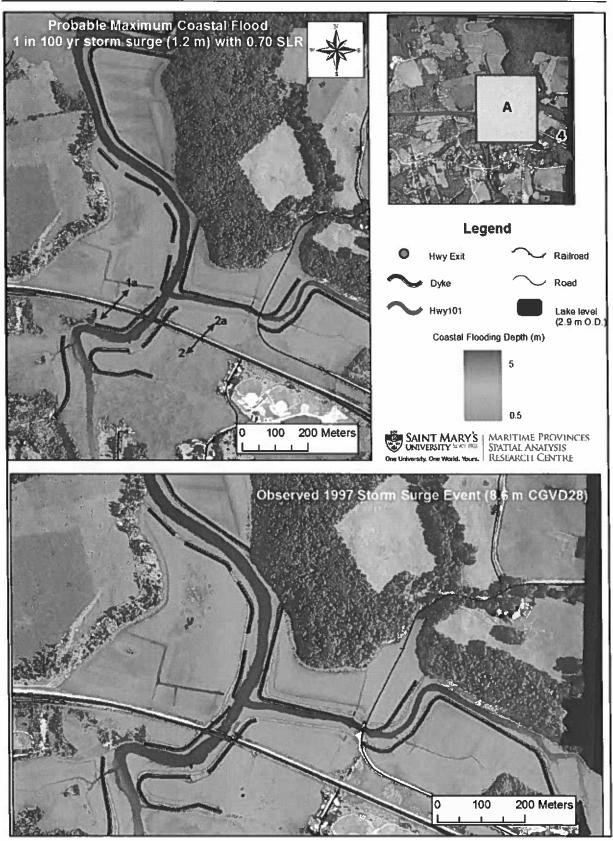


Figure 11: Exit 4 Study Site A impacts of flooding from a 1 in 100 yr storm with SLR and the 1997 observed storm level. Note breached dyke areas for coastal habitat restoration.

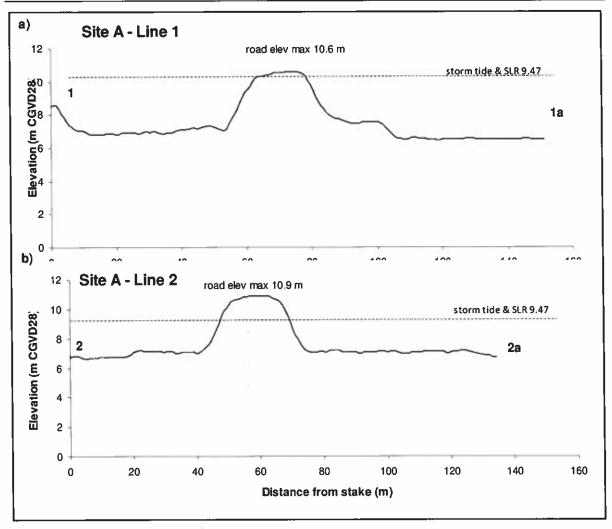


Figure 12: Cross sectional profiles perpendicular to Highway 101. Location of profiles indicated on Figure 11.

Final Report

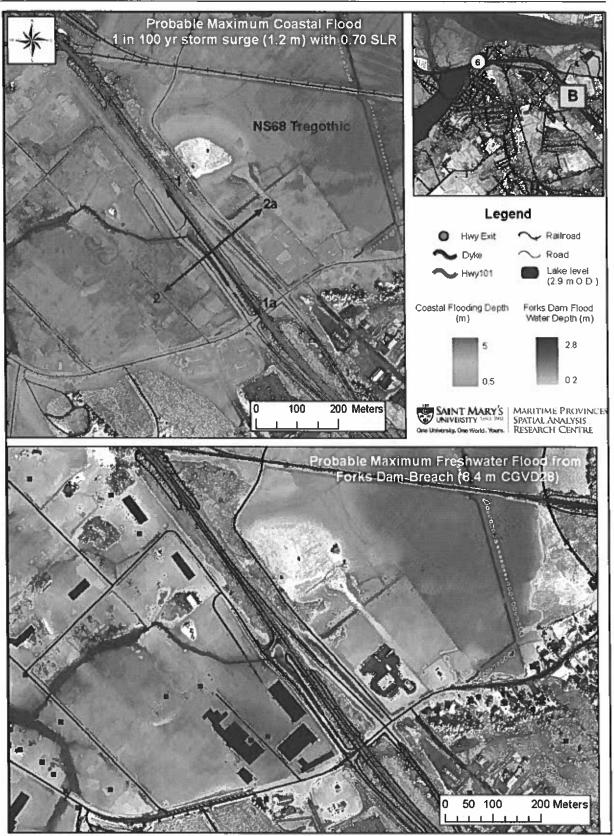


Figure 13: Exit 5 Study Site B with Maximum probable flood due to climate change from coastal and freshwater sources.

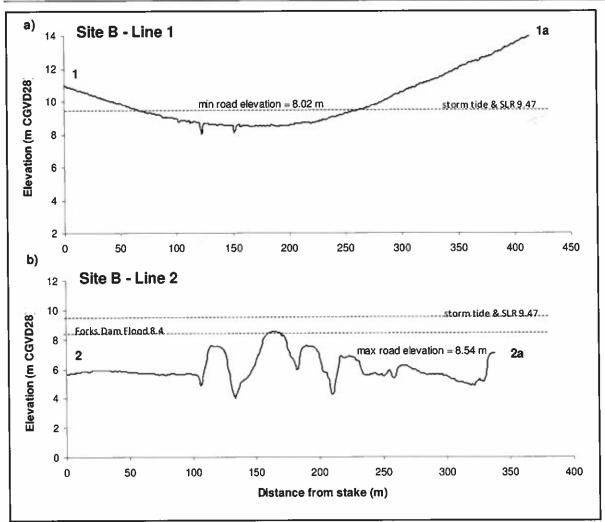


Figure 14: Exit 5 Study Site B with Maximum probable flood due to climate change from coastal and freshwater sources.

Assessment of Flooding Hazard Using LIDAR

Final Report

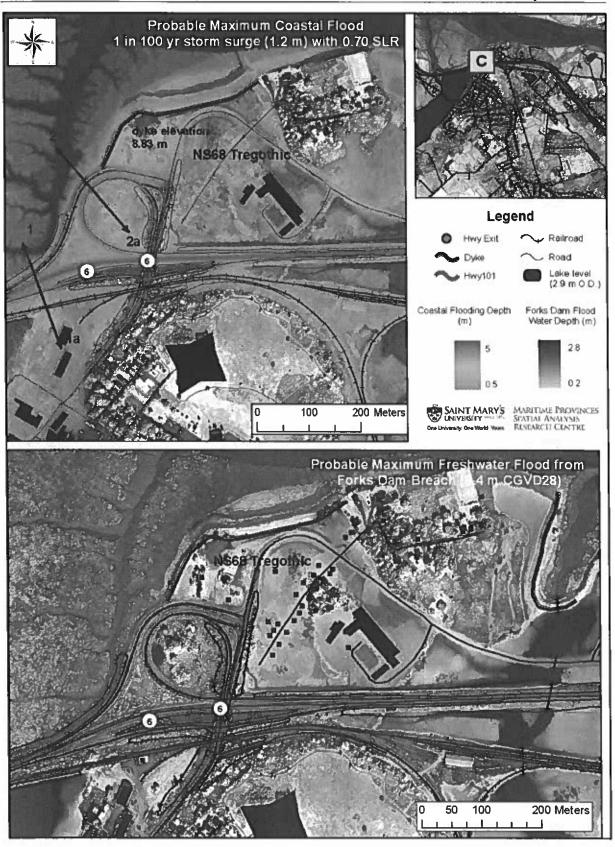


Figure 15: Exit 6 Study Site C illustrating depth of flooding from the 1 in 100 yr storm with SLR and freshwater flooding from the Forks Dam.

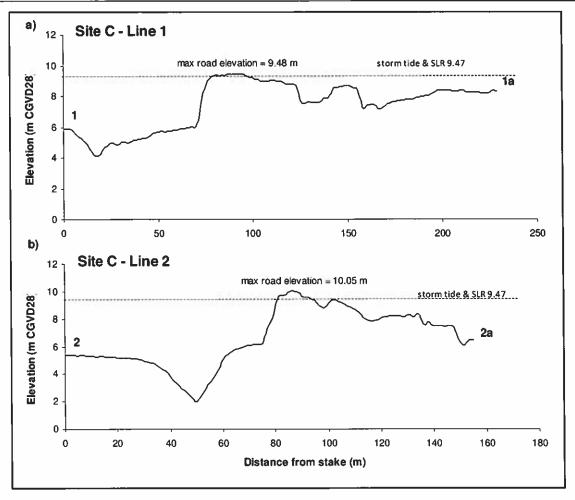


Figure 16: Cross sectional profiles at Site C perpendicular to the a) causeway on ramp at Exit 6 and b) edge of the causeway. Location of profiles are indicated on Figure 15.

The main area of vulnerability through this section of the highway 101 transportation corridor is the Windsor causeway. The central portion of the causeway is not the main concern as the mean elevation is approximately 10.4 m (Figure 17). Based on cross section and GIS analysis, the areas at the western and eastern edges of the causeway are lower in elevation and are at risk of flooding in the future (Figures 17 & 19). This includes the current tide gate infrastructure. The eastern edge is fronted by at least 1 km of salt marsh and would be protected from the majority of the storm wave's energy. The western portion however, is vulnerable since the orientation of the main tidal channel is also oriented in the direction of the longest fetch and hence has the potential to receive more of a storm's impact. The impacts from a freshwater flooding event are likely to be minimal.

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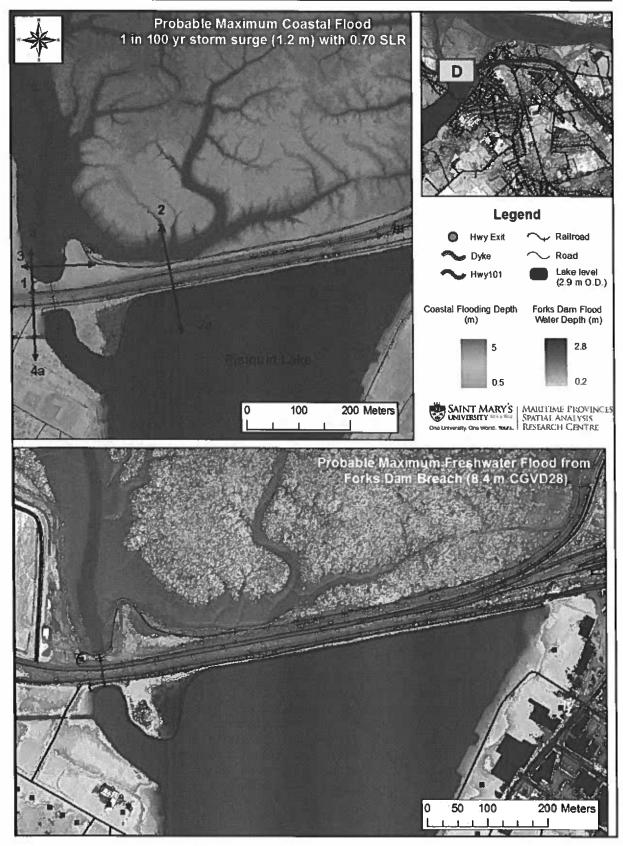


Figure 17: Causeway Study Site D impacted by coastal due to SLR and storm surge and freshwater flooding.

Assessment of Flooding Hazard Using LIDAR

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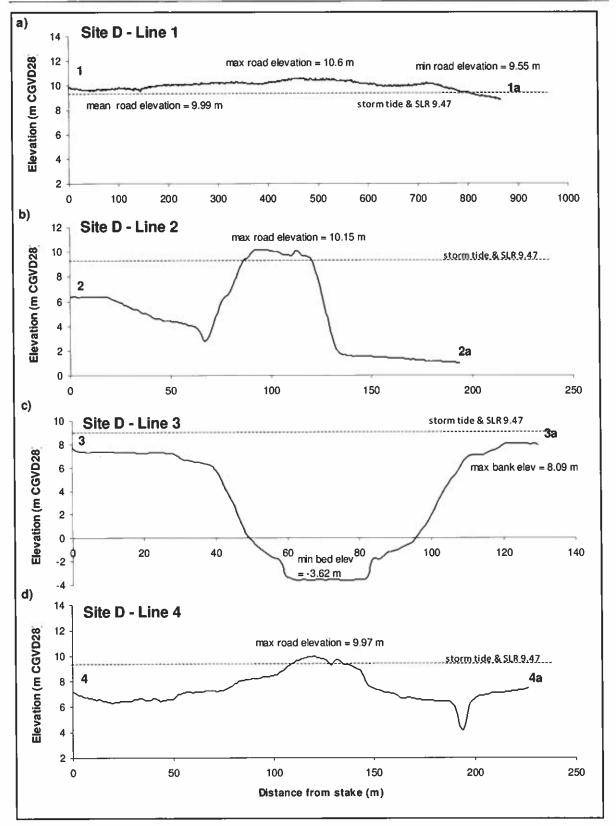


Figure 18: Causeway cross sectional profiles at Site D a) along Highway 101 on the causeway; b) perpendicular to the causeway; c) across the tide gate channel and d) far western edge of the causeway. Location of profiles indicated on Figure 17.

D. van Proosdij

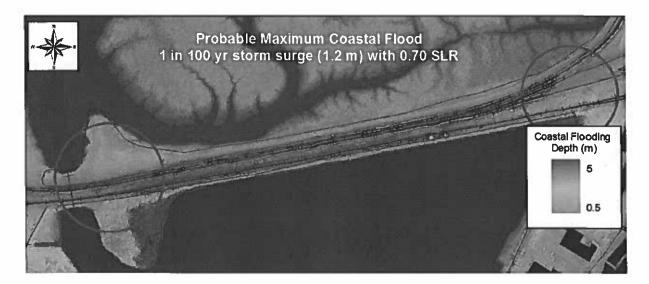


Figure 19: Impact of a 1 in 100 year storm surge with SLR on the Windsor Causeway. Red circles depict areas at greatest risk of flooding or coastal erosion.

Site E is located to the west of the causeway, adjacent to the MMRA marsh body NS14 Elderkin Marsh (Figure 20). This dyke has overtopped in the past (e.g. 1997) and will likely overtop in the future. Depending on the length of time that floodwaters exceeded the level of the dyke, the primary impacts on transportation infrastructure would be mostly associated with bank erosion along the edge of the highway and potential slumping of adjacent fill. The cross sectional profiles indicate that the road has a maximum and minimum elevation of 9.76 and 9.44 m respectively (Figure 21). A greater risk arises however if storm tides coincide with heavy rainfall and high tides and the aboiteau on NS14 is not able to drain (Figure 20). This has occurred in the past in the Truro region causing significant amounts of damage.

Site E2 is located near Exit 7, and although there are numerous low lying regions surrounding it, the highway itself and surrounding roads are at minimum risk (Figures 22 & 23). The road elevation exceeds 13 meters in the majority of this section (Figure 23). Some flooding could arise from high precipitation events if the capacity of the existing culvert structures are exceeded however the likelihood of this is minimal. The area at greatest risk in this section is the rail line and Water St. (Highway 1) near Falmouth.

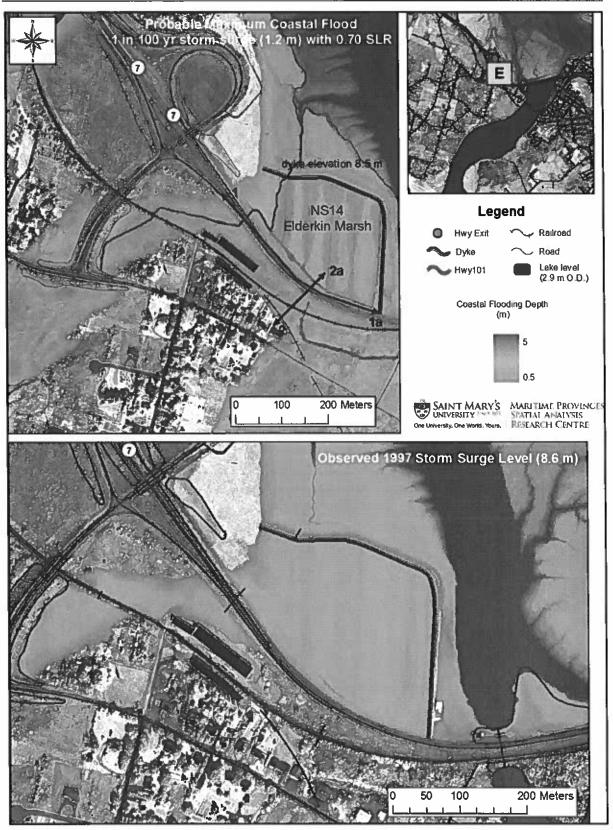


Figure 20: Elderkin Marsh Site E illustrating extent and depth of coastal flooding due to the combined effects of storm surge and sea level rise and the 8.6 m observed storm event in 1997.



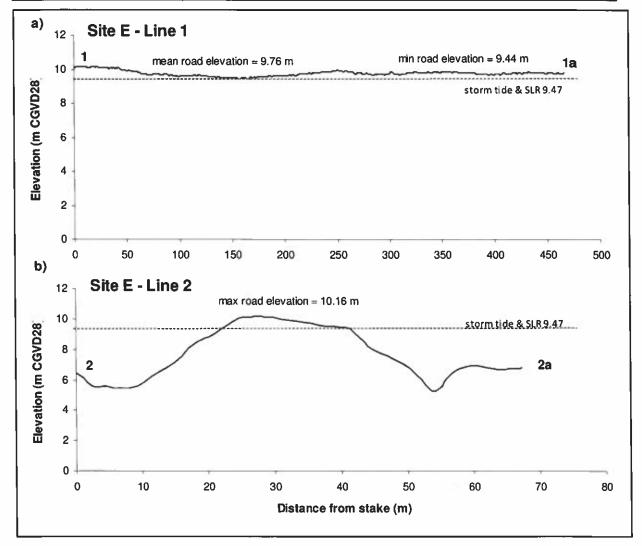


Figure 21: Cross sectional profiles at Site E on the western edge of the causeway a) along highway 101 and b) perpendicular to the highway. The location of profiles are indicated on Figure 20.

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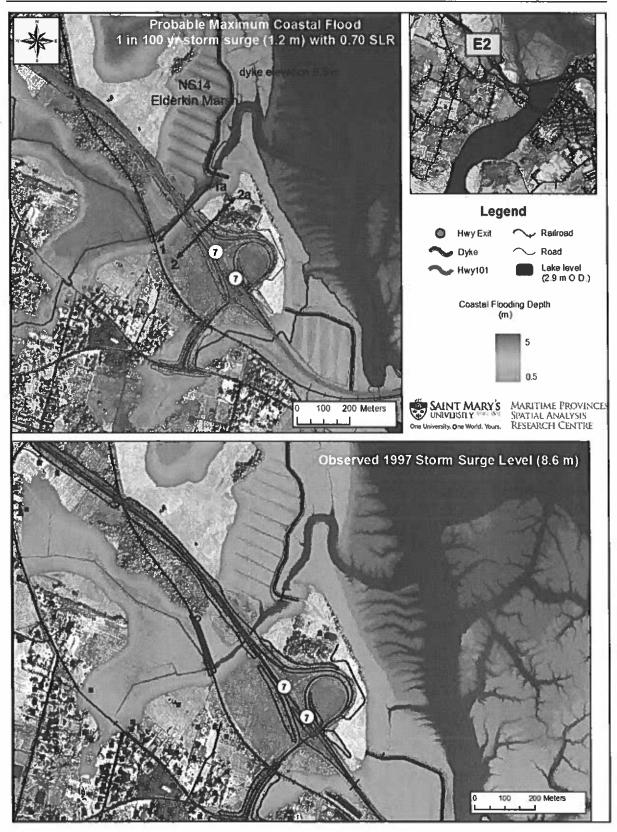


Figure 22: Exit 7 Study Site E2 extent and depth of flooding due to the combined effect of storm surge and SLR as well as the observed 8.6 m storm surge level of 1997.

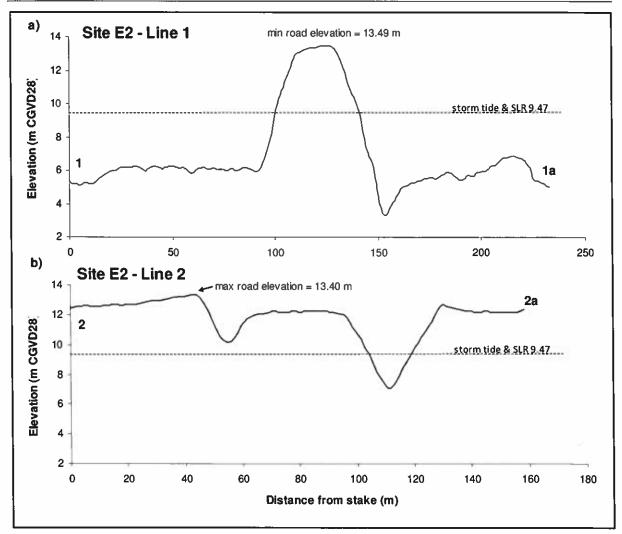


Figure 23: Cross sectional profiles at Site E2 near Exit 7 perpendicular to Highway 101. The location of profiles are indicated on Figure 22.

Site F is located near Exit 8 – Hantsport and although the highway itself is sufficiently high (17 m), the on and off ramps are vulnerable from flooding from the adjacent Halfway River (Figures 24 & 25). The approximate maximum elevation of this section of road is 8.95 m and the elevation of the river ranges from 1.8 to 2.6 m based on the LIDAR data. The risk of flooding in this area is significant since the existing aboiteau beneath the rail line at the mouth of the Halfway River is in disrepair and is missing a gate allowing partially restricted tidal flow (pers comm. Ken Carroll, Oct 19, 2009). The road leading into the town of Hantsport is at risk of flooding during a storm event.

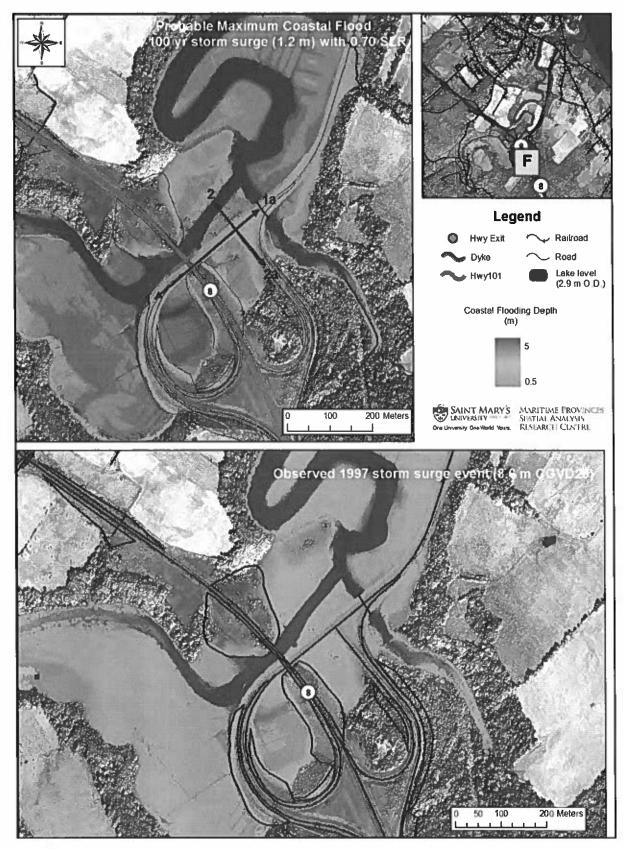


Figure 24: Extent and depth of flooding at Site F due to combined effects of storm surge and SLR as well as the observed 8.6 m storm surge event in 1997.

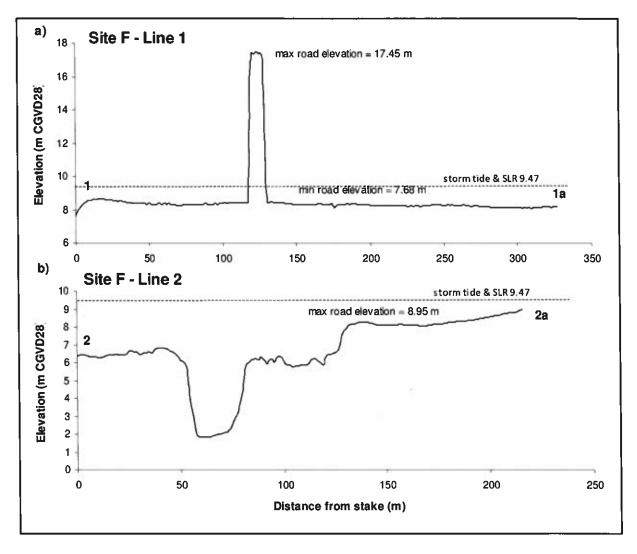


Figure 25: Cross sectional profiles at Site F near Exit 8 a) along the on ramp and b) perpendicular to the highway on ramp. Location of profiles indicated on Figure 18.

Figure 26 reflects the risk at Site G to the town of Windsor from both freshwater flooding, a significant storm event with SLR or if the tide gate were removed and full tidal exchange were restored to the Avon River. Since this area has been isolated from the tides since 1970, new development has taken place in areas that were once marshland and original protective dykes removed in many areas. Although the water levels in the Avon River are regulated to some degree by the hydro corporation and the tide gate, there are still situations that arise such as a prolonged period of heavy rainfall coinciding with sequence of high tides where flooding is a real threat. If full tidal flow were restored or during a significant storm event with SLR, the Town of Windsor would be at significant risk from flooding. Examination of Figure 26 clearly

shows that the downtown core adjacent to Pisiquid Lake will flood under both coastal and Forks Dam failure scenarios. Although the water would be initially restricted somewhat by the old rail bed (~7.6 m) depicted in Figures 25 and Water Street at line 1 (Figure 27) (elevation 8.17 m), once this was exceeded, there are minimal restrictions that remain. It will be crucial to groundtruth the elevation of these roads in the future.

A similar situation arises at Site H on the western shore of Pisiquid lake and the Avon River. The LIDAR information indicates that the Armstrong marsh dyke (NS75) is no longer completely continuous and would be easily breached near the bridge (Figures 28). The elevation in this area is around 7.36 m. The road elevation derived from the cross sectional profile is 8.16 m (Figure 29). Both indicate that during storm conditions, this area would be easily flooded.

Much of the flooding hazard upstream of the causeway originates from building on or near former agricultural marshland. Figure 10 depicts the marsh bodies and flood zones upstream of the causeway. The area of flooding is extensive and surrounds the town of Windsor. If the causeway were to be removed, there would be significant risk to the town and associated infrastructure and considerable cost in rebuilding and/or repairing the dykes. One of the original reasons for constructing the causeway in the first place was to decrease the amount of area that needed to be protected by dykes that require regular, costly maintenance. It should be noted that this assessment of flood hazard to the town of Windsor is preliminary and further in depth studies are required regarding the economic implications and site specific impacts (e.g. built infrastructure and property level) as well as groundtruthing.

The proposed new twinned section of highway will cross the Avon River at the tide gate via a bridge. The positioning of the bridge abutments will need to be carefully considered since the area around the banks of the tide gate channel are both at a high risk of erosion and of flooding (Figure 30). Even if additional fill is placed on the sea ward edge of the existing dyke, this area is susceptible to erosion and currently is within the flood zone for normal spring tides. This risk will continue to increase with increasing water levels which will accelerate any bank scour in the area. Addition rock armouring will also be required. In addition, significant discharge events from the tide gate will continue to erode the banks adjacent to the sluice gate. The eastern edge of the causeway will likely flood with storm tides within the next decade given current rates of sea level rise. In both cases additional fill will be required as well as bank armouring.

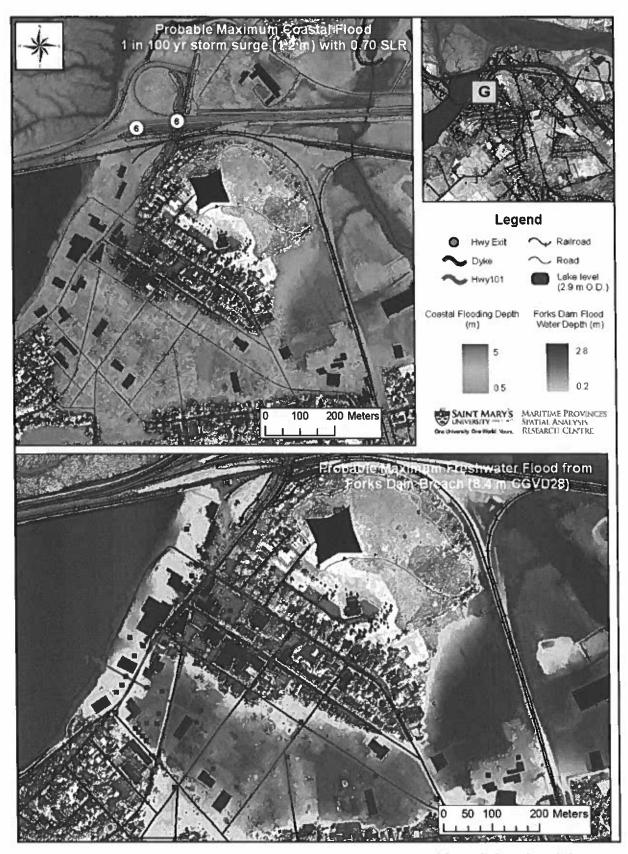


Figure 26: Impacts of coastal flooding and freshwater flooding due to failure of the Forks Dam through downtown Windsor at Site G.

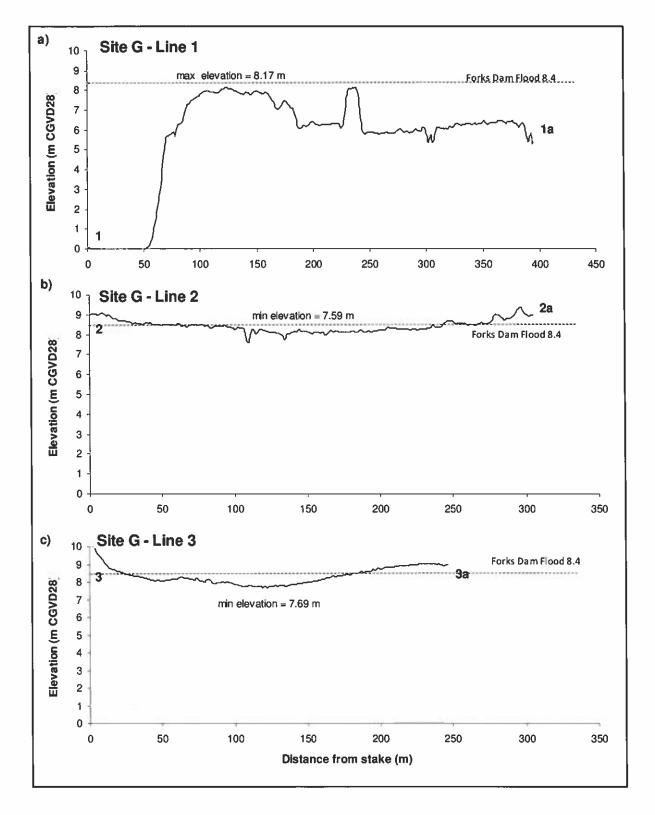


Figure 27: Cross sectional profiles at Site G adjacent to the Windsor waterfront downtown. Location of profiles indicated on Figure 26.

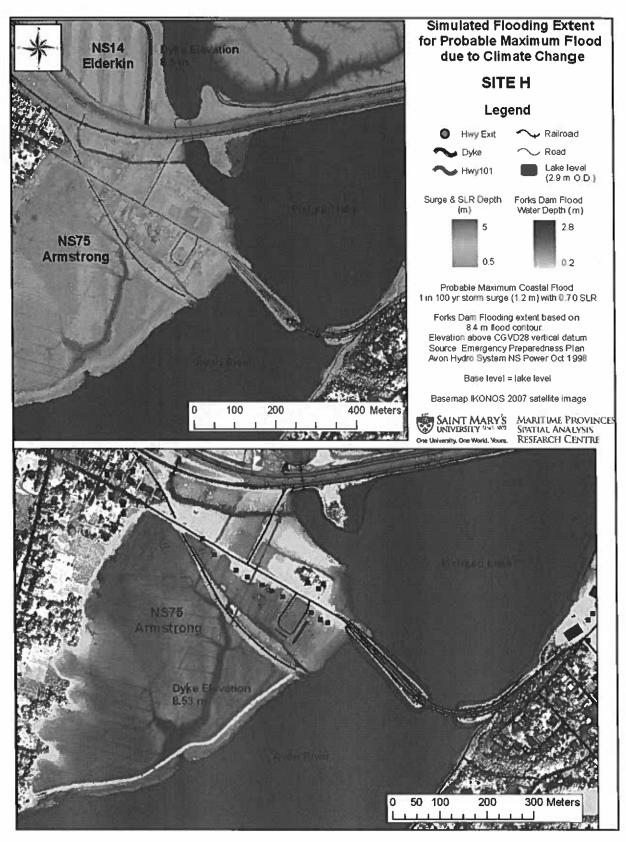


Figure 28: Extent and depth of flooding at Site H due to both coastal storm surge with SLR and failure of the Forks Dam.

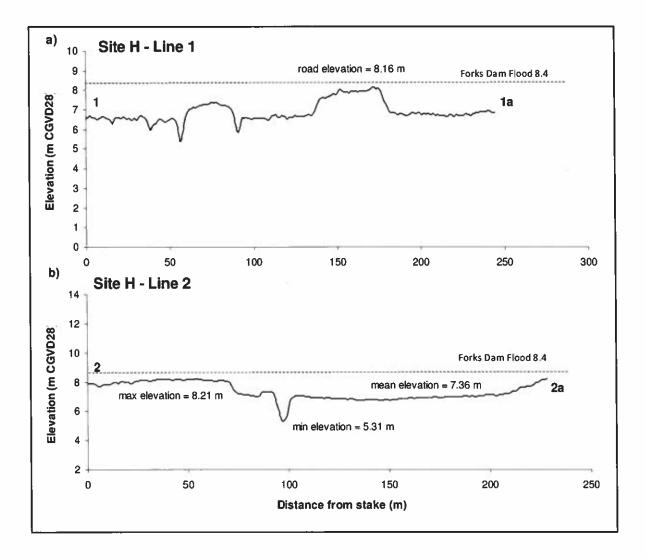


Figure 29: Cross sectional profiles at Site H on the western shore of Pisiquid Lake. Location of profiles indicated on Figure 28.

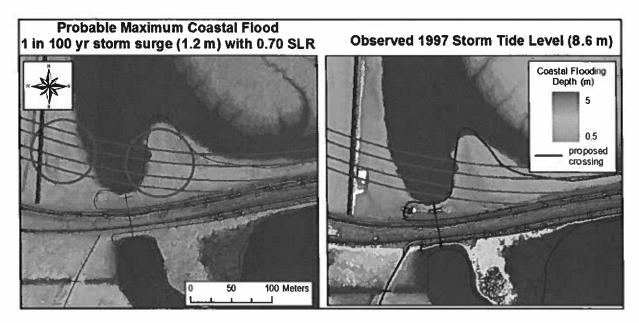


Figure 30: Potential area of concern for the proposed new twinned Highway 101 crossing near the Windsor Tide Gate.

# Conclusions

Within the majority of the study area, the elevation of the 101 Highway is sufficient to keep it from being flooded in all but high storm conditions. There are however small pockets of vulnerability, most notably at the on ramp at Exit 6 (tidal) and Exits 5 & 8 (freshwater). The tidal impacts however are time limited and restricted to the period at high tide initially which limits the amount of water that can fill the 'basin'. This water can then become trapped behind the dyke and remain for a period of time. Additional research will be needed to determine basin fill times and develop an emergency evacuation plan avoiding roads that will flood. Alternatively, freshwater flooding can result from prolonged rainfall which is not able to drain through aboiteau that are held shut by concurring high tides. This can result in very rapidly rising water levels. The causeway itself is at an adequate elevation in the central portion to withstand rising sea levels, however it is recommended to increase the elevation of both western and eastern ends to exceed approximately 9.75 m. Some areas of concern such as those at site F near Exit 8 can be mitigated in part by replacing the old aboiteau structure with a new one. One of the questions to the addressed within this study what the flooding impacts would be on the Town of Windsor if the tide gate were removed. A preliminary, primarily qualitative analysis was performed, which depicts a significant impact on the downtown core even during normal spring tide conditions. The majority of the impacts surround Pisiquid lake however there is a large central corridor radiating out from the lake which is completely inundated, flooding numerous homes and businesses. This same area would be flooded based on the flood elevation (8.4 m CGVD28) provided by the Emergency Preparedness Plan for the Avon Hydro System (Oct 1998) for failure of the Forks Dam. Additional in-depth site specific analyses on the flood hazards within the town are recommended.

### References

- Daborn, G.R.; van Proosdij, D. and M. Brylinsky. 2003. Environmental Implications of Expanding the Windsor Causeway (Part One). Report prepared for Nova Scotia Department of Transportation Contract # 02-00026. Acadia Centre for Estuarine Research Publication No. 72. 15 pp.
- Daborn, G.R.; Brylinsky, M. and D. van Proosdij. 2003. Ecological Studies of the Windsor Causeway and Pesaquid Lake, 2002. Final report prepared for Nova Scotia Department of Transportation Contract # 02-00026. Acadia Centre for Estuarine Research Publication No. 69. 111 pp.
- Desplanque, C. and D, Mossman. 2004. Tides and their seminal impact on the geology, geography, history and socio-economics of the Bay of Fundy, eastern Canada. *Atlantic Geology* 40(1):1-30.
- Bindoff, N.L., J. Willebrand, V. Artale, A, Cazenave, J. Gregory, S. Gulev, K. Hanawa, C. Le Quéré, S. Levitus, Y. Nojiri, C.K. Shum, L.D.Talley and A. Unnikrishnan, 2007: Observations: Oceanic Climate Change and Sea Level. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S.,D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Parkes, GS.; Forbes, D.L. and Ketch, L.A. 2006. Sea-level rise and regional subsidence in southeastern New Brunswick. *In* Impacts of Sea Level Rise and Climate Change on the Coastal Zone of Southeastern New Brunswick (ed) R. Daigle, D. Forbes, G. Parkes, H. Richie, T. Webster, D. Berube, A. Hanson, L Debaie, S. Nichols and L. Vasseur: Environment Canada 613 p.
- van Proosdij, D. and G. Baker. 2007. Intertidal Morphodynamics of the Avon River Estuary. Final report prepared for the Nova Scotia Department of Transportation 186 pp.
- van Proosdij, D; Bambrick, J. and G. Baker. 2006. Spatial and Temporal Variations in the Intertidal Geomorphology of the Avon River Estuary. Final report prepared for the Nova Scotia Department of Transportation 82 pp.
- van Proosdij, D. 2005. Monitoring Seasonal Changes in Surface Elevation in Intertidal Environments near the Windsor Causeway. Final report prepared for the Nova Scotia Department of Transportation 22 pp.
- van Proosdij, D., Daborn., G.R. and M. Brylinsky. 2004. Environmental Implications of Expanding the Windsor Causeway (Part Two): Comparison of 4 and 6 Lane Options. Report prepared for Nova Scotia Department of Transportation Contract # 02-00026. Acadia Centre for Estuarine Research Publication No. 75. 17 pp.
- Vasseur, L. and N. Catto. 2008. Atlantic Canada; *in* From Impacts to Adaptation: Canada in a Changing Climate 2007, *(ed)* D.S. Leman, F.J. Warren, J. Lacroix and E. Bush; Government of Canada, Ottawa, ON p. 119-170.
- Webster, T., Dickie, S., O'Reilley, C., Forbes, D., Parkes, G., Poole, D. And R. Quinn. 2003. Mapping storm surge flood risk using a Lidar- derived DEM. Geospatial Solutions May, 5 pp.
- Webster, T., Forbes, D., Dickie, S. and R. Shreenan. 2004. Using topographic Lidar to map flood risk from storm-surge events for Charlottetown, Prince Edward Island, Canada. Canadian Journal of Remote Sensing 30(1): 64-76.

Carol Anne Smith March 23, 2025 1:15 PM Office of the Legislative Counsel Re.: Bill 24

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To Whom it May Concern,

As a Nova Scotian I am extremely concerned with this Bill 24 that has been tabled by Premier Houston. It would give far too much provincial government overreach over municipal affairs and jurisdictions. For this reason I am completely AGAINST this Bill! Please rescind it.

Thank you!

Carol A Smith

Rob Bright March 23, 2025 12:01 PM Office of the Legislative Counsel bill 24

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I would like to express my extreme concern about the Province's bill 24 consolidating transportation issues in NS. This bill is highly undemocratic and removes Municipal oversight on transportation development in our province. It consolidates too much power in the hands of the province with little or no accountability. Giving the province this much overreach is a terrible idea. The province would be accountable to no one, especially when they have super majority powers to enact any kind of legislative changes they want without considering the will of the people of Nova Scotia. The bill should either be scrapped or seriously amended to reflect the wishes of Nova Scotians, and not just the wishes of this present government.

Sincerely,

Robert Bright Resident of Annapolis County

March 24, 2025 12:28 PM Office of the Legislative Counsel Bill 24

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**Public Bills Committee Members** 

Dear Committee Members,

I have only recently become aware of the content of Bill 24 and am concerned about its implications.

While I am relieved that the current government appears to be taking a long overdue more serious interest in transportation issues I am deeply perturbed at the overreach of power that the bill embodies. Municipal councils, as several MLAs already know from direct experience, play a vital role in staying in close touch with the concerns of local residents. The frequency and transparency of municipal council meetings allow councils to maintain a regular dialogue with residents. Sadly, the recent pattern of the Public Bills Committee routinely forwarding unmodified bills despite detailed and well-informed critiques from private citizens and community groups suggest that the current government is inclined to exploit the exceptional circumstances of its super-majority to assume equally exceptional political powers.

Systemic shifts in the political power structure need to be examined very carefully. Centralizing power, as we see all too vividly in other jurisdictions, always diminishes democratic institutions and serves to stifle public participation. I hope that this will be a case where the present committee shifts from its present pattern of rubber-stamping government bills and remove the threat to the autonomy of municipal councils embodied in Bill 24.

Sincerely, Gillian Thomas



Nina Newington March 24, 2025 11:39 AM Office of the Legislative Counsel warden@annapoliscounty.ca; Jesse Hare Comment regarding Bill 24

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To the Public Bills Committee

**Regarding Bill 24** 

We have three levels of government for a reason. Municipal government is in many ways the most direct and responsive to citizen's concerns. Bill 24 is fundamentally anti-democratic. It attempts to take decision power over transportation infrastructure away from the municipalities. To add insult to injury, it then proposes to give the provincial government the power to force municipalities to pay for infrastructure they did not want.

Bill 6, taken in combination with Bills 1,6,12 and 36, represents an unparallelled and unmandated attempt to reduce the say Nova Scotians have in determining what happens in our province. These Bills are undoubtedly intended to amplify each other. For example, having over-ridden the carefully considered and popular ban on fracking (Bill 6), it is not hard to see how Bill 24 might be used to force a municipality to build a road required for a fracking project in spite of strong local opposition. If the municipality refuses, the province, if Bill 24 becomes law, grants itself the power to go ahead and get that road built anyway – and then to force the municipality to pay for it.

It may appear that this high-handed approach will be more efficient – it is certainly in keeping with the combative tone of this government – but in a democratic system, social license is necessary for projects to go ahead. A friendly, informative, collaborative approach works better. A joint transportation task force that allows the municipalities and provincial government to work together is more effective than this 'my way or the highway' approach.

I ask that Bill 24 be withdrawn.

Sincerely,

Nina Newington

From:	Shawn Rosvold	
Sent:	March 24, 2025 11:15 AM	
Го:	Office of the Legislative Counsel	
Subject:	A plea	

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I call on the Houston government to immediately release the JRTA's Regional Transportation Plan, and amend Bill 24 to remove provincial overreach into municipal planning.

# Shawn Rosvold



-	SWP HOPE
Sent:	March 24, 2025 11:15 AM
To:	adegoke@adegokefadare.ca; barbadamsmla@gmail.com; barkhousemla@gmail.com; bradmcgowanMLA@gmail.com; brendan@brendanmaguire.ca; briancomermla@gmail.com; brianwongmla@gmail.com; chrispalmermla@gmail.com; contact@damianstoilovmla.com; DianneTimminsMLA@gmail.com; MLA, Eastern Shore; gregmorrow4gt@gmail.com; hello@digbyannapolis.ca; iknowdavebowlby@gmail.com; info@beckydruhan.ca; info@claremla.ca; info@coltonleblanc.ca; info@marcomacleod.com; info@mombourquette.ca; info@nickhilton.ca; Info@trevorboudreau.ca; johnlohrmla@gmail.com; Johnwhitemla@outlook.com; Kim.maslandmla@gmail.com; leahmartinmla@gmail.com; melissa.mlaoffice@gmail.com; michellethompsonmla@gmail.com; MLA@kylemacquarrie.com; mla@northsidewestmount.ca; mlabradjohns@gmail.com; mlahantseast@gmail.com; mlajulievanexan@gmail.com; nolan.young@shelburnemla.ca;
Cc: Subject:	patdunnmla@bellaliant.com; pictoueastamanda@gmail.com; Rick.burns.mla@gmail.com; susancorkumgreekmla@gmail.com; timhalmanmla@gmail.com; timouthitmla@gmail.com; Tom.Taggartmla@gmail.com; toryrushtonmla@bellaliant.com; Office of the Legislative Counsel; Speaker's Office mla@esmithmccrossinmla.com; info@iainrankin.ca; claudiachendermla@gmail.com; info@rodwilsonmla.ca; kendracoombesMLA@gmail.com; KristaGallagherMLA@gmail.com; linahamidmla@gmail.com; LisaLachanceMLA@gmail.com; paulwozneymla@gmail.com; suzyhalifaxneedham@gmail.com; susanleblancMLA@bellaliant.com; Clerks Office Bill 24

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I have serious concerns about ALL the bills this PC government is jamming through without due process. Bill 24 and the sweeping legislative powers it will grant the provincial government, at the expense of municipal decision-making and autonomy, is another example of unethical behaviour from T Houston and his sheep. Elbows up!

It is clear that Nova Scotians do not condone this pattern of consolidating power while excluding the voices of concerned citizens, experts, or anyone else who might dare to disagree. These legislative changes were never mentioned during the election campaign, encroaching on the autonomy of communities, municipalities, universities, and research... Is this really how you want to govern? Are you really on board with putting the party line ahead of the public good? Are you a sheep or a leader? Sheep blindly follow...leaders stand up for those they were voted to represent.

I urge you not to vote for this bill. I urge elected PC MLAs...to not be sheep...and blindly follow one of the most unethical leaders this province has ever had. Your actions will be remembered! Tim Houston is a member of CPA Nova Scotia who is responsible for regulating the professional development of its members, and the protection of the public through its ethical standards, Tim Houston seems to have left his ethics behind. Stand up for the people of Nova Scotia you were elected to serve and not the Trump like dictator who is showing his true colors.

There are different levels of government for a reason. Municipal Councillors are voted in by the members of the community and they are who we look to for decisions on municipal transportation, infrastructure, building and development. WE who live in the communities SHOULD have the final decision not some MLA who does not even live in the community! We need strong municipalities to represent Nova Scotians in their home communities without threats of interference from the province.

Granting the Public Works Minister the authority to order any municipality in the province to build or remove infrastructure is a very slippery slope. Allowing the Minister to then bill the municipality for projects they may not support or be able to afford is an irresponsible way to govern. Homeowners are already overwhelmed by the increases in property taxes to fund infrastructure for projects they did not want! It is no wonder that the Nova Scotia Federation of Municipalities has deemed some of the clauses in Bill 24 "tremendously concerning." Former municipal councillors, now MLAs, among them Tim Outhit, Tom Taggart and Danielle Barkhouse, should have particularly strong reservations about this bill!

By voting for this bill, you are voting to take the "joint" out of the Joint Regional Transportation Agency. Nova Scotians have long wanted a collaborative, municipal, provincial and federal approach to improving efficient transportation in the province.

Government overreach and interference is not supported by Nova Scotians! The PC party was not voted in to destroy democracy in the province. Nova Scotians have displayed a wealth of knowledge and opposition to Bills 1, 6, 11, 12, and 36. Which the PC government is willfully ignoring!

Democracy requires our active participation, especially when democracy is threatened. The bills put forward in this legislative session considered collectively, present a clear threat to transparency, collaboration, and the public good. Completely unethical!

Be a leader not a sheep! Vote AGAINST this bill and the rest of the over reaching legislation that is being put forward.

Regards, <u>Shauna Wadden</u>

From:	Elizabeth Peirce
Sent:	March 24, 2025 9:19 AM
То:	Office of the Legislative Counsel
Subject:	Bill 24
Follow Up Flag:	Follow up
Flag Status:	Completed
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Dear Public Bills committee,

I am writing to express my concern over what the PC government proposes in Bill 24 respecting municipal government. The Union of NS Municipalities has called this bill "tremendously concerning" as it gives the province the power to override municipal decisions on issues such as transportation and other community infrastructure and then force the same municipalities to cover the costs.

Good governance at both municipal and provincial levels requires ongoing public consultation and feedback; to take these elements away, as Bill 24 proposes, is deeply undemocratic.

Former municipal councillors, now MLAs, among them Tim Outhit, Tom Taggart and Danielle Barkhouse, should have particularly strong reservations about this bill. Why have municipal government at all if the province won't allow it to function as it should, representing the interests of our communities?

I would urge the committee not to pass Bill 24 as it stands. We need strong municipalities to represent Nova Scotians in their home communities without threats of interference from the province.

Elizabeth Peirce

Elizabeth Peirce (she/her)

## Writing, editing, gardening

I acknowledge with gratitude that I live and work in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaw people.

Geraldine Kenny March 24, 2025 9:00 AM Office of the Legislative Counsel Bill 24

Follow Up Flag: Flag Status: Follow up Completed

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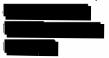
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Dear Premier Houston,

I oppose your government's proposal to enact Bill 24. The autonomy of Municipal Councils' must be preserved to enable democractic due process. Local governments must retain and respect local issues affecting the lands and waters of their jurisdiction.

sincerely,

**Geraldine Kenny** 



### McDonald, David S

From: Sent: To: Subject: Elly Heim <elly\_heim@yahoo.ca> March 24, 2025 8:17 AM Office of the Legislative Counsel Bill 24

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Dear Members of the Public Bills Committee,

as with several of the Bills currently tabled in the legislature Bill 24 is very concerning to me. Taking away municipal decision-making and autonomy when it comes to transportation infrastructure and have municipalities cover the costs incurred is yet another overreach of the provincial government.

I work in a rural hospital and I have experienced, what it means, when decisions on routines in small hospitals are made by staff managing large hospitals. They tend to lack the knowledge on the peculiarities of smaller hospitals, which is not helpful and leads to many inappropriate decisions. Municipalities all have their own issues, capacities, characteristics. To have a central department make decisions on municipality matters is absurd. Municipalities have the experience, expertise, and capacity to serve their constituents' needs. Municipal planning requires public consultation and allows for constituents to participate and provide feedback on how their communities are shaped. Taking this away is another step away from democracy and towards consolidation of power.

I have contacted my MLA and written numerous letters regarding Bill 1 and Bill 6 and I know countless other people have done so as well. There have been no amendments coming forward on these Bills and I am not getting my hopes up that it will be any different for Bill 24. However, I see it as my duty to speak up when I feel that something is not right.

Judging from the Bills currently tabled in the legislature this government seems to be determined to consolidate power and decrease transparency. It also appears determined to muzzle dissent by insulting constituents, who utilize their right to speak up and voice their concerns, calling them 'professional protesters', 'naysayers', or 'problem stretchers'. The steps that our provincial government are taking are very alarming to me, especially while witnessing how democracy is eroded right before our eyes South of the border. That's what compels me to share my concerns with you.

1

Sincerely, Elly Heim

#### March 25, 2025

As it stands now this bill proposes to give unmerited powers to the government to override the rights and protection of the people of this province. You know better. If you want to act like Trump don't be surprised if you are treated with disrespect. Your position gives you an opportunity to help the province, especially during these trying times, so don't blow it on petty selfishness and greed. Your grandchildren will have to live with the choices you make. Really think about what the legacy is that you will be leaving them. It's in your hands now.

Sandra Fowler

Public Bills Committee Members

Dear Committee Members;

I am submitting this as opposition to Bill 24. However, from my experience at Eisner Cove Wetland, I expect it to fall on deaf ears. I don't say that out of malice. In fact, I say it out of your government's own actions.

To back up my position, I point to the unelected Housing Task Force. They were give a document to read, by your government, which explained house NOT to listen to the public. Especially if that public disagreed with your government policies. I also point to the implementation of the Coast Protection Act. Thousands of Nova Scotians support to that Act, which your government ignored.

So, why should citizens expressing their opinions this committee? Is it not a waste of time? Unlike the sitting government, I still believe in democracy. I hope one of the government's members of this committee has an ounce of independence. I hope that one of you will, at least, for a moment, pretend to listen to the public. However, I am a realist.

The realist in me says, if I were to appear before you today, I would be ignored. Government members, of this committee, would simply sit there playing Candy Crush. Participatory democracy at work.

I find many aspects of Bill 24 similar to The Housing in the Halifax Regional Municipality Act (HHRMA). They both take steps to erode representative democracy in Nova Scotia. I don't use that word, "erode" lightly. But, I'll get to that in a moment.

Premier Houston, Minister Lohr and Minister Halman are aware of how strong my voice is. They saw me as I stood against Minister Lohr's move to take away democracy in HRM, with the Housing in the HRM Act. My views of the HHRMA, and special planning areas, are already on the record. It is my humble believe Bill 24 is taking us down the same path

When Minister Lohr moved the HHRMA he took our democratic rights taken away from us. At a local level, we elect a Council to take steps that are seen to be positive to us, the citizens. In 2021, Minister Lohr stripped away those rights, when it came to development in our communities. With a simple swipe of a pen, Minister Lohr took away our, and our elected Council's rights away. He gave them to an unelected group. There are many similarities between HHRMA and Bill 24, it is right there, in black and white.

Rightly or wrongly, under normal circumstances, there is a process for development and build in HRM. Staff make a recommendation to Council. Council then makes a decision to move forward or not. After that the public can make submissions, or, as with your committee, speak in front of Council. The HHRMA took that away from us, and, therefore, eroded our democratic rights.

The HHRMA further eroded our rights with the unelected Housing Task Force. I don't say this in a flippant manner. Thet Task Force's minutes are sealed and confidential. Full minutes are not even available through Freedom of Information requests. I don't believe members of the public are even

able to speak in front of the Task Force. As proof, look at their agendas. The vast majority of presentations were made by the developer or construction communities.

Bill 24, as tabled by The Honourable Fred Tilley Minister of Public Works, on 20 February 2025, parallels HHRMA. It would allow the Minister of Public Works to make certain decisions. Decisions currently made by municipal Council's across Nova Scotia. Last I looked, transit was not a provincial responsibility. Indeed, transit is under the municipalities.

When I think of transit, I think of Halifax Metro Transit, Yarmouth Transit, Kings Transit, and so on. I do not think of "Nova Scotia Minister of Public Works Transit" or "Transportation", within those municipalities. The province should not be able to dictate, to municipalities, local infrastructure. Bill 24 would give the Minister that power. Bill 24 would allow the Minister to overrule Councils by dictating what to "build, change, reconfigure or remove". Nor do I believe the Minister should be able to decide if a project is moving fast enough or not. What's next? Will your government disband Councils across Nova Scotia? That appears to be the road you are heading down. Take control from Council and give to this Minister or that Minister. Autocratic rule over all decisions.

I can understand the fear Mayor Pam Mood, of Yarmouth. Bill 24, and ultimate powers given to the Minister, could push municipalities toward bankruptcy. They would, after all, be the ones footing the Bill. If the Minister felt a road should be bigger, than that decided by Counci, will the province pay for the difference? My guess is no.

When a development project, whether it be housing (as with HHRMA) or roads work there is open dialogue. Many levels of dialogue in fact. From developers to citizens, we have our say. But along comes Minister Tilley and poof, our voices are silenced. Bill 24, as with the HHRMA, would take public consultation, and elected officials decisions, out of the equation. That is NOT democracy, Committee members.

In my mind's eye, and my experience at Eisner Cove Wetland, and with the HHRMA, I find myself asking, "Is the government's plan to implement this Act so they can join some cross Canada pipeline, or some common ilk?" The public, and municipal governments, don't support our policies, so we'll remove them from the equation. Let's pass Bill 24 so we can force our actions onto an unsuspecting public?

As I said, at the beginning of this submission, I don't believe government members will read my words. They have probably been given their marching orders by the Caucus Whip. So, I believe my time and thoughts, as a citizen of Nova Scotia, has been wasted.

With my experience of HHRMA, and I see in Bill 24, the provincial government amounts to totalitarianism in nature. For the record, I do not use that work freely, Merriam Webster defines totalitarianism as *"relating to centralized control by an autocratic leader of hierarchy"*.

In closing, in my opinion, the decisions of this government, in its second term, are authoritarian and totalitarian. It takes away MY democratic right to question the actions of the government. It give the Minister ultimate power, without public input. I urge you to vote against this Bill. Let the municipal governments of this great province make their own decisions. Afterall, rightly or wrongly, isn't that why we hold elections every four years? All it takes is one to stand up to a bully for that bully to back down.

Respectfully submitted by

Bill Zebedee

Good day,

I know I'm a bit late, but I missed this one. Please put my opinions on the record.

Bill 24:

I am writing to express my concern over what the PC government proposes in Bill 24 respecting municipal government. The Union of NS Municipalities has called this bill "tremendously concerning" as it gives the province the power to override municipal decisions on issues such as transportation and other community infrastructure and then force the same municipalities to cover the costs.

I disagree that the province can force municipalities to build how the current government wants, or change traffic planning, change transportation, such as bike lanes, busses, and of course climate related efforts such as HaliFACT. Municipalities have the closest and best relationships with the people, and often succeed in pleasing most residents. This is why many municipalities have acclaimed, or very long-serving mayors—people usually trust them to do a decent job.

The same can NOT be said for Nova Scotia provincial governments, especially this one, which only seems interested in selling Nova Scotia out to big, foreign businesses, and has severe trouble with transparency. Municipalities should indeed have the power to veto dirty work such as uranium mining or fracking in their areas, if the majority of their residents don't feel it is safe (due to lots and lots of science).

I would urge the committee not to pass Bill 24 as it stands. We need strong municipalities to represent Nova Scotians in their home communities without threats of interference from the province.

Thank you for including this in the record.

Susan Kulik

Mr Houston

I am in opposition to the passing of Bill 24. On the face of it, another power grab by the Provincial Conservatives, this time overriding decisions on infrastructure held by the duly elected members of Municipal Councils..

A stepping stone perhaps to the expropriation of land for mineral exploration?

Majority governments are a menace. This is another example of overreach.

Working with Municipalities remains an option.

Please do not pass Bill 24

Karen Ewing MD CCFP

To Whom It May Concern. I am deeply concerned with the passing of Bill 24 which gives the Provincial government authority to override decisions made by Municipalities. Municipal Governments have an important job to do such as providing local services, **establishing rules and bylaws and managing community infrastructure**, such as roads, water, waste management and parks. Giving the Provincial government the authority to override decisions made by the Municipalities, the councillors of which are elected by their constituents, is a hideous abuse of power and will only lead to the detriment of our beautiful province of Nova Scotia. Bill 24 is a very unsettling proposal and I hope people can see it for what it is and not allow passage of this Bill.

Sincerely,

Carol McNutt