



THIS ISSUE:

The National Adaptation Strategy and planning for climate change 04

Planners can be leaders in the implementation of appropriate and intentional climate change solutions 06

Behind every great community you'll find the work of many planners.

Healthy, sustainable communities don't just happen — they are planned that way. From population growth and increasing density to access to public transit and services like hospitals, schools, and libraries. From demographics and housing affordability to environmental sustainability and urban resiliency. Green spaces and rural development to the impact of technology. These are just a few of the many issues planners think about in their day-to-day work informing the thousands of decisions that go into every aspect our lives.

WHAT IS A PLANNER?

A planner is a trained professional who acts in the public interest to improve the health and sustainability of communities by anticipating the consequences of current trends and activities 5, 10, 20, and 50 years into the future.

In Ontario, only planners who are full members of the Ontario Professional Planners Institute (OPPI) are permitted to use the title Registered Professional Planner (RPP). RPPs meet quality practice requirements and are accountable to OPPI and the public to practice ethically and to abide by a professional code of practice.

WHERE DO PLANNERS WORK?

Ontario's RPPs work in a variety of fields within the public, private, academic, and not-for-profit sectors. The more than 4,000 members of OPPI work in government, private practice, universities, and not-for-profit agencies in the fields of urban and rural development, community design, environmental planning, transportation, health, social services, heritage conservation, housing, and economic development.



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Authorized since 1994 by the *Ontario Professional Planners Act*, OPPI is the recognized voice of Ontario's planning profession.

Find more information at ontarioplanners.ca.

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INSPIRE



“The impacts associated with climate change – intensified wildfires, devastating flooding, more powerful storm systems, and others – are being felt in every region of Canada. That is why Canada is committed to a comprehensive plan to adapt to, and mitigate, the effects of climate change. The National Adaptation Strategy makes important investments, like in flood mapping, that will protect Canadian lives and livelihoods, and ensure more resilient and prosperous communities.”

– The Honourable Jonathan Wilkinson, Minister of Natural Resources

THE NATIONAL ADAPTATION STRATEGY

Canada is experiencing climate change in many different ways, and the need to act has become critical. To help prepare communities for the impacts of climate change, the Government of Canada released the National Adaptation Strategy (NAS), described as a roadmap for action on adaptation and a vision for a resilient society.

Establishing the NAS brings Canada in line with the majority of advanced economies that have national adaptation plans or strategies in place, including 24 of the European Union's member states and all G7 countries other than the United States.

Canada's NAS calls on all segments of society to accelerate action and work better together to match the magnitude of the climate threat. By the nature of their work, professional planners are well positioned to lead on climate change adaptation, influence climate adaptation action, and communicate the business case for adaptation measures. Fulfilling that role starts with building knowledge.

National Adaptation Strategy:
<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy/full-strategy.html>

Government of Canada Adaptation Action Plan:
<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy/action-plan.html>

Building Regional Adaptation Capacity and Expertise (BRACE) Program:
<https://natural-resources.canada.ca/climate-change/building-regional-adaptation-capacity-and-expertise-program/21324>

Climate Change Impacts and Adaptation Training Program for Professional Planners – Climate Risk Institute (a partnership with OPPI and Dillon Consulting with support from the NRCan BRACE program):
<https://climateriskinstitute.ca/climate-change-impacts-and-adaptation-training-program-for-professional-planners/>

Adaptation Resources Pathway for Planners (developed by Climate Risk Institute with support from the Canadian Institute of Planners and funding from the NRCan BRACE program): <https://climateriskinstitute.ca/arpp/>

Climate Adaptation Competency Framework:
<https://can-adapt.ca/canadapt-capability>

Climate Data for a Resilient Canada:
<https://climatedata.ca>

→ LEARN MORE

The information on this page was provided by the Climate Change Impacts and Adaptation Division of Natural Resources Canada.

Learn more about the NAS and steps the federal government is taking to build engagement and support the integration of climate adaptation in an article on the NAS posted on OPPI's Planning Exchange Blog at <https://ontarioplanners.ca/blog/planning-exchange>.

“...greater efforts are needed to address what is clearly a climate emergency.”

The recognition that our climate is changing has been known for decades. It has been 26 years since the *Kyoto Protocol* to reduce greenhouse gas emissions was signed. Despite numerous actions and acknowledgements, our climate continues to warm. The planet's hottest week on record was marked this past July. Never before do I remember the extent of smoke that has engulfed not only southern Ontario but also the US and even Europe this past spring due to the forest fires in our country – forest fires caused by a warmer, dryer climate.

Climate change is rolling on and intensifying, and greater efforts are needed to address what is clearly a climate emergency. What can planners do? How can we contribute to the solution? What resources do we need to help to tackle this crisis?

In this issue of *Y Magazine*, read about the actions planners are taking individually and as a profession to influence decision makers and ensure the resiliency of our communities. Realistic measures to mitigate and adapt to changes that are increasing in frequency and intensity. Megan Geregthy from the Climate Risk Institute writes about steps planners can take to build individual and collective knowledge to support climate action. Jaelyn Hall and Laura Taylor look at how the planning framework in Ontario has shifted and discuss what's next for climate change planning in the Greater Golden Horseshoe. Meghan MacMillan and Amanda Van Wychen discuss how the environmental assessment process is evolving to consider climate change. That's just to name a few articles in this packed issue of *Y Magazine*.

As Registered Professional Planners, it is incumbent on us all to continue to learn how planning can be a vehicle to help address

climate change. The National Adaptation Strategy calls on all Canadians to work together and recognizes that planners are uniquely positioned to play a leadership role. It is up to all of us to educate decision makers on how our land use patterns and built forms can help to adapt to climate change and strengthen resiliency.

This is my last President's message for *Y Magazine*. It has been a pleasure being your President through this exciting but frenetic two years. I look forward to seeing you all in Ottawa at our conference, Adaptation Transformation, on September 20, where it will be my honour to turn the reigns over to Claire Basinski. I wish Claire and the new OPPI Council all the very best.



A handwritten signature in black ink, appearing to read 'Paul Lowes'.

Paul Lowes, MES, MCIP, RPP
President
Ontario Professional Planners Institute

The importance of building knowledge to support intentional action in an era of climate change

BY MEGAN GEREHTY, RPP



The rapid pace of climate change and severity of extreme weather is pushing communities and the natural environment past their breaking points. This is affecting health, safety, sustainability, and livelihoods here at home and around the world. To help prepare for the changes that are underway, professionals and practitioners in all sectors, including Registered Professional Planners, must be informed about climate impacts, risks, and adaptation solutions.

Fortunately, certain strategies to address climate challenges already coincide with established planning best practices. For quite some time now, establishing complete communities with compact mixed-use development and incorporating healthy community initiatives have been top priorities for planners leading to actions that reduce sprawl, preserve agricultural lands and natural features, service growing populations more efficiently, and support healthy active lifestyles. These initiatives often also support the reduction of greenhouse gas emissions and/or increase resilience to climate impacts. However, it is important to recognize that “support” and “alignment” are not equivalent to intentional action. For example, although an initiative like incorporating more green space in a community has the potential to enhance resilience, it does not guarantee that future green spaces will offer substantial protection against climate impacts.

Intentional project design is often needed to address specific climate risks.

“... it is important to recognize that ‘support’ and ‘alignment’ are not equivalent to intentional action.”

Getting to this level of detail requires an understanding of how climate change impacts infrastructure, the natural environment, services, and people in a given area. Building this knowledge may require both continuous professional learning as well as collaboration and engagement with experts in a variety of areas, such as climatology, infrastructure, landscape architecture, or Indigenous knowledges.

THE ROLE OF PLANNING

What individual planners need to know and understand in order to prepare their communities for these future climate risks will depend on their roles and responsibilities. For some, this may include developing a better understanding of climate models and data or a new way to design public spaces. For others, it may require expertise in communication and engagement strategies to collect and share information about climate change with other practitioners and government agencies. Ultimately, planners have a responsibility to develop a functional understanding of climate change to a degree that allows them to integrate consideration for climate impacts and solutions into their day-to-day work.

Importantly, planners must also understand climate change from both a climate mitigation and climate adaptation perspective. For good reason, emphasis is often placed on actions related to climate change mitigation; those that look to decrease our impact on the climate by reducing and eliminating greenhouse gas emissions. This could include the addition of trails and bike paths to encourage the use of alternative modes of transportation, setting regulations to require electric vehicle charging in parking lots to promote

alternatives to gas-powered vehicles, or leveraging planning tools to incentivize or require low-carbon buildings.

However, as extreme events and other changes in the climate continue to affect people, more attention is needed for adaptation solutions and actions to prepare for existing or potential future climate impacts. Things like energy efficient design, using low-impact development techniques, and the conservation and preservation of natural features that provide critical ecosystem services can all be done in ways that have mitigation and adaptation benefits or “co-benefits.” The trick is knowing which options are most appropriate.

Many communities across Ontario and Canada have already begun to do the work to assess risk and have begun taking action. In the last couple of years, the Region of Durham completed a risk assessment specific to flooding and recently launched their Flood Ready Durham website that provides information about the risks of flooding, what is being done in the region to prepare, and how individuals can prepare on their own.¹ The City of Mississauga is also undertaking a climate risk assessment of their municipal assets and are applying the Public Infrastructure Engineering Vulnerability Committee protocol.² The protocol is a process used to ensure infrastructure is resilient and contributes to health, safety, and economic security, despite the uncertainty caused by climate change.

“...more attention is needed for adaptation solutions and actions to prepare for existing or potential future climate impacts...”

RESOURCES FOR PLANNERS

Planners looking for resources to learn more about climate adaptation specifically from a planning perspective could start with the Adaptation Resource Pathway for Planners, a recent resource developed with support from the Canadian Institute of Planners and funding from Natural

Resources Canada.³ The interactive PDF helps planners in all stages of their climate change learning journey in identifying reliable resources, training opportunities, and examples of successful climate change adaptation initiatives that have been vetted by experts in both climate change adaptation and planning.

In addition to individualized learning, climate change knowledge should also be built collectively through collaboration and engagement. Not only does this allow for the sharing of multiple perspectives but also alleviates pressure on any one individual to have all the answers. Planners can't be expected to be climate experts, but having an understanding of climate change causes and impacts will help planners incorporate climate actions into their work and speak to colleagues and councils confidently about climate issues and, importantly, will help them recognize instances where it may be necessary to bring in expertise from other professions, like climate scientists.

Expanding one's professional networks and sharing practices can also help build collective professional knowledge. OPPI's Planners Connect platform is one example where experience and differing perspectives can be shared between members.⁴ Other interdisciplinary networks like the CanAdapt Adaptation Practitioners' Network is intended to help decision makers and practitioners connect with their peers from around Canada and access expertise, learn, and advance practice related to climate-resilient communities.⁵

"...climate change knowledge should also be built collectively through collaboration and engagement."

Community outreach and engagement are also critical to inform the kinds of climate change decisions and actions needed. Like other planning processes, getting perspectives and real-world experiences from those most impacted by our changing

climate, including community members, organizations and businesses, Indigenous communities, and other agencies and levels of government, will help to ensure solutions meet the needs of the community. Fostering community dialogue and encouraging community participation and input will help build collective knowledge and understanding to fill in gaps, identify issues, and find equitable solutions.

In this era of climate change, we can't afford to miss opportunities for positive change or, worse, to lock in decisions that are adding to the problem. There may not be a one-size-fits-all solution to climate change, but by building individual and collective knowledge to support climate action, planners can be leaders in the implementation of appropriate and intentional climate change solutions. (V)

¹Flood Ready Durham. <https://www.durham.ca/en/flood-ready-durham/>

²Public Infrastructure Engineering Vulnerability Committee. <https://pievc.ca>

³Climate Risk Institute. Adaptation Resource Pathway for Planners. <https://climateriskinstitute.ca/arpp/>

⁴Ontario Professional Planners Institute. Planners Connect. <https://plannersconnect.ontarioplanners.ca/home>

⁵CanAdapt Adaptation Practitioners' Network. <https://adaptation-practitioners-network.earthnet.org>



Megan Geregthy, BES, MES, MCIP, RPP, is a Member of OPPI and a Climate Change Adaptation Planner with the Climate Risk Institute: climateriskinstitute.ca.

Someone’s gotta do it: What’s next for regional climate change planning in the Greater Golden Horseshoe?

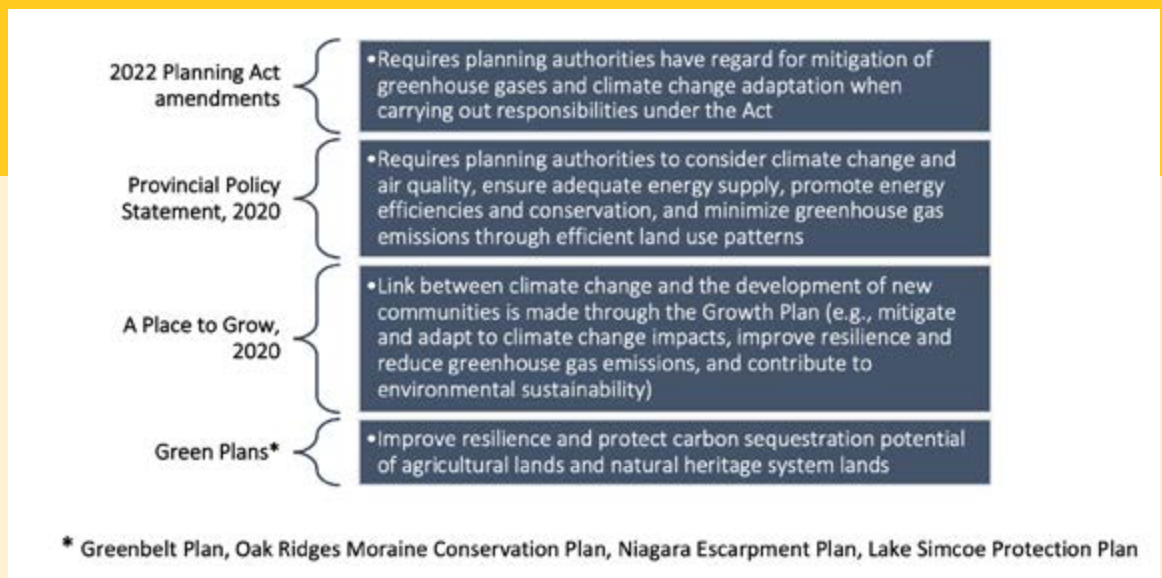
BY JACLYN HALL, RPP AND LAURA TAYLOR, RPP

Will removing planning responsibilities from regional municipalities in Ontario make a difference to climate change planning? The planning framework in Ontario is shifting dramatically as the Province of Ontario reconfigures rules and responsibilities while simultaneously introducing aggressive housing growth targets. The 10-year housing unit targets are dramatic in the quantum of change imagined for fast-growing areas, especially in the Greater Golden Horseshoe (GGH), the large urban region centred on Toronto. Our concern is whether the changes will diminish the effectiveness of planning for climate change.

For those involved in climate change planning, the pressure for action feels intense as the thresholds for making real change are passing us by. The planning horizon for growth in the GGH in the most recent round of planning is 2051 (a 30-year time horizon), with a population forecast to grow to 14.9 million. But jarringly, 2050 is the *Paris Agreement* date by which Canada promised to limit greenhouse gas emissions to net zero. How can the GGH possibly contribute to national net zero, while at the same time accommodating 4.7 million more people and retrofitting the places where the existing 10.2 million already live?

In the 2010s, climate change was added as an issue for planning in the provincial land use planning framework, shown in Figure 1. Legislation and policy linked climate change to urban structure, land use patterns, transportation, infrastructure, and the protection of natural heritage features.

Figure 1: General Overview of Current Provincial Policy Framework for Climate Change



In accordance with the existing Growth Plan, the 21 single- and upper-tier municipalities in the GGH were required by mid-2022 to update their official plans to the 2051 planning horizon. Through updates to regional plans, this process has provided climate change planning direction to lower tiers.

In November 2022, the *Planning Act* was amended to allow the province of Ontario to shift upper-tier planning responsibilities to lower-tier municipalities. The province proposed that the responsibilities be shifted in the regions of York, Peel, Durham, Halton, Waterloo, and the County of Simcoe by 2025. Subsequent legislation regarding Peel Region went further, with the regional municipality now to be dissolved by 2025.

As part of the package of planning reforms, the Ontario government also proposed far-reaching changes to the existing provincial policy framework. These changes are intended to support the implementation of the *Housing Supply Action Plan*, with the goal to construct 1.5 million homes by 2031. The proposed new policy guidance would combine *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* (Growth Plan) and the Provincial Policy Statement (PPS) into a new land use policy document to be referred to as the Provincial Planning Statement (still PPS), as shown in Figure 2. While the land use planning considerations related to climate change remain, the responsibilities for planning for climate change in the most populous and fastest growing part of the province have been devolved to lower-tier municipalities.

The challenge for climate planning going forward under this proposed framework is that it shifts the municipal burden of responsibility for addressing climate change from regional planning authorities to local councils and boards. Yet regional planning would seem to be better aligned with climate planning. Regional planning generally is meant to encourage coordination and cooperation between towns and cities to deliver services and share resources. The distribution of costs and benefits is carried out by the regions. The future of services such as clean water, wastewater treatment, stormwater management (including flood control) and related infrastructure, and solid waste management is uncertain, but clearly these services will have to be delivered.

“The challenge for climate planning going forward under this proposed framework is that it shifts the municipal burden of responsibility for addressing climate change from regional planning authorities to local councils and boards.”

What are regional responsibilities related to climate change? Climate mitigation and adaptation require cooperation. Regions have in many cases supported the sharing of information about climate change and have the ability to balance broader public interests with local political realities. The following five areas are where we think regions have the most impact:

- **Growth management** allows for the coordinated planning of infrastructure, the location and built form of development, demographic changes and growth projections. Growth management facilitates climate change adaptation and mitigation through the protection of key landscape-scale features, the avoidance of areas experiencing adverse impacts from extreme weather, and the location of infrastructure. Regional municipalities support growth management through official plan policies, which identify the location and type of land uses, the location of future urban boundary expansions and new settlement areas, the conversion and/or protection of land uses as well as accommodating growth projections to 2051.
- **Community planning** by lower-tier municipalities reduces greenhouse gas emissions and prepares for climate change through the planning of compact, transit supportive and complete communities. Regional municipalities provide policy direction and guidance for lower-tier municipalities, including climate change policy.

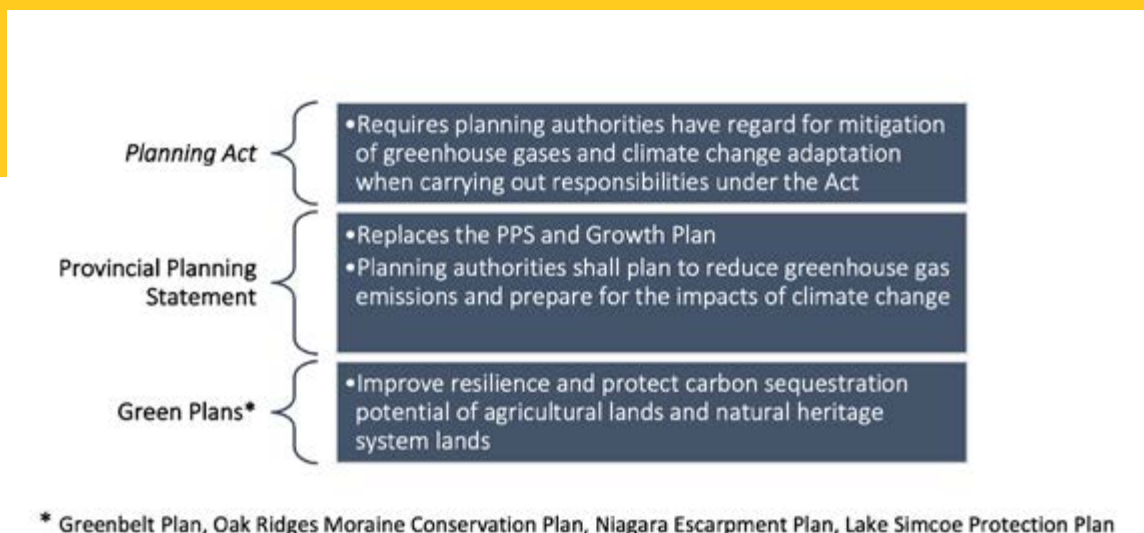


Figure 2: Proposed Future Provincial Policy Framework for Climate Change

- **Infrastructure planning** is costly and requires significant resources and coordination to build and operate. With more extreme weather events forecast, higher infrastructure standards are required. Regional municipalities play an important role in coordinating the planning and delivery of services that provide a benefit across multiple lower-tier municipalities. Examples include, but are not limited to, water and wastewater services (Peel, York, Durham, Halton, etc.), transit initiatives (York, Durham, Waterloo, Niagara, etc.), and regional roads.
- **Financial considerations** are important when planning for climate change. Municipalities must manage capital and operating expenses with limited revenue-raising tools. Regional municipalities help to fund services through development charges, utility rates, property taxes, debt, and user fees.
- **Coordinated response** across jurisdictions is required as the impacts of climate change span large geographic areas. Regional municipalities coordinate information and education about climate change. They collaborate and coordinate with lower tiers and other agencies within and beyond their borders (e.g., public health units, conservation authorities) as well as Indigenous groups, special interest groups, and other stakeholders in the planning process.


Of course, planning is one piece of a much larger puzzle. While land use planning policies are required to reduce greenhouse gas emissions and plan for the impacts of climate change, the transitions are through changes in societal activities and behaviours and not just from land use planning. The certainty of results also varies by scale. For example, regional plans provide an overall vision while local plans are better able to put goals into action. Local-level plans and design requirements encourage green building, ensure the proper location of active transportation infrastructure, and identify easements for new utility models as well as the location of charging infrastructure for electric vehicles.

The effects of shifting planning responsibilities from regional municipalities to lower tiers is a topic of concern. Understanding possible implications is essential in assessing how climate change planning in Ontario will transform. We find the following four central implications are top of mind:

1. **Lack of coordination:** Climate change planning requires coordination across and beyond local municipal boundaries. Regional municipalities are arguably playing this role. With the removal of regional planning responsibilities, coordination among the numerous cities and towns will need to rely on greater provincial guidance, regulation, and leadership, something which we are not yet seeing. But someone's gotta do it.
2. **Uneven climate action:** Even where planning coordination is provided by regional municipalities, the sophistication of the climate change response varies. Some local municipalities have detailed policies and actions to reduce emissions and adapt over

time. Others are just initiating work to meet minimum legislated climate-related requirements. Without regional-level planning, gaps between progressive municipalities and those with less political will and resources will widen further.


3. **Less comparability of efforts:** The latest land use planning climate change policies were developed within a regional planning framework. Many regions are currently providing oversight for climate action, documenting efforts according to region-wide goals and targets. What will happen without this oversight? Some lower tiers will no doubt move forward, each following their own processes, for example through ICLEI's pathways approach (icleicanada.org). Some municipalities will have plans for community-wide resilience and emissions reductions, while others will only make corporate plans, while others without the political support or staff resources will not encourage change. Without regional response to climate change, climate planning will be even more fragmented, undermining climate action.
4. **Site standards tested against the big picture:** Many lower-tier municipalities are instituting green performance standards for development to adapt to and mitigate climate change at the site scale. For successful site-level implementation, the vision for climate action needs to be very clear. In Ontario's top-down planning environment, the vision for any planning approach is established at the top and implemented at the lower level. The province, through this latest round of reforms, appears to have both muddied the vision for climate action at the provincial level and removed key players (i.e., the regions) who were taking leadership in most cases to set the stage for real site-by-site change.

Will removing planning responsibilities from regional municipalities in Ontario make a difference to climate change planning? We think so. 



Jaelyn Hall, MCIP, RPP, is a Member of OPPI and an Associate at Hemson Consulting with over nine years of growth management, municipal finance experience, and climate change policy.

Laura Taylor, PHD, MCIP, RPP, is a Member of OPPI and a consulting planner and professor of environmental planning at York University. She brings extensive knowledge of growth management, greenspace planning, and climate change issues, especially in Ontario communities.



Planning in the North: One RPP's career life cycle and recent experiences woven together to spotlight climate change and current practices “up here”

BY SHANNON DODD-SMITH, RPP

I live and work in the Boreal Forest between deliciously cold Lake Superior and ancient Nor'Wester Mountains. Northern and rural planning is my area of expertise.

At the moment, Canada is on fire, the big lake is not as cold, and our entire family is becoming schooled in household emergency planning with our dining table covered in items destined for an emergency departure stash being packed by the kids.

I have finally accepted that climate change impacts are here to stay. In spite of planning for it professionally, deep down, I harboured hope that we humans would delay the progression. Now, my hope is that by involving the kids with emergency preparedness planning, it may allow them to feel some level of control in a situation that is deeply distressing. When we can no longer shelter them, what else can we do but empower them to foster resiliency?

On a personal and professional level, I empowered myself by leaving an excellent Manager of Community Planning and Development job with Municipal Affairs and Housing to “raise babies” and help create a resilient future by ditching the commute, building community, and taking small actions within my control, such as growing (and making) organic food and products. Functionally, it was a climate change resiliency decision. Just like land use planning itself.

Making the decision to leave mid-career was truly daunting. But to my surprise, requests for professional planning help started to come in. I adjusted schedules and made it work. The pleasure in working with clients also took me by surprise and re-ignited my love of planning.

Working solo was convenient and profitable, but I quickly realized that what I truly wanted was a cooperative-type team, where merging of the personal and professional behind the scenes was the norm. Where we could amplify each other's skills and watch each other's kids while we deliver high-quality projects at a reasonable cost. I wanted to do more than just offer land use planning. I wanted to help plan resilient futures with a resilient team!

This article is a modification of the OPPI Conference presentation “Planning in the North: RPP Moms Unapologetically ‘Killing It,’” intentionally weaving together the personal and professional.

It turns out my rural neighbourhood is rich with skilled moms, fearlessly “raising babies,” homesteading, and building community (all climate change resiliency decisions) while being professional. It didn’t take long to assemble a small but mighty local economic development engine with the Superior Consulting Team (SCT) employing a local rural bookkeeper, webpage designer, graphic artist, facilitation expert (who authored a land use planning children’s book), and a new-to-Ontario RPP. The one exception to this female force is my treasured “IT Guy” who is my business/life partner.

It was this team that roared into action in fall 2021, delivering a robust Community Exploration and Township Shaping program, comprehensive review, official plan update, and comprehensive zoning by-law update — all within six months (final draft), in collaboration with the Township of Manitouwadge all-female senior administration team.

THE MANITOUWADGE EXPERIENCE

Also located in the Boreal Forest and vulnerable to the climate change effects of extreme drought and fire is the Township of Manitouwadge, home to 1,974 people. It is an isolated town that was planned by design (like Goderich, ON) in the late 1950s to serve two mines. Since the mine closures decades ago, Manitouwadge has been battling back to vitality. Anecdotal history indicates the town was intended to be temporary. But the company sold the homes to locals, and town spirit thrived in spite of inevitable out-migration. The 2021 census shows a population increase.

In addition to being located in a gorgeous setting, Manitouwadge boasts some unexpected features for its size and location: a ski hill; a community centre featuring a hockey arena, gym, pool, curling rink, library, and community hall that converts into a large-screen movie theatre; and hallmarks of ideal urban design, such as a traffic circle (if you are not northern, you will not appreciate this) and compact urban neighbourhoods separated by publicly accessible natural features but connected with foot paths.

“Indigenous People will play a critical role in the transition away from fossil fuel dependence.”

This official plan (OP) is the first since the original in 1986 and was the first comprehensive project for the SCT. Adopted in October 2022, it awaits Minister’s approval. Outreach was undertaken to specifically include:

- Businesses, boards, municipal staff, First Nations, and other Indigenous People (both on and off Reserve). A local Indigenous person was hired and given a budget by SCT to design and execute Indigenous engagement. Indigenous People will play a critical role in the transition away from fossil fuel dependence.¹
- Full-time working people, seniors, children, and youth of all abilities. Youth were clear about their expectations for an ecologically sound future and meaningful, local employment.

Conceptually, the existing OP was solid, featuring compact urban residential lot development around a mixed-use town centre — all within a fully municipal-serviced settlement area. However, it needed extensive updating to reflect Ontario’s policy-led planning and modern land uses. It also needed to reflect needs for people wishing to move to, visit, and continue to reside in a northern and rural context, specifically, more housing options, more/larger lot sizes to accommodate rural economic activities and lifestyles (such as space for accessory buildings, agricultural activities, storage, etc.), tourism opportunities, and remote cottage lots.

In addition to the mandated Provincial Policy Statement standards and *Planning Act* requirements, the notable concepts and/or provisions specific to climate change include:

- Growth calculations included climate and war refugees, housing affordability, “work from home” influences, aging population, and new Canadians;
- Local food/agriculture included food forests, community and market gardens;
- Protection of Lake Manitouwadge shoreline for community access and wilderness;
- Up to three-storey residential buildings permitted anywhere there are single-detached homes;
- Wider range of uses permitted in all areas to encourage a local economy (to reduce trips to larger centres) and to allow small-scale neighbourhood-accessible commerce;
- Permissive policies and zoning for tiny homes and minimum floor space removed;
- Support for tourism activity, including remote cottages, campgrounds, recreational vehicles (to help build a more robust local economy to ultimately prevent individual trips to larger centres); and
- Renewable energy systems (individual and large) introduced.

I am truly proud of the SCT work, but it is the Township of Manitouwadge that was so clearly interested in good planning that paved the way.

The Township of Manitouwadge is located a 30-minute drive off the TransCanada Highway between Marathon and White River, ON. Check out Manitouwadge.ca.

THE SHUNIAH EXPERIENCE

As a solo practitioner, I was fortunate enough to collaborate with Municipality of Shuniah staff to help update the 2020 official plan and provide on-going planning support.

Shuniah is located east of the City of Thunder Bay, spanning the beautiful beach and pebble shoreline of Lake Superior to the base of the Sibley Peninsula. Shuniah boasts many smaller inland lakes as well. It is home to approximately 3,247 people, several hundred of which are located on “Association” lands — similar to land-lease

communities — that have evolved over time from summer camp (aka “cottages” to folks in the south or “cabins” to others) to permanent dwelling areas along Lake Superior.

As a result of the legal non-conforming and complicated ownership situation, very dense development has evolved over time in absence of today’s safe servicing requirements. Presence and/or functionality of individual septic systems is unclear as are drinking water sources.

To make things more interesting, a now-decommissioned rail line runs through most Association lands upon which many people have built their dwellings because the high-water mark is otherwise too close. Development pressures are compounding.

“It is the shoreline erosion with increasingly intense and frequent Lake Superior storms along with the (new and unexpected) occurrence of blue-green algae blooms that have presented real-time planning challenges.”

With that scenario in mind, climate change is playing out here quite differently than in Manitowadge. It is the shoreline erosion with increasingly intense and frequent Lake Superior storms along with the (new and unexpected) occurrence of blue-green algae blooms that have presented real-time planning challenges.

This is how the Municipality of Shuniah and other approval agencies have been taking action:

- Shuniah commissioned a master water and wastewater servicing plan (MWWSP) in 2017 to inform the 2020 official plan update regarding high-density shoreline areas.
- To prevent exacerbation of the issues identified in the MWWSP, Shuniah, with input from the Thunder Bay District Health Unit (which administers septic approvals in Shuniah, outside of Associations), the Ministry of Environment, Conservation and Parks (MECP) (which administers septic approvals for Associations), the Associations, staff, and council created a program to temporarily freeze development until safe servicing could be installed as an affordable alternative to installation of shared services or extension of city piped water.
- MECP updated Association Environmental Compliance Approvals, improving Shuniah program implementation and planning.
- Official plan policies include a protected area system (including wetlands, Lakehead Region Conservation Authority (LRCA) regulated areas, hazard lands, etc.), similar to OPs in southern Ontario but which remain flexible depending on the specific feature being protected and the proposed development.

- Servicing decisions are made by authorities outside of the municipality, but there are challenges with the lack of new data for shoreline erosion mapping to inform decisions. Developers are responsible for now.
- Surface water used to be an option, but the new risk of blue-green algae is cause for policy consideration for the next municipally led OP or program update.

Again, my respect goes to Shuniah Council, senior administration, the Associations, and citizens for recognizing that good planning protects the community (investors, tax payers, property owners) from unsafe development and/or the financial hardship of purchasing or developing on a lot that cannot be serviced or that could be washed away with climate change. Check out shuniah.org.

CONCLUSION

In conducting my practice, reading blogs, researching, etc., I am heartened by the commitment of planners and related professions to creating resilient futures. I am heartened by the willful and informed citizens and councils like Manitowadge and Shuniah upholding strong policies and hope they can expect senior levels of government to do the same.

“My struggle is that the forests are still burning, the water is still warming, our planning tools have been limited...”

My struggle is that the forests are still burning, the water is still warming, our planning tools have been limited, and by the time this is published, I am unsure the revised Provincial Policy Statement will be the benchmark for what constitutes good planning in Ontario. I am seeking answers. For the time being, the personal and professional remain woven together because, for climate reasons, we are converting our annual family-visit-road-trip into a “Conference Tour.” I will accept this as a golden opportunity to inspire the next generation and look forward to meeting and learning from my colleagues both in and outside of planning. (Y)

¹Birrell, A. Just a transition explainer: Human, workers’, and Indigenous Rights. (Jan 10, 2023). The Council for Canadians. <https://canadians.org/analysis/just-transition-explainer-human-workers-and-indigenous-rights/>



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Considering climate change in the environmental assessment process in Ontario

BY MEGHAN MACMILLAN, RPP, AND AMANDA VAN WYCHEN

Ontario's *Environmental Assessment Act* was originally enacted in 1975, establishing a planning and decision-making process that continues to this day, requiring consideration and mitigation of environmental impacts of infrastructure projects prior to their implementation. The environment is defined broadly in the *Environmental Assessment Act* and includes not only the natural environment but also the social, economic, and cultural environments.

The current environmental assessment (EA) framework in Ontario has evolved since 1975 and now provides many different pathways to obtain approval for a project under the *Environmental Assessment Act*, which vary depending on who the proponent is and the nature of the project. This evolution includes the emerging topic of climate change and its inclusion in the EA process.

ENVIRONMENTAL ASSESSMENTS

Currently in Ontario, most EAs are carried out following the more than 10 different "Class" EAs and processes defined through regulation under the

Environmental Assessment Act. While the processes vary (in some ways significantly), all are streamlined processes that can be applied to routine types of public infrastructure projects. They are generally reserved for situations in which the environmental impacts of a proposed project can be well understood and mitigated with the application of mitigation measures during design and construction. The streamlined "Class Environmental Assessment" processes are in contrast to an "Individual Environmental Assessment," which is reserved for the most complex infrastructure projects with the greatest potential for environmental impacts, for which no streamlined pathway for approval exists.

"Participation in the EA process by the parties with the greatest potential to be impacted by decisions is a fundamental principle of any EA."

What is common to all EA types in Ontario is that it is used as a planning and decision-making process that requires a transparent evaluation of alternative solutions and methods to address long-range infrastructure needs. All EA processes in Ontario share varying requirements for engagement of the public, stakeholders, and Indigenous Peoples at key stages of the decision-making process. Participation in the EA process by the parties with the greatest potential to be impacted by decisions is a fundamental principle of any EA.

For municipalities, most public infrastructure projects will follow a process established under the Municipal Class EA (excluding transit projects, which follow a distinct Transit Project Assessment Process defined in Ontario Regulation 231/08). The Municipal Class EA is a streamlined process used by municipalities across the province to plan for new, expanded, or rehabilitated infrastructure, including transportation networks (e.g., roads and bridges), water infrastructure (e.g., distribution systems and treatment plants), and wastewater infrastructure (e.g., sewage systems and stormwater management facilities) to name a few examples. Depending on the type of project and potential for adverse effects, up to five study phases must be completed to fulfill a Municipal Class EA and proceed to project implementation.

In this article, we will explore the emerging practice of integrating climate change considerations in key phases of this process.

CLIMATE CHANGE ASSESSMENT

Climate change is a new and emerging component of EAs. Only since 2017, when Ontario published guidance on *Considering Climate Change in the Environmental Assessment Process*, has climate change been more consistently considered in EAs in Ontario. This has been further reinforced by the publication of the *Strategic Assessment of Climate Change* by Environment and Climate Change Canada. Even with these guidance documents, incorporating climate change in EAs is a quickly evolving subject with much precedent yet to be set.

“... incorporating climate change in EAs is a quickly evolving subject with much precedent yet to be set.”

To fully consider climate change in the EA process, and to align with the Ontario and federal guidance, there are three questions to consider:

1. How will the project impact climate change?

This is the most obvious component that comes to mind when thinking about climate change and represents how many greenhouses gas (GHG) emissions could be attributed to the project. This is not only direct GHGs being produced but, instead,

the net GHGs and so must take into consideration impacts such as the removal of carbon sinks (land clearing), acquired/purchased energy, as well as carbon offsets. The impact the project has on reaching municipal targets can also be assessed here.

2. How will climate change impact the project?

It is also important to consider what types of physical risks climate change presents to the project itself. In other words, will the infrastructure be resilient to a changing climate? Can it adapt to climate change? Do the design or operational procedures need to be adjusted to account for future climate? This is often assessed using a risk management approach by identifying climate hazards that may interact with the project and assessing the likelihood and consequence of those interactions. From this, risk rankings are developed for each climate-project interaction to identify where additional adaptation measures may be required.

3. How will climate change impact the interactions between the project and the environment?

Climate change can indirectly impact how the project interacts with the environment. The way the project affects the environment may not remain the same under a future climate. A project may reduce water levels in a watercourse, which could be exacerbated under future climate conditions if further mitigation is not implemented. These indirect impacts could be identified as part of many of the disciplines within an EA (e.g., hydrology, hydrogeology, ecology, and socioeconomics).

In many recent EAs, consideration of climate change has been at a high level for the first two questions and often left unanswered for the third question. However, we anticipate review of these considerations will become more closely scrutinized, requiring more in-depth evaluation in the future.

Climate change assessments do not fit the typical approach used for many of the other disciplines that support the EA process, in which existing conditions are documented, impact of the project on those conditions assessed, and measures to mitigate those impacts are identified. It is instead an element that must be considered throughout the planning, decision-making, and design process and provides a link between the project and municipal climate change targets and planning, such as climate change action plans.

“While the practice of integrating climate change in the EA process is still evolving, proponents should strive to incorporate climate change consideration...”

CONSIDERING CLIMATE CHANGE IN AN ENVIRONMENTAL ASSESSMENT PROCESS

The most commonly used EA process by municipalities, the Municipal Class EA process, is based on five phases: identification of the problem or opportunity to be addressed; identification and evaluation of alternative planning solutions; identification and evaluation of alternative designs; documentation of the study process in a report; and implementation (detail design and construction). The five phases are explained in detail in the *Municipal Engineers Association March 2023 Municipal Class Environmental Assessment* document.

The phases in which alternative solutions and alternative designs are considered and evaluated are key points in the decision-making process. As such, they have the greatest potential to effectively consider climate change and to include climate change mitigation and adaptation measures, particularly innovative solutions. While we refer to the Municipal Class EA for illustrative purposes, evaluating alternatives is a step common to most EAs in Ontario and offers similar opportunities for integrating climate change considerations.

Alternative planning solutions: During this phase of an EA process, alternative planning solutions are developed to address a problem or opportunity identified at the outset of the project. Proponents are encouraged to consider all reasonable and feasible alternatives for solving the identified problem. Planning solutions consist of high-level options; for example, if the problem is defined as the need to provide a connection across a rail corridor, planning solutions considered could include a new tunnel, bridge, or at-grade crossing. The planning solutions are evaluated based on technical and environmental criteria to identify a preferred solution; climate change should be considered a criterion in the evaluation process.

At this stage, two separate criteria can be used to assess the effects of climate change: 1) impacts on GHG emissions, and 2) potential for the planning solution to be resilient to climate change. For many municipal infrastructure projects (but not all), GHG emissions from construction outweigh the emissions from operation itself; as such, impacts to GHG emissions are often tied to the constructability of the solution. Alternatives that require more complex and longer construction timelines would result in larger amounts of GHG emissions (e.g., more exhaust from construction equipment). Additionally, the amount of land clearing required to implement a project would affect GHG emissions related to the removal of a carbon sink. The comparison of the resilience of the

planning solutions is completed at a high level and requires a more detailed assessment at the design-alternatives stage that follows.

Alternative designs: During this phase of the EA, alternative methods of implementing the preferred solution are developed and evaluated. Using the example of the rail crossing, if a new bridge is the preferred solution, during this phase, the different structures that are technically feasible are identified and evaluated. The alternative designs or methods are assessed using technical and environmental criteria to identify a preferred design alternative. The climate change criteria evaluated during this phase are the same as those used for the alternative planning solutions but can now be more detailed and quantitative based on additional design information and construction methodology. The assessment of resilience can be conducted in more detail as there would be more information and understanding of where adaptation measures could be incorporated into the design.

CONCLUSION

As a participatory decision-making process that touches many aspects of municipal infrastructure, much of which is designed with an intended service life in the order of decades, the EA process provides a strategic opportunity to consider and further climate change objectives, such as those articulated in municipal climate action plans. While the practice of integrating climate change in the EA process is still evolving, proponents should strive to incorporate climate change consideration in the decision-making process to encourage the development of infrastructure that can not only withstand the impacts of climate change, but also reduce or fully avoid further impacts to climate change. ♻️



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Striking the right balance: Navigating national climate change strategies and localized approaches in Ontario

BY ALEXANDER ELGIN

Communities worldwide are confronted with the urgent task of mitigating and adapting to the increasingly severe impacts of climate change. Canada has proactively engaged in international climate change agreements, notably the *Paris Agreement*, and actively participates in collaborative initiatives to address this global challenge. At the national level, Canada has implemented several key actions to combat climate change.

Canada is committed to increasing the use of renewable energy sources, supporting projects in solar, wind, hydro, and geothermal energy. Recognizing the harmful effects of traditional coal-fired power generation, Canada aims to phase it out by 2030. Various energy efficiency programs have been implemented to reduce energy consumption and greenhouse gas emissions. Additionally, Canada promotes the adoption of electric vehicles through incentives, rebates, and infrastructure development. Sustainable transportation options, such as public transit and cycling

infrastructure, are being supported.

Moreover, Canada is actively working on national adaptation strategies, investing in climate-resilient infrastructure, and supporting research on climate resilience. Through its comprehensive approach to climate change, Canada aims to reduce emissions, promote sustainable practices, enhance resilience, and create a more sustainable and resilient future for its citizens and the planet.


By striking a balance between national strategies and localized approaches, Canada ensures that climate action is inclusive and impactful. This holistic approach recognizes that addressing climate change requires collaboration and cooperation among different levels of government, organizations, and communities. It highlights the significance of tailoring measures to the unique circumstances and priorities of each region while aligning with the overarching national goals.

ONTARIO ACTIONS AND INITIATIVES

In Ontario, a province renowned for its diverse ecosystems, addressing the challenges of a changing climate is particularly complex. However, the planning sector in Ontario is tackling these challenges head-on by implementing effective mitigation and adaptation strategies.

Ontario experiences a wide range of climate conditions, from a modified continental climate in the north to a more moderate humid continental climate in the south. This variation makes Ontario particularly vulnerable to the impacts of climate change. Human activities, such as greenhouse gas emissions, drive these impacts, posing substantial risks to the environment, economy, and communities. To address these risks comprehensively, it is crucial to





“...addressing climate change requires collaboration and cooperation among different levels of government, organizations, and communities.”

adopt strategies and actions that foster sustainability and resilience.

Recognizing the urgency of the climate crisis, Ontario has developed a robust climate change action plan as a roadmap for reducing greenhouse gas emissions and adapting to climate change impacts. This comprehensive plan outlines measures and strategies across various sectors aimed at achieving emission reduction goals and ensuring a sustainable future for the province. The plan sets ambitious targets to guide Ontario’s emissions reduction efforts, aiming to decrease emissions to 30 per cent below 2005 levels by 2030. These targets provide a clear direction, offering a framework to guide policies and initiatives that facilitate the transition to a low-carbon economy.

Renewable energy initiatives are a significant aspect of the plan. Ontario actively encourages the development and adoption of renewable energy sources like wind, solar, and bioenergy. By promoting cleaner and sustainable energy alternatives, the province reduces its reliance on fossil fuels and contributes to a greener energy mix. These initiatives not only mitigate greenhouse gas emissions but also stimulate economic growth and create job opportunities in the renewable energy sector.

Promoting the adoption of electric vehicles (EVs) is another critical element of the plan. Recognizing the transportation sector’s substantial contribution to emissions, Ontario has implemented various programs and incentives to support EV purchase and use. By encouraging the transition to EVs and developing charging infrastructure, the province aims to reduce transportation-related emissions and improve air quality.

Energy efficiency programs play a vital role in Ontario’s climate change action plan. These programs target businesses, organizations, and residents, offering incentives, rebates, and

initiatives to improve energy efficiency in buildings, appliances, and industrial processes. By reducing energy consumption, Ontario not only lowers emissions but also helps individuals and businesses save on energy costs, fostering a more sustainable and resilient economy.

AT THE LOCAL LEVEL

The action plan also recognizes the need for localized adaptation strategies to address climate change impacts. Ontario actively collaborates with stakeholders, including municipalities, Indigenous communities, businesses, and non-governmental organizations, to develop and implement effective climate change mitigation and adaptation measures. This collaborative approach ensures that adaptation strategies are tailored to the specific challenges and opportunities faced by different regions within the province.

Infrastructure planning is a significant focus of localized adaptation strategies in Ontario. As climate change leads to more frequent and intense weather events, designing and managing infrastructure systems that can withstand and adapt to these changes becomes crucial. This includes considerations such as flood management, urban heat island mitigation, and ensuring the resilience of critical infrastructure such as transportation networks, water supply systems, and energy infrastructure.

Emergency management is also a priority within Ontario’s localized adaptation strategies. With the potential for increased climate-related risks such as storms, flooding, and wildfires, the province is actively working to enhance emergency response preparedness. This involves developing robust emergency management plans, improving early warning systems, and supporting communities in developing resilience strategies to mitigate the impacts of climate-related emergencies.

Natural resource management plays a critical role in localized adaptation efforts in Ontario. The province recognizes the importance of protecting and managing its diverse ecosystems, including forests, wetlands, and biodiversity hotspots. By implementing sustainable land use planning and resource management practices, Ontario aims to preserve and enhance the resilience of its natural systems in the face of climate change.

LAND USE PLANNING

Land use planning plays a crucial role in implementing the provincial action plan and addressing climate change while reducing greenhouse gas emissions. It greatly influences the built environment, transportation systems, and land use patterns, all of which have a significant impact on energy consumption, emissions, and overall climate resilience.

Sustainable and resilient land use planning places significant importance on compact and efficient land use patterns that actively promote mixed-use development, transit-oriented development, and higher population densities. These strategies have proven to be highly effective in reducing the need for long-distance commuting, encouraging the use of active transportation, and significantly decreasing energy consumption and greenhouse gas emissions associated with transportation.

Moreover, climate change actions can be integrated into land use planning by implementing policies such as the use of greenbelts and strong urban growth boundaries. These measures are aimed at effectively managing and restricting urban sprawl, ensuring that development remains within defined limits. By establishing clear boundaries, planners seek to safeguard valuable agricultural lands, natural areas, and green spaces, while concurrently fostering the establishment of more sustainable and resilient growth patterns.

“Climate change actions can be integrated into land use planning by implementing policies such as the use of greenbelts and strong urban growth boundaries.”

For example, the greenbelt in Ontario plays a significant role in climate change mitigation efforts due to its ecological functions, carbon sequestration capacity, and land use planning policies. The Ontario Greenbelt Plan also encourages the use of the greenbelt for recreational purposes by providing opportunities for trails, parks, and other outdoor activities. Moreover, land use planning policies within the greenbelt, such as those outlined in the Ontario Greenbelt Plan, guide development and ensure the protection of sensitive natural areas, agricultural lands, and water resources.

By promoting compact, sustainable urban development and limiting sprawl, these policies help reduce energy consumption, promote active transportation, and minimize greenhouse gas emissions associated with transportation and infrastructure. The greenbelt’s preserved natural areas, including wetlands and forests, provide ecosystem services that enhance climate resilience, regulating water flow, mitigating flooding, and acting as carbon

sinks. These natural features within the greenbelt help communities adapt to climate change impacts and build resilience.

In addition to the greenbelt, Ontario has other land use planning policies to guide development and protect environmentally sensitive areas. For example, the Niagara Escarpment Plan and the Oak Ridges Moraine Conservation Plan are other significant land use plans in Ontario that aim to protect unique ecological features.

Overall, the greenbelt and other land use planning policies in Ontario play a crucial role in balancing urban growth and development with the preservation of valuable agricultural land, natural heritage, and water resources. These planning measures help to ensure sustainable and responsible land use practices throughout the province.

STRIKING A BALANCE

In conclusion, striking the right balance between national strategies and localized approaches requires collaboration and knowledge-sharing among different levels of government, organizations, and communities. Effective coordination, data sharing, and capacity building are essential for successfully implementing national strategies while aligning them with localized goals. Empowering local communities to take ownership of climate change action fosters innovation, accountability, and a shared sense of responsibility.

“Empowering local communities to take ownership of climate change action fosters innovation, accountability, and a shared sense of responsibility.”

An exemplary initiative in this regard is the ongoing implementation of the High-Performance Development Standard (HPDS) in Ottawa, which showcases effective and inclusive climate action approaches.

Finding the right balance between high-level national climate change strategies and localized approaches is paramount for achieving effective and inclusive climate action in Canada. By combining national frameworks with localized approaches, Canada can leverage its diversity, engage communities, and implement tailored solutions that address regional priorities, enhance resilience, and contribute to a sustainable and low-carbon future for the entire country. Through collaborative efforts and an integrated approach, we can navigate the challenges of climate change, protect our environment, and create a better future for generations to come. ♻️



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WE ARE ALL VULNERABLE TO EXTREME HEAT

I could feel the heat against my skin as I poured milk onto my cereal at 6:58 a.m. My first apartment, all mine, 11 floors up in the heart of downtown Hamilton, a city I had grown to love dearly. That apartment stole my heart with its sunset-facing windows, but the June heat rendered the sun an enemy even with the blinds closed. I did a quick scan of my flat to make sure all four fans were on full blast before I left for my 9 to 5 – only to return to a sauna.

Eleven floors up with no air conditioning proved to be physically and mentally difficult as the summer raged onwards. No sleep, no appetite, and no motivation – the warmth drained every ounce of energy I had until there was nothing left. I felt sick most of the time, like a zombie going through the work day. My hobbies included opening my freezer to feel cool for a second and putting frozen vegetables on my forehead.

“... climate change impacts those of different genders, ethnicities, ages, and disabilities differently.”

I thought a lot about my community that summer, the impacts heat had on those who occupied the rooms above and below me. Those without housing, older residents, and those who lived alone or in precarious housing situations – all robbed of air conditioning and any relief on days where the temperature was relentless. It's a known fact that climate change impacts those of different genders, ethnicities, ages, and disabilities differently¹ – and that immigrants and people with a low income are most likely to live in the hottest urban areas.²

If I, an active and healthy 25 year old, was feeling the physiological pressure from extreme heat, I couldn't imagine how others in my building and community who were more vulnerable were feeling. Shade and air conditioning alone weren't always enough to combat the extreme heat. The mental turmoil and stress on my body were overwhelming, and I wasn't even working outdoors. I wasn't even directly in the sun. I had the ability to change my environment if need be.

– Lindsay Nooren

¹IPCC. Climate Change 2022: *Impacts, Adaptation and Vulnerability*. https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryVolume.pdf

² CBC News Data Analysis. Here's who lives in your city's worst heat islands (Jul 13, 2022). <https://ici.radio-canada.ca/info/2022/07/ilots-chaieur-villes-inegalites-injustice-changements-climatiques/en>

A systems-thinking approach: Extreme heat, climate change, and learning to do what works

BY ZAHRA JAFFER AND LINDSAY NOOREN

There is no denying the aggression of the sun, especially in Ontario's urban centres that are getting hotter every year.¹ Alarming, Canada is warming at twice the global rate.² As reported in July of 2020, approximately seven out of 10 people live in Canada's metropolitan areas where the "Urban Heat Island Effect" is concentrated, resulting in potential health impacts on millions of people.

SOCIO-ECONOMIC DISPARITY AND INCREASING HEAT: A DEADLY COMBINATION


Provincial planning requirements alongside local climate change mitigation and adaptation strategies have helped to mainstream climate change considerations into policy, providing a through-point for planning considerations that filter down into the development approvals process. A core challenge is that we are often not looking at climate adaptation as a component of a system — connected in myriad and inextricable ways to the housing crisis, to accessibility and disability rights, to transportation justice, to food security and clean water supply, to health care access, and to the intersections between racial discrimination and income disparity.

So while this is a story about extreme heat, it is also a story about how our broader adaptation response needs to think bigger and engage meaningfully with the root causes of vulnerability. Framing climate adaptation in terms that are simple: making meaningful gains in climate adaptation requires housing justice.

The Ontario Human Rights Commission has stated air conditioning to be a human right in the context of climate justice and the most effective life-saving measure in an extreme heat event.^{3,4} Lindsay's story (facing page) brings this home for us — we are all vulnerable to heat without access to cooling.

Adaptation planning that is truly equity-focused requires involving those with lived experience and a

nuanced understanding of how policy can be shaped to create effective outcomes. We need to actively reckon with how historic and contemporary planning creates the conditions for disparity in climate change impacts and engage with communities on the design of effective interventions for both indoor and outdoor spaces. This means centring health, well-being, and accessibility and considering any barriers to the resources and spaces we are designing — be it physical, social, financial, cultural, or related to communication.

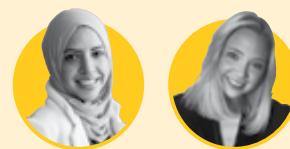
Keep reading... the full article by Zahra Jaffer and Lindsay Nooren is posted on the Planning Exchange Blog at ontarioplanners.ca. 

¹ Climate Atlas of Canada. Urban Heat Island Effect. <https://climateatlas.ca/urban-heat-island-effect>

² Canada in a Changing Climate. <https://changingclimate.ca>

³ Ontario Human Rights Commission. OHRC statement on human rights, extreme heat waves and air conditioning. https://www.ohrc.on.ca/en/news_centre/ohrc-statement-human-rights-extreme-heat-waves-and-air-conditioning

⁴ Bouchama A, Dehbi M, Mohamed G, Matthies F, Shoukri M, Menne B. Prognostic Factors in Heat Wave-Related Deaths: A Meta-analysis. *Arch Intern Med*. 2007;167(20):2170–2176. doi:10.1001/archinte.167.20.ira70009.



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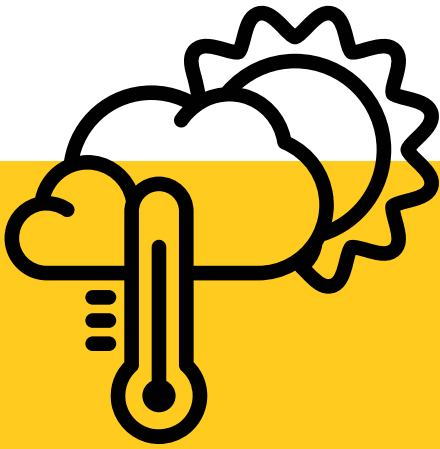


Developing a land use plan among old wells, an explosion, and a changing climate

BY GABRIEL CLARKE

On August 26, 2021, an explosion ripped through downtown Wheatley, a small community of approximately 3,000 people on the edge of Lake Erie that is part of the Municipality of Chatham-Kent in southwestern Ontario. The explosion levelled a building, damaged several others, and shattered the sense of normalcy in the otherwise quiet community whose economy primarily revolves around fishing.

In the aftermath, an exclusion zone was established, several residential and commercial buildings were vacated, and an investigation was initiated to identify the cause. Over the course of several months, the investigation revealed that natural gas had seeped from a deep natural gas pocket through an abandoned water well and accumulated in the basement of the building that ultimately exploded.



“A historical and future climate analysis found that Chatham-Kent’s climate had become hotter, wetter, and wilder over the last several decades and that this trend is expected to continue into the future.”

Several months prior to the explosion, the Municipality of Chatham-Kent had identified the need to develop a secondary plan for the southern part of Wheatley. Chatham-Kent is a large single-tier municipality located between London and Windsor. The municipality was established in 1998 through the amalgamation of 22 former municipalities. With a growing population of just over 100,000 people, Chatham-Kent covers an area of 2,458 square kilometres. It is home to several urban centres, including Wheatley, numerous hamlets and rural settlement areas, some of the most productive soils in Canada, a deep agricultural history, and access to Lake Erie to the south and Lake St. Clair to the northwest.

The Imagine Wheatley Secondary Land Use Plan – as the project was called – was required to address the need for additional lands to accommodate projected growth in Wheatley. The southern part of Wheatley had long been part of the community’s urban boundary but has remained in agricultural production due to low historical growth pressures and a lack of servicing infrastructure.

“... record-breaking high-water levels seen in 2019 and 2020 drastically accelerated this naturally occurring phenomenon...”

The Wheatley area, along with much of Lake Erie’s northern shoreline, is already familiar with the potential local effects of climate change. High bluff areas and silty soils have always rendered the shoreline prone to erosion, but the record-breaking high-water levels seen in 2019 and 2020 drastically accelerated this naturally occurring phenomenon. Specific to the secondary planning area, an existing drainage outlet to Lake Erie had become consistently difficult to maintain due to the underlying erosion and was an area of concern when considering how to service the project area.

Partly as a result of this, Chatham-Kent had initiated the development of a climate change action plan in late 2019 to identify

measures to address the local causes and impacts of climate change, with a specific focus on energy use and increasing local resiliency to flooding, erosion, heatwaves, and extreme weather. A historical and future climate analysis found that Chatham-Kent’s climate had become hotter, wetter, and wilder over the last several decades and that this trend is expected to continue into the future. During the priority setting phase of the climate change action plan project, council identified energy efficiency, storm water management, and integrating nature into new developments as key priorities for the climate change action plan.

“... the reverberation caused by the explosion and the topic of climate resiliency each had a hand in informing the trajectory of the project.”

When Imagine Wheatley was officially launched in January 2022, the reverberation caused by the explosion and the topic of climate resiliency each had a hand in informing the trajectory of the project.

CHANGING THE SECONDARY PLAN

The community engagement process was reconfigured in the aftermath of the explosion to provide the community with time and space to focus on recovery efforts. The explosion had created a high level of uncertainty in the community, especially in terms of the exact cause or causes, possible future risks, the long-term viability of the downtown area, and the time it would take for the community to return to normalcy.

“... employed an ‘environment first’ approach for the creation of the land use plan.”

In response, engagement events were scheduled around key events associated with the recovery process, project narratives were recast to acknowledge the significance of the event, and the accessibility of the engagement process was enhanced through a variety of communications and engagement tools. Messaging regularly emphasized the municipality's commitment to supporting the recovery of Wheatley's downtown. Staff worked closely with local community groups as recovery efforts and the secondary plan process proceeded in tandem. The planning team ensured that the commercial and employment uses in the secondary plan would be compatible with and complement those in the downtown area.

On the climate change front, the project team referenced existing provincial policy, Chatham-Kent's Official Plan regarding buffer zones from natural features, and council's priorities for the climate change action plan and employed an "environment first" approach for the creation of the land use plan.

The first step involved delineating existing significant environmental features, such as an established mature woodlot on the eastern edge of the project area. Next, the project team utilized some naturally low-lying areas to locate parts of the storm water management system and developed naturalized storm management policies to ensure the storm water management system contains elements that are similar to a natural coastal wetland.

Community amenities, such as active transportation trails, community parks and public spaces, were integrated with the storm water management system. Other specific climate-friendly policies include preserving the forested area for passive recreational uses and requiring drought-tolerant, pest- and disease-resistant native plant species within the parkland areas to reduce maintenance and create areas more resilient to the effects of climate change.


"Well-designed naturalized systems are more aesthetically attractive, less expensive over their life cycle, and better equipped to handle extreme rain events compared to conventional concrete and pipe systems."

The naturalized storm water management system is a key environmental and climate resiliency measure for the project area. Well-designed naturalized systems are more aesthetically attractive, less expensive over their life cycle, and better equipped to handle extreme rain events compared to conventional concrete and pipe systems. Locating community amenities around the storm system creates a connected network of public facilities, community amenities, and natural areas that serve as a focal point for the neighbourhood. Policies to preserve the mature forest on the eastern edge and encourage tree and native species planting ensure the community will be less vulnerable to heatwaves.

Finally, the project team leaned on conventional planning processes to create a number of development scenarios that imagined different ways residential, neighbourhood commercial, and compatible employment uses might be integrated into the project area. The scenarios were presented to the community and

refined based on the feedback and input provided, leading to the creation of the preferred development scenario and the remainder of the secondary plan's development policies.

"We hope that this project will serve as a template for new land use plans going forward in Chatham-Kent," said Ryan Jacques, Director, Planning Services with the Municipality of Chatham-Kent. "We engaged the community to understand their vision for the area. We structured the land use plan around the natural opportunities and constraints posed by the unique geography of the project area and celebrated them while also accommodating the kinds of development that are needed in the community. The environment provided the canvas on which the secondary land use plan was created, people provided the subject, and the need to accommodate growth guided our hand. In the end, we believe that Imagine Wheatley is a key initiative that will set the community up for success for the long term, which is what sustainable development is all about."

At the time of writing, the Imagine Wheatley Secondary Plan was scheduled to be considered by council in fall 2023. Recovery efforts associated with the downtown explosion are ongoing. 



Gabriel Clarke, MES, BA (HONS), is a Candidate Member of OPPI and Manager, Growth & Sustainability, Development Services for the Municipality of Chatham-Kent.

New foundations in the City of Barrie: 2023 update

BY MICHELLE BANFIELD, RPP

Barrie

“... if developed, upwards of 1,500 new residential units could be accommodated in Barrie...”



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Barrie Affordable Housing Symposium held on May 4, 2023.

For the spring/summer 2022 issue of *Y Magazine*, I wrote an article, and this article for the current issue is an update.

A 2021 city-initiated zoning by-law amendment added residential uses as permitted uses on properties zoned institutional to allow for the co-locating of institutional uses and residential uses. Barrie City Council allocated funds to prepare concept plans to show how residential housing units could be built on these properties.

Smart Density, an architecture and urban planning firm, was hired to do this work for six properties. Two other properties were already working with consulting teams of their own and the City of Barrie supported them through the New Foundations program as well.

The results were outstanding. Across all of the properties, if developed, upwards of 1,500 new residential units could be accommodated in Barrie on existing institutional, church, and places of worship sites. The New Foundations program was part of the City of Barrie's Bill 23 Municipal Housing Pledge. The feasibility studies looked at the unique characteristics and the surrounding community for each proposal and provided the realistic, if not frightening, projected construction costs to complete the dwelling units. It is up to the property owners to review what was provided to them by Smart Density as they consider their options for future development.

As we look past the completion of the feasibility studies, we

know these organizations, should they wish to continue with the construction of housing units, are going to need continued support and partnerships. This support will come from the County of Simcoe, City of Barrie, home builders and housing providers, and ultimately, the operation of the housing units. So, our work continues.

AFFORDABLE HOUSING SYMPOSIUM

With so much is going on in the affordable housing space in Barrie and Simcoe County, we felt an event was needed to highlight collaborations, engage with our community, and recognize the work underway by professional planners, housing providers, and community organizations. The City of Barrie's planning department, supported by our corporate communications team, brought the Affordable Housing Symposium to life on Thursday May 4, 2023.

The night began with a screening of a moving documentary: *Searching For Home*. A project by Dr. Naomi Thulien, Nurse Practitioner and Researcher at MAP Centre for Urban Health Solutions, lead researcher for the study, and also executive producer of the film, the documentary was a glimpse into the struggle of finding affordable housing. The film follows three young people, Sonia, Devin, and Anthony, as they transition out of homelessness, navigating relationships, school, and family along the way. Incredibly, Dr. Thulien was able to bring Sonia, Devin, and Anthony with her to Barrie and everyone participated in a Q&A period following the film.

"... the documentary was a glimpse into the struggle of finding affordable housing."

As the documentary was filmed during the pandemic, the audience was eager to hear how everyone is doing and where life has taken them since then. The updates were uplifting and the audience was genuinely interested in hearing from these young people. Many audience members came up to them during breaks to

encourage them and thank them for sharing their stories. It was an incredibly moving way to begin the evening.

Following the documentary screening, a panel discussion featured professionals working in the affordable housing space. The panel speakers included:

- Matthew Bennett, Partner, NBLC, whose firm has been hired to update the affordable housing strategies for both the City of Barrie and the County of Simcoe.
- Naama Blonder, Architect/Urban Planner/Urban Designer from Smart Density, joined as the lead of the New Foundations program.
- Mina Fayed-Bahgat is the General Manager, Social & Community Services at the County of Simcoe and brings a fantastic perspective on housing initiatives across the spectrum.
- Luke Wilson, Partner with MDM Developments, whose company just completed a mix-market rental building in Barrie with some dedicated affordable housing units.

Each professional brought a unique perspective to the conversation and contributed ideas on how to move the needle on increasing housing affordability.

Mina began by recognizing the accomplishments made in recent years in affordable housing – and it’s true! While it is easy to think about how much work remains, I encourage us all to take a moment to think of some of the improvements in recent years that Registered Professional Planners have been part of. Examples include: second and third dwelling unit permissions, new community improvement plans, many city-initiated zoning by-law amendments to help get more units built, rental conversion/protection by-laws, and wide-spread changes to planning documents like official plans and comprehensive zoning by-laws to allow more flexibility in residential built forms beyond single detached homes.

“Collectively, we are in a better place than 50 years ago.”

Add these initiatives to the changing provincial planning landscape that will see, for example, reduced development charges for affordable units and purpose-built rental units. Collectively, we are in a better place than 50 years ago. This is a good thing, considering affordability is more challenging than ever, so our work continues.

Naama drew the audience’s attention to passionate objectors across communities, regardless of the type of housing proposed, who are resistant to change, and how that has a direct correlation to affordability in housing and supply. She noted that we all need to be saying “Yes, in my backyard.”

Matthew is working on several affordable housing strategies in the Simcoe County area, including Barrie. He is aware of the challenges locally but shared that it is not unique to this area as affordability is an issue across the country. While Matthew identified

several obstacles to building more housing, he referenced the lack of “off the shelf” business cases for a private developer to create affordable housing. Initiatives like Barrie’s New Foundation program that seek to unlock available land for more development should continue to be explored.

Luke recently completed a rental development project in Barrie with a mix of at-market and affordable units. He spoke about tight project budgets and how the components of building and developing do not make a strong case to construct rental projects, let alone affordable rental units. Funding has to come from many sources to make a successful affordable project. Luke cited municipalities like Barrie with community improvement programs and reduced or waived application fees for affordable housing projects that make projects viable so they actually get constructed.

“Funding has to come from many sources to make a successful affordable project.”

I was so pleased by the high interest shown in the event and the expertise shared by the panel. The evening was full of activity as community members visited the display booths, had refreshments, asked questions, and participated in a community engagement activity for the City of Barrie’s Affordable Housing Strategy. The intention was never to solve housing affordability in one evening, but we did take a moment to reflect on some successes and the overall collective desire to continue to do more about this complex issue – and so our work continues! 🙌



Michelle Banfield, RPP, is a Member of OPPI and the Director of Development Services at the City of Barrie. She is also the Vice-Chair of the Lakeland District Leadership Team. Members can reach out to Michelle at michelle.banfield@barrie.ca as she would love to help you host your own Affordable Housing Symposium.

→ LEARN MORE

If you missed the event, check out the following links:

- *Searching for Home* documentary: www.searchingforhome.ca
- Panel Discussion from the Affordable Housing Symposium from May 4, 2023: [Affordable Housing Symposium | Rogers TV - YouTube](#)
- For more information on the City of Barrie’s Affordable Housing Strategy Update: buildingbarrie.ca/AffordableHousing



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Climate-resilient planning with housing equity

BY LINZEY BEDARD, OALA, CSLA

Adequate housing is a recognized human right, yet, for vulnerable populations securing a stable home that guarantees habitability for decades to come is becoming increasingly difficult. As each season passes, Canada and the global community witness intensifying weather patterns that displace entire neighbourhoods and towns, amplifying the lack of peace and security that homes are rightfully supposed to provide. As the Human Rights Council states, climate change is exacerbating existing inequalities and having immense consequences on the enjoyment of the right to housing.

Central now to urban planning is adopting climate change mitigation and adaptation solutions. Smart planning strategies can help cities prepare for climate impacts while creating opportunities to achieve housing and environmental equity.

RISK-RESILIENT DEVELOPMENT

Although severe weather events remain somewhat unpredictable, Canada has seen wildfires, drought, flooding, and heat domes claim lives and destroy homes, making it critical to plan for emergency evacuation scenarios and the potential variables of climate change. It is important that when planning resilient neighbourhoods and homes, communities are planned as a whole, so people are not put at risk in the

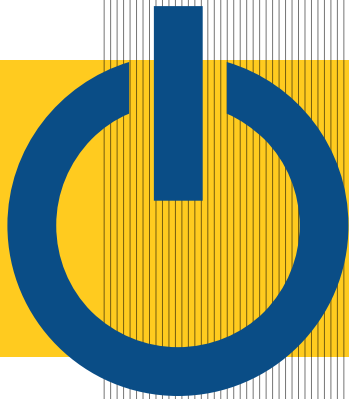
first place. Currently, development is still happening in areas projected to be at high risk for floods in the future, putting residents in harm's way. It also passes the potential issue of inadequate housing onto future generations, continuing the historic inequity of leaving vulnerable populations to inherit poor housing.

“... development is still happening in areas projected to be at high risk for floods in the future...”

According to research by the Centre for American Progress, low-income renters are more vulnerable to being displaced by natural disasters and extreme weather.¹ These communities often live in neglected infrastructure in neighbourhoods frequently exposed to climate threats, making them more susceptible to related damage. Flooding of the Wolastoq River in New Brunswick in 2018 and 2019, as well as recent flooding in numerous Quebec communities, has shown the repetitive risk and housing instability disadvantaged groups experience.

As a case study example of potential planning solutions, Esri Canada independently analyzed the City of Moncton and a future high-risk flood zone close to the downtown core. The area along the edge of the Petitcodiac River is presently a mix of residential and commercial uses, with current zoning allowing for possible increased development. But in imagining if development was to be phased out of the area altogether and instead rezoned for parks and open space, the re-naturalized river edge would provide a barrier in the event of flooding. Acting as both a public green-space amenity while also functioning to intercept stormwater for surrounding areas and flood-risk mitigation, such planning removes communities from likely damage and, therein, from forced relocation. This type of re-naturalization has shown success under appropriate conditions but is a highly complex system requiring the appropriate geological and physical conditions.

Flooding, wildfires, landslides, and other climate threats can cause detrimental impacts that can take



“... climate change is exacerbating existing inequalities and having immense consequences on the enjoyment of the right to housing.”

years to repair, which low-income households already facing financial constraints cannot fund. By considering the unique challenges that specific neighbourhood locations face and reevaluating land use, planning can be geared towards building urban and natural hazard resilience while contributing to long-term climate mitigation goals.

“... planning can be geared towards building urban and natural hazard resilience while contributing to long-term climate mitigation goals.”

ZONING FOR PROTECTION

As heat waves sweep in and temperatures soar, integrating sustainable building practices and climate-responsive design principles throughout different zones can help address intensifying heat islands and protect marginalized urban communities.

Buildings can be designed and sited to minimize heat absorption, maximize insulative properties, and encourage comfortable seasonal air circulation. Although costs and materials are much higher for subsurface parking, moving this land use underground, or as an above-ground structure, can allow a higher percentage of surface level green space. In these instances, mixed-tenure housing not only has social benefits but would also help support equitable access to adequate housing for vulnerable populations.

Community planning, zoning, policy, and guidelines can all have long-lasting impacts on vulnerable populations. Traditionally, single-family residential neighbourhoods have much lower maximum lot coverage regulations. While this type of regulation helps limit building size, it also allows these neighbourhoods to have a greater overall area for landscaping and guarantees space allotted for trees.

In contrast, similar maximum lot coverage requirements in mixed-use or multifamily zones are not taken into consideration, leading to lower income neighbourhoods having fewer public trees and less

canopy cover. When factoring in that more residents are likely to walk or take public transit within these neighbourhoods, the need for trees and a comfortable exterior environment is important to protect people in their everyday lives. Without green spaces and trees that offer adequate shading, the effects of solar radiation and urban heat islands are disproportionately felt within these areas.

This small example highlights how zoning, even when well-intentioned, can create a long-term disparity between different socioeconomic areas. Rethinking minimum landscaping and maximum lot coverage requirements in vulnerable areas would be an important step in addressing heat inequity as well as meeting the necessary location and habitability needs required for adequate housing.

HOLISTIC CLIMATE PLANNING

To achieve environmental and housing equity, urban planning needs to set a high standard of what can be accomplished and what should be expected from development. Switching from reactively making decisions based on current conditions to holistically assessing and planning for the future climate-related needs of communities will result in more sustainable long-term solutions.

Beyond rezoning and land use assessments, this includes looking at such possibilities as infill redevelopment for affordable housing on a citywide scale rather than a site-by-site basis. Collaborating with resources such as transportation, road, and social services to account for all elements of livability is integral to strengthening adaptable communities. Additionally, the initiatives discussed above all require collaboration among a variety of professionals and different levels of government. Planners, architects, landscape architects, designers, economic consultants, and engineers of all disciplines would be essential.

The aforementioned Esri Canada case study also looked at accommodating residential and employment opportunities and a percentage of future growth projections through infill development. Another unfortunate symptom of historic planning




“... development is still happening in areas projected to be at high risk for floods in the future...”

practices is the traditional North American suburban neighbourhood of the 1940s to 1960s, which requires new green field development and is still the standard for development today. To protect existing green fields for future generations, we explored potential areas for redevelopment on underutilized land. Not only did we look to maximize height and density, but we also aimed to improve walkability and maximize landscape areas and outdoor amenity spaces.

Our study analyzed a predominately single-use commercial corridor with surface parking fronting the main street. The corridor in this study is an arterial road, already well serviced with public transit. However, narrow sidewalks and large parking lots make the area relatively undesirable for walking. We created scenarios in which we could move buildings closer to the road, propose mixed-use buildings, minimize surface parking, maximize landscaping, propose best practices for stormwater management, modestly increase height and residential density, and explore streetscape opportunities under different right-of-way widths. These scenarios may help modify the behaviour of those living in the area but, more importantly, provide the advantage to planners to expand their scale in planning for resiliency.

Crucially, to reach these goals, equity must be integrated throughout the planning process, through public awareness, engagement, and consultation. Without a systems approach – in other words, smarter urban planning – to incorporate community data

and a common platform to visualize and communicate scenarios, low-income renters and vulnerable communities who are particularly exposed to displacement and consequences of extreme weather cycles will continue to inherit foreseeable climate problems. 

¹ Centre for American Progress. A Perfect Storm: Extreme Weather as an Affordable Housing Crisis Multiplier. <https://www.americanprogress.org/article/a-perfect-storm-2/>



Linzey Bedard, OALA, CSLA, is the Service Delivery Manager with the Urban Design Solutions team at Esri Canada. In this role, she supports multidisciplinary teams of community planners, urban designers, and GIS specialists as they implement ArcGIS technology as part of their workflows to support their future planning visions.

Natural hazard emergency management and the role of planners

BY KATHERINE BIBBY, RPP

Planning to prevent, avoid, and reduce the impacts of climate change is becoming an urgent task in communities across Ontario. Shifts towards higher temperatures and wind speeds are increasing heat stress on humans, worsening destructive wildfires, and extending the reach of hurricanes. Rainfall volumes and intensities are changing with serious consequences for flooding and droughts.

Planners have the responsibility to mitigate anticipated climate change risks and to foster community awareness of the potential for unanticipated consequences that may require innovative responses. The Provincial Policy Statement (PPS), 2020, identifies the need to address climate change and hazard planning in land use planning policy and decision making. Most relevant are policies 1.2.3 and 1.6.4 of the PPS, 2020.

Emergency management is a continual cycle of preparedness, response, recovery, and mitigation. The emergency management plan is not a one-time document, rather an adaptive and flexible plan that changes over time based on the types of emergency events and community vulnerabilities. The emergency management is also different based on the organization – from transit service providers and emergency service providers to community organizations.

The federal Emergency Management Strategy for Canada 2019 describes resilience as “the capacity of a system, community or society to adapt to disturbances resulting from hazards by preserving, recuperating or changing to reach and maintain an acceptable level of functioning.”¹

In applying emergency management to community planning, lessons can be learned for how to build resilient communities through adaptive emergency management. Planners can influence the “mitigation” stage of the cycle of emergency management to site development appropriately from hazardous lands and to incorporate emergency management into land use planning policies.

“Planners have the responsibility to mitigate anticipated climate change risks and to foster community awareness of the potential for unanticipated consequences that may require innovative responses.”

Provincial Policy Statement, 2020

Policy 1.2.3 Planning authorities should coordinate emergency management and other economic, environmental, and social planning considerations to support efficient and resilient communities.

Policy 1.6.4 Infrastructure and public service facilities should be strategically located to support the effective and efficient delivery of emergency management services, and to ensure the protection of public health and safety in accordance with the policies in Section 3.0: Protecting Public Health and Safety.

IDENTIFICATION OF VULNERABLE AREAS

Municipalities and conservation authorities already work together to identify and assess the floodplain hazards. With changing weather conditions, planners can advocate for consideration of suitable models of potential hazards with technical specialists to support the identification of hazards within their communities. Planners can work with conservation authorities to support efforts to refine municipal mapping of vulnerable areas.

Each community has its own unique vulnerabilities depending on the local climate, geography, and proximity of urban structures to hazard lands/risks. Once these vulnerabilities are understood, planners can advocate for appropriate policy approaches to mitigate these risks and implement these strategies in new development.

In addition to vulnerable areas are vulnerable communities that have disproportionate services to respond in an emergency. Planners can be a part of identifying the location of vulnerable communities and working to provide sufficient community services and resourcing via partner agencies or departments.

MITIGATION TO SUPPORT COMMUNITY RESILIENCE

Through the mitigation cycle of emergency response planning, planners are uniquely positioned to improve resilience to natural hazards. In the hurricane prone area of the eastern US,² the role of planners in emergency management has included:

- identification of vulnerable areas and vulnerable populations;
- siting of emergency facilities and critical infrastructure;
- preparation of/involvement in evacuation and sheltering plans;
- acting as contact points between public and local governments before, during, and after emergencies;
- identifying and reducing conflicts among the plans of different agencies;
- standby plans for post-disaster recovery; and,
- ensuring the lessons of past events are systematically analyzed and applied to provide future improvements.

In the Ontario context, municipalities have begun to address climate change in their official plans and climate change action



Source: APTA. 2020. Transit Agency Emergency Management Plan. The Four Phases of Emergency Management.

plans to identify key priorities for climate adaptation and/or mitigation. These documents can identify strategic priorities for addressing vulnerabilities to natural hazards and identify a policy framework for land use decisions and infrastructure improvements. Similarly, the following plans and activities may be utilized to support implementation of emergency management.

Plans to support the resilience of natural features and areas, such as:

- Regional forest management plans;
- Urban forest management plans;
- Conservation area management plans;
- Watershed plans;
- Species at risk management plans; and,
- Invasive species management plans.

Plans to support the protection of community services and safety:

- Emergency plans, including hazard identification and risk assessment (HIRA) for provincial, municipal, emergency service providers, and transit, utility and other service providers; and,
- Source water protection plans.

Reviews of technical guidelines/standards (i.e., culvert sizing/drainage guidelines) to address changes to local weather patterns as a result of climate change.

Participation in risk assessments and GIS analysis of climate risks and vulnerabilities (such as the PIEVC protocol³) in concert with partner agencies where appropriate.

Participation in Inter-Agency Emergency Management Response plans.

Participation in debriefs from emergency test scenarios.

There is an opportunity for planners to “complete the cycle” of emergency management by having an increased coordination function between the established Ontario land use planning system and emergency management framework. At the moment, these processes occur fairly independently of each other with consultation between municipal planners and emergency services occurring at key milestones, such as official plan reviews or development application review cycles.

Planners can consider new ways of strengthening these relationships with agency partners to identify the lessons learned from natural hazards in the community and identify ways of addressing and reducing risks through land use planning tools/policy. Some questions for consideration include:

- Have vulnerable areas been identified, and what data was used to assess these vulnerable areas?
- What lessons have been learned about vulnerabilities during recent natural hazard events?
- What tools are available to increase resilience to natural hazards?

CASE STUDY: RESILIENCE SCORECARD

In the US, one tool that has been utilized by community planners is the “Plan Integration for Resilience Scorecard” method.⁴ The tool is used to assess existing community plans to identify vulnerabilities to natural hazards and identify opportunities to reduce those risks through hazard mitigation. The approach uses spatial analysis to compare land use plans, floodplain data, and conservation area data. This approach is used to identify conflicts between land use plans and potential hazard mitigation actions that address both physical and social vulnerabilities. It is one approach to integrating land use planning with hazard planning.

People in Ontario have recently seen the consequences of natural hazards, such as flooding and forest fires. A proactive approach is needed to shape community plans to be more resilient with more frequent hazard events and a rapidly changing climate. ♻️

¹ Public Safety Canada. 2019. Emergency Management Strategy for Canada. Toward a Resilient 2030.

² Mitchell, James K. 2023. Personal correspondence. Professor Emeritus, Department of Geography, Rutgers University.

³ Sandink and Lapp. 2021. The PIEVC Protocol for Assessing Public Infrastructure Vulnerability to Climate Change Impacts: National and International Application. CSCE 2021 Annual Conference. Institute for Catastrophic Loss Reduction, Canada.

⁴ Malecha, M., Masterson, J.H., Yu, S. & Berke, P. (2019). Plan Integration for Resilience Scorecard Guidebook: Spatially evaluating networks of plans to reduce hazard vulnerability - Version 2.0. College Station, Texas: Institute for Sustainable Communities, College of Architecture, Texas A&M University. Retrieved from: <http://mitigationguide.org/wp-content/uploads/2018/03/Guidebook-2019.Sept-14.pdf>



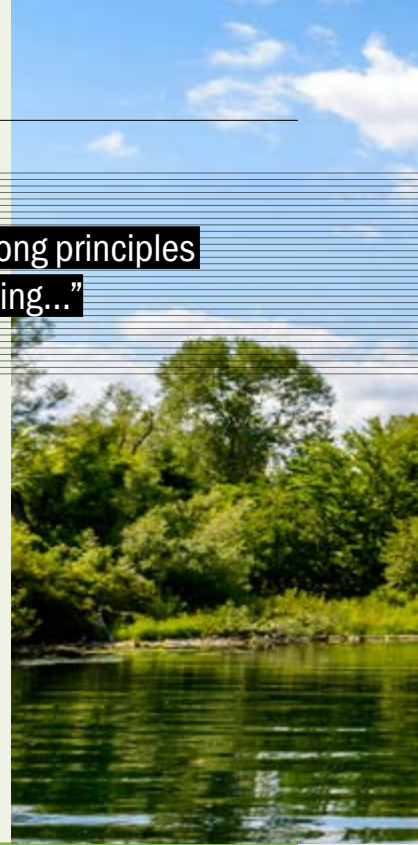
Katherine Bibby, MCIP, RPP, is a member of OPPI and a Senior Environmental Planner with WSP Canada specializing in environmental assessments for transit and transportation projects and natural heritage planning. Advice and input provided by J. Kenneth Mitchell, PhD, a Professor Emeritus with Rutgers University, Department of Geography. His research interest includes human response to environmental hazards.

“Stay true to the strong principles of community planning...”

INTERVIEW

Honing a sustainability mindset

AN INTERVIEW WITH LISA PRIME, A CHAMPION OF RESILIENT COMMUNITIES



Lisa Prime, MES, MCIP, RPP, LEED AP, is an expert on sustainable communities and infrastructure planning. While she has always focused on sustainability from an environmental impact assessment perspective, she says the initiatives she was involved with in the early part of her career were still hard for people to grasp.

“Since the early 2000s, sustainability has become more normalized in the context of good planning, which is frankly what I always thought about it as,” she says, adding that, at that time, she built strong relationships with like-minded people in industry and many are still close connections. “Now, you start to see the impacts of climate felt more and realized through significant events that affect us, and you start to see the relationship between climate planning and good planning and how things fit together. This leads to resiliency and it is how those two things come together for a particular place.”

“... you see the change in expectations for climate planning at a higher level through policy changes...”

When she was with Waterfront Toronto, Lisa had the opportunity to work internationally with C40 Cities, a global network of mayors of the world's leading cities united in action to confront the climate crisis.

“In other parts of the world, there is more progress than what you sometimes see in our own province or our own country and that's where you start to understand the challenges everybody is having,” she says. “Once we got to the *Paris Agreement* in 2015 and an evolving set of net zero policies and action in Canada, you see the change in expectations for climate planning at a higher level through policy changes, and that trickles down into what we're doing. Although we work under the *Planning Act*, there's a lens there of cascading policy that really informs what we should be doing and how we should be doing things.”

It is change mindset and it demands risk. Planning for climate change now, she says, is about resiliency and creating strategies for building resilient communities, which means addressing what people need on different levels and for different circumstances moving forward in a changing climate, creating places where people can thrive with dependencies that are complex, not singular.

PLANNING FOR THE CLIMATE CHALLENGE

Lisa offers planners a list of three top considerations for climate change planning: energy systems, community design, and how people move.

“There are probably more, but these three contribute to lower GHG, which is an important aspect of the climate challenge, but they are also about how people experience place,” she says. “And ultimately, it's all about the people.”

For example, how we draw the relationship between electrification and opportunities for net zero energy, to how we design communities with passive buildings and reliance, to what people need to sustain a future. How we can support district scale and renewable energy systems. Standards and expectations are important. In a climate scenario, that's also about walkability, parks, connectivity, passive building design, integrated building uses, and



public space flexibility. How people move is about being open to transitioning away from the historically automobile-oriented approach to creating an environment where it is easier for people to choose other options to get around. That also addresses affordability.

“Planners need to help others see the trends and changes that demographics and future generations will be looking for,” she says. “This is hard but worthwhile when you experience it.”

And all of these things are very much linked together.

“Climate planning and how we move forward as planners is about connecting the key aspects of what makes your community resilient for the future – which might be slightly different across different geographies – and drawing on those layers of policy from elsewhere to understand the data,” says Lisa.

Access to data, including climate data, has changed significantly in recent years.

“We can do some really good planning around important data points and important data topics for some of these things that we’re trying to address,” she says.

“Planner education is key to addressing the climate crisis and building resilient communities.”

Planner education is key to addressing the climate crisis and building resilient communities. OPP1 has developed a series of climate change training modules for planners in collaboration with the Climate Risk Institute, Risk Sciences International, and Dillon Consulting, with funding support from Natural Resources Canada’s Building Regional Adaptation Capacity and Expertise program. Lisa had the pleasure of teaching part of the initial offering, drawing on a vast portfolio of corporate and municipal strategy and policy.

STEPPING OUT OF THE BOX

The new and evolving information and priorities, including requirements in the National Adaptation Strategy, create a lot of pressure for planners.

“Try not to get overwhelmed,” says Lisa. “Stay true to the strong principles of community planning and look for ways to connect the issues and the data for how to change that experience of place through what you are doing in your projects.”

For example, we should design space for shade in the context of connectivity between parks or smaller urban squares, places for people to stop and rest, aligned with aging population and creating moments. Or it could be storm water issues and design for infiltration to deal with flooding and reduction of heat islands. Look at alternative materials and push for innovation through change.

“You just have to keep that lens of wondering how we could maybe be doing something different when we’re writing policy or when we’re doing site design to create opportunities,” she says.

Lisa sees positive change especially in municipal sectors and in key stakeholder sectors, such as local energy providers and developers through construction. For example, she is proud of her role in collaboration between Mattamy Homes, Enwave Energy, and the City of Markham for GeoExchange technology. Champions and leadership are critical to ensuring cities don’t miss opportunities.

“[Positive change] is cross jurisdictional,” she says. “The issue is how do we scale things up and how do we get things to move at more of a mass approach? How do we support developers that are trying to implement key initiatives? Where others have maybe figured it out or figured out different things, how do we share? How do we make things a little more transferable, a little more open and accessible and collaborative? We see lots of initiatives happening, but we need to scale up faster and more collaboratively.”


Planners have an important role in all of this.

“... the celebration is in seeing those that rejected change start leading it themselves.”

“Planners are a window to opportunity for change, but they equally need to understand risk and the environment they work in,” she says. “In a municipal sector, sometimes it can be challenging to do innovative things or get buy-in on alternative standards. What’s important as planners is that we don’t miss that opportunity to design for resiliency to include GHG reduction, but also access the experience of people and how design can address change.”

Planners may have to think about and support concepts that go beyond the typical planning piece.

“Not always in planning do you think about building — you don’t have to, to do your job as a planner,” says Lisa. “But to be open to what that looks like and how to get there is really important, because you are that middle piece and you’ve got to bring everybody to the table. That’s part of your planning process, even if you’re not on the engineering side of it.”

“Everybody’s got to be willing to step out of the box a little bit,” she says. “That’s how you get more innovation.” 



ABOUT LISA PRIME

Lisa Prime, MES, MCIP, RPP, LEED AP, is Chief Planner for the City of Cambridge and Founder of PRIME Strategy and Planning. Her work includes policy development and implementation and has ranged from watershed planning and land use issues, integration of natural systems and urban development, to major revitalization master planning, infrastructure, and flood protection. She has held roles in both the private sector and public sector. Transformative roles in provincial planning reform, landfill site selection, conservation authority approvals, and as a senior executive with Waterfront Toronto led her to launching her own firm, PRIME Strategy and Planning.

Now Lisa is Chief Planner of one of fastest growing communities in Canada. Tireless in her commitment, giving back includes contributions over the past 10 years through positions on boards and committees tied to important national issues, such as urban water, green buildings, housing, standards, and data.

“I’m sort of an impact assessment planner at the base,” says Lisa. “I did my master’s around decision making and uncertainty, and I think it goes with my general expectation and interest to be transformative and look at things through an innovation lens and, understanding risk, that means I took positions that were transformative and new and very much about figuring stuff out.”

That mindset led her to working with the Toronto and Region Conservation Authority (TRCA) — and the “uncertainty of defining development” — as well as on the living city agenda and the sustainability agenda. Already well embedded in the work to revitalize Toronto’s waterfront from the 2008 Olympic Bid effort as a consultant, in short term, she was back on the waterfront directly for the corporation leading the efforts. Waterfront Toronto is all about transformative change: developing an innovation agenda around green building requirements, flood protection and building a river, and the approvals required for complex brownfields provided change-agenda leadership.

“Sustainability was as much about going to a very urban project on Toronto’s waterfront and reclaiming brownfields for development as it was about protecting the green fields,” she says. “I’m dealing with sustainability in the context of creating a change of land use in a brownfield to help ease the need to develop green fields. That’s the core of the sustainability mindset that I have had in my career.”

The work Lisa was involved in for green building requirements at Waterfront Toronto fed into the process the City of Toronto initiated to create the Toronto Green Standard, and the sustainability framework created change policy for the province and all municipalities.

“A lot of it was about market transformation and pushing the market into spaces they hadn’t been in — and that is super interesting to me,” she says. “There was a lot of push back in this agenda from both public and private actors, and the celebration is in seeing those that rejected change start leading it themselves.”

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POLICY

“More homes” needs more planners

BY SAAD BAIG



“Municipalities have long raised capacity issues, especially as it relates to meeting provincially imposed timelines.”

Recent planning discourse has centred around the consolidation of A Place to Grow: Growth Plan for the Greater Golden Horseshoe and the Provincial Policy Statement. Two marquee provincial documents that impact planning in Ontario are set to become a single integrated Provincial Planning Statement, a document with the stated intention of helping generate appropriate housing supply, make land available for development, provide infrastructure to support development, balance housing with resources, and help with implementation of recent changes.

In the backdrop of this high-profile exercise with public consultation and stakeholder roundtables, a new and just as important area of work is emerging – tackling the shortage of planners in Ontario.

The challenge can be simply explained as, “Just like we need more skilled trades to build homes, we need more planners to approve projects to get to a stage where we can build homes.”

OPPI’s job board has seen a flurry of activity over the past couple of years with an average of about 750 postings each year. Almost two-thirds of them are for roles in municipalities, other governments, and agencies. Twenty-three of Ontario’s 29 large and fast-growing municipalities have posted jobs in the three-month period preceding the writing of this column. And, that is just on the OPPI board, not countless other places where public sector jobs are posted.

“OPPI’s job board has seen a flurry of activity over the past couple of years with an average of about 750 postings each year.”


On the supply side, Ontario’s six accredited planning programs only graduated a total of 439 planners in 2022 across bachelor, master, and PhD programs. But the problem is not just new graduates — it’s across the spectrum, including among senior planners. Retirements have steadily increased over the past decade, and many young planners who would have been senior planners today left the profession when opportunities dwindled during the recession of the ‘90s.

Municipalities have long raised capacity issues, especially as it relates to meeting provincially imposed timelines. The development sector sees the capacity challenge and desires quicker processing of their applications. With emerging stakeholder consensus, the time is now to move towards a comprehensive plan to tackle this challenge.

OPPI is working on a coordinated plan that will seek to:

1. Increase interest among high school students to pursue post-secondary education in planning,
2. Create more spaces for planning students in universities and ensure more graduates pursue careers in planning, and
3. Reduce friction for mid-career professionals to enter planning roles in Ontario.

The plan requires close coordination between at least four provincial ministries and the planning profession to develop and implement an action plan with concrete steps.

Given this alignment between the interests of municipalities, industry, the province, and the profession, the time to act is now! 

Saad Baig is a Director in StrategyCorp’s Public Affairs Group. He provides strategic advice to clients navigating complex government relations challenges across a variety of sectors. Saad previously served as senior advisor to several cabinet ministers, including the Ministers of Finance, Transportation, and Infrastructure in the Ontario Government.

ACADEMIC

Balancing urbanization and wetland conservation: Addressing climate change challenges in the Greater Toronto Area

BY KAUSHIKA VINOOTHEESWARAN

The Greater Toronto Area (GTA) is experiencing substantial population increases, with projections indicating a significant rise by 2041. This population growth places immense strain on housing supply, resulting in increased development and expansion of urban areas. However, limited availability of quality land for development leads to decentralization and the encroachment of development on wetlands. This pattern of dispersed growth results in the fragmentation of land and the loss of valuable wetland ecosystems. As urbanization intensifies within the GTA, it further exacerbates the impacts of climate change and contributes to increased wetland loss.

URBANIZATION-INDUCED WETLAND LOSS

Wetlands play a crucial role in maintaining ecological balance and providing essential ecosystem services. Ontario accounts for a significant portion of wetlands in Canada, with an estimated 10,000 square kilometres of wetlands in southern Ontario alone. Accommodating land demand often leads to modifications and significant loss of wetlands. Between 1800 and 2002,

approximately 72 per cent of the province's wetlands were converted with ongoing encroachment due to urban expansions.

The research I completed for my thesis looked at wetland loss induced by urbanization from 2005 to 2015. My research revealed that from 2005 to 2011, 177 wetlands with an average surface area of 1.17 hectares were lost in the GTA (figure 1). From 2011 to 2015, 620 wetlands with an average surface area of 0.45 hectares were lost (figure 2). The percentage of wetlands lost from 2005-2011 to 2011-2015 increased by 250 per cent.

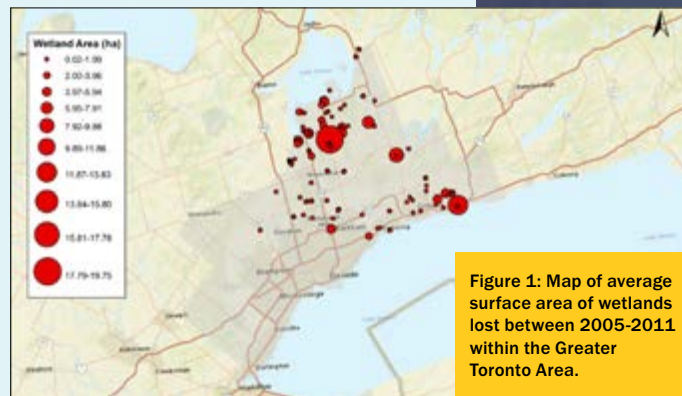


Figure 1: Map of average surface area of wetlands lost between 2005-2011 within the Greater Toronto Area.

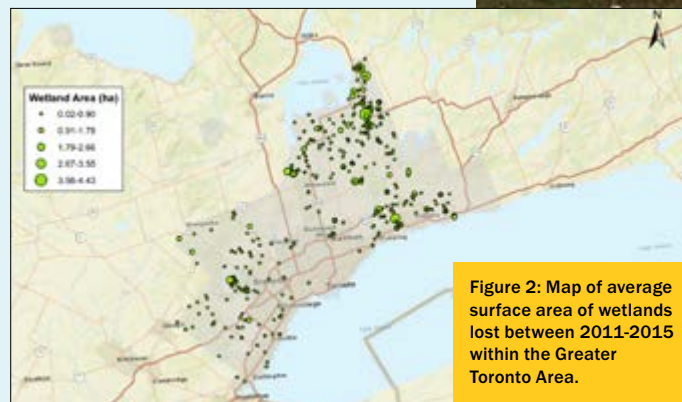


Figure 2: Map of average surface area of wetlands lost between 2011-2015 within the Greater Toronto Area.





“Wetlands serve as valuable carbon sinks, purifying water, regulating floods, supporting biodiversity, and replenishing groundwater reserves.”

The largest loss of wetlands occurred in undifferentiated land uses, followed by conversion to tilled land. My research highlights the significant increase in conversions to built-up areas from 2011 to 2015 compared to 2005 to 2011. It also shows that the surface area of wetlands lost from 2011 to 2015 was smaller compared to the previous period. This indicates that the increasing trend of urbanization attributes directly to the loss of wetlands, especially smaller wetlands.

The loss of wetlands has profound implications for climate change mitigation and adaptation. Wetlands serve as valuable carbon sinks, purifying water, regulating floods, supporting biodiversity, and replenishing groundwater reserves. Preserving these ecosystems is crucial to maintain their capacity for carbon sequestration, water filtration, flood control, habitat provision, and sustaining freshwater resources. However, urbanization and associated land use changes contribute to increased surface runoff and pollution of wetlands, disrupting their delicate balance and impairing their ability to provide essential ecological services. Additionally, wetland loss releases stored carbon dioxide and other greenhouse gases into the atmosphere, exacerbating the greenhouse effect and global warming. Prioritizing the protection and restoration of wetlands is vital to enhance resilience to climate change and safeguard these essential ecological services.

PROVINCIAL POLICY PERSPECTIVE

To address the threats to wetlands, Ontario has implemented several wetland protection policies. These policies are outlined in the Provincial Policy Statement (PPS) authorized under the *Planning Act*. They provide strong policy direction to protect certain wetlands from development and land use changes. Additionally, various provincial ministries, federal departments, conservation authorities, and municipalities are involved in managing and protecting wetlands through legislation and land use plans, such as the Niagara Escarpment Plan, Oak Ridges Moraine Conservation Plan, Greenbelt Plan, and Growth Plan for the Greater Golden Horseshoe.

While current policies aim to protect wetlands, there is an increased need for

evidence-based policymaking to enhance their effectiveness. Ongoing evaluation and analysis of policy outcomes are essential to identify barriers, unintended consequences, and areas of improvement. By considering factors such as habitat connectivity, watershed conditions, land uses, and natural heritage, policymakers can develop holistic approaches to wetland conservation and sustainable land use planning.

“To address climate change and mitigate its impacts, policymakers and stakeholders need to prioritize the protection and restoration of wetlands.”

The impacts of wetland loss on biodiversity, water quality, and ecological systems emphasizes the need for effective policies and management strategies to mitigate wetland loss and address the challenges posed by urbanization. The *Planning Act* is the main policy framework governing wetland conservation and management in Ontario; however, research has pointed out the limitations of current policies, particularly in addressing small wetland losses. Addressing wetland loss and promoting sustainable urban development requisites the need for a systemic approach to wetland management that considers the impacts of land fragmentation, agricultural drainage, and urban expansion. It also highlights the importance of informed decision making, improved policy guidance, and collaboration between stakeholders to protect and conserve wetlands effectively.

COMBATTING CLIMATE CHANGE

To address climate change and mitigate its impacts, policymakers and stakeholders need to prioritize the protection and restoration of wetlands. Collaboration among multiple government agencies, conservation authorities, municipalities, and community organizations and cohesive coordination among policy documents are crucial for effective wetland management and conservation.

Taking a proactive approach to address climate change in urban areas like the GTA

involves implementing measures such as green infrastructure, which includes incorporating more natural features like wetlands into urban design and land use planning. Furthermore, it would be beneficial to incorporate periodic evaluation into wetland management strategies to assess the effectiveness of conservation efforts, adapt to changing conditions, and ensure long-term success.

The interplay between climate change, urbanization, and wetland loss in the GTA underscores the importance of adopting sustainable development practices and implementing effective climate change mitigation and adaptation strategies. It requires integrated land use planning, stricter environmental regulations, and the preservation and restoration of wetlands as critical natural infrastructure.

Urban planners in Ontario are prioritizing climate change mitigation and recognizing the importance of wetland protection. However, the continued encroachment on wetlands due to urbanization poses significant challenges. Efforts to address these challenges include wetland protection policies, land use plans, and the involvement of multiple stakeholders. It is crucial to consider the broader impacts of climate change on urbanization and wetland loss and adopt evidence-based policymaking and periodic evaluation to ensure effective and sustainable mitigation measures. In doing so, Ontario can better protect its valuable wetland ecosystems. By recognizing the importance of preserving wetlands as vital natural infrastructure, the GTA and the province of Ontario can strive towards a more resilient and sustainable future in the face of climate change. ♻️




Kaushika Vinothswaran is a Candidate Member of OPPI and an Environmental Planner at Dillon Consulting. She is also a Master of Applied Science graduate of Environmental Applied Science and Management at the Toronto Metropolitan University.

ACADEMIC

Balancing buildings and biodiversity

BY KIERYN MATTHEWS



“NbS defines actions that work to support natural ecosystems to enhance environmental and societal well-being.”

Nature-based solutions (NbS) is a term gaining popularity in conversations around climate change mitigation and adaptation. But what does it really mean? This buzzword is used in many different contexts and can refer to a variety of projects, from green roofs to mangrove conservation. It is especially important to understand this term in the planning context, as creating more climate-resilient communities should be at the forefront of all urban planners' minds.



“... cities consume 78 per cent of the world’s energy and produce 60 per cent of the world’s emissions, despite only covering two per cent of the earth’s surface.”

NbS defines actions that work to support natural ecosystems to enhance environmental and societal well-being. Climate change is impacting cities now, and while NbS is not the only answer, it can offer some impactful solutions if implemented thoughtfully. This article aims to define the term, describe why it is important, and determine what it means for practising planners in Ontario.

“... NbS is not the only answer to the climate crisis.”

DEFINING THE TERM

While NbS is an increasingly common term, it is also referred to as green infrastructure or ecosystem-based adaptation. The Nature-based Solutions Initiative at the University of Oxford, defines NbS as actions that involve the protection, restoration, or management of natural and semi-natural ecosystems to address current environmental and societal challenges by providing benefits for both people and the planet.¹ A good example is the blue-green infrastructure projects being implemented under Vancouver’s Rain City Strategy.² By enhancing green spaces and water connectivity through bioswales, green roofs, and permeable pavement, the City of Vancouver is improving water quality, green space area, mitigation of urban heat islands, and pressure on stormwater systems.²

Overall, the basic principles of NbS are as follows:

- Enhancing ecosystem services,
- Strengthening biodiversity and wildlife habitats,
- Improving climate resilience, and
- Supporting human well-being.

WHY IT IS IMPORTANT TO INCORPORATE NATURE-BASED SOLUTIONS IN CITIES

A study led by the Nature Conservancy and 15 other institutions found that NbS can provide 37 per cent of the mitigation needed to meet the 2030 carbon reduction targets in the *Paris Agreement*.³ Not only can NbS support climate mitigation efforts, but it can also support climate adaptation measures and overall human well-being. According to UN Habitat, cities consume 78 per cent of the world’s energy and produce 60 per cent of the world’s emissions, despite only covering two per cent of the earth’s surface.⁴ This

“Supporting climate mitigation cannot be an excuse to continue business as usual.”

highlights the importance of taking climate action in urban areas.

Ontario is already seeing increased forest fires, heat waves, and rainfall. A report from the Institute for Sustainable Finance states that if nothing changes and the global climate warms by two degrees by 2100, it will cost Canada over \$2.8 trillion in damages and health care.⁵ Incorporating more natural areas in cities can help improve air and water quality, reduce the heat island effect, reduce the reliance on building heating and cooling, absorb carbon, improve mental health, and support pollinators and food security. All these outcomes contribute to a better climate and social resilience.

“... if nothing changes and the global climate warms by two degrees by 2100, it will cost Canada over \$2.8 trillion in damages and health care.”

WHAT THIS MEANS FOR URBAN PLANNERS

It is critical that planning professionals work to incorporate the natural environment into cities to support climate resilience. The need for climate change planning is pressing, and in 2018, the Canadian Institute of Planners released a policy on just that.⁶ It emphasizes the important role planners must play in supporting built, natural, and social environments in the face of the climate crisis. NbS offers a solid path forward to improving climate resilience and human well-being in cities.

While the benefits are numerous, it is important for planners to be aware of all aspects when moving forward with NbS. The impacts of these projects are not always well documented, which is why planners must bring their multidisciplinary perspective to the table. Understanding the long-term impacts on the environment and people is key, as is understanding that NbS is not the only answer to the climate crisis. First and foremost, we must reduce emissions and shift to renewable resources. Supporting climate mitigation cannot be an excuse to continue business as usual. Finally, it is imperative that Indigenous Peoples are included in the process. They hold valuable traditional knowledge, and all planning projects should be rooted in reconciliation.

TYING IT ALL TOGETHER

Regardless of what term is used to define the use of natural systems as solutions to societal and environmental challenges, it

is important to consider incorporating it into all planning projects. While NbS is not the only solution, it is a key part of the steps we need to take to tackle the climate crisis. The benefits are numerous and can have an immensely positive impact on people and the planet. NbS has become a buzzword for good reason, but we must take the time to understand what it means in different contexts and ensure those involved are pushing for a more resilient and healthy community for everyone. ♻️

¹ Nature-based Solutions Initiative. <https://www.naturebasedsolutionsinitiative.org/what-are-nature-based-solutions>

² Rain City Strategy. <https://vancouver.ca/files/cov/rain-city-strategy.pdf>

³ The Nature Conservancy. Nature's Make or Break Potential for Climate Change (2017). <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/natures-make-or-break-potential-for-climate-change/>

⁴ United Nations. Climate Action. Cities and Pollution. <https://www.un.org/en/climatechange/climate-solutions/cities-pollution#:~:text=Cities%20and%20Pollution,cent%20of%20the%20Earth's%20surface.>

⁵ Institute for Sustainable Finance. The Physical Costs of Climate Change, A Canadian Perspective. <https://smith.queensu.ca/centres/isf/pdfs/ISF-Report-PhysicalCostsOfClimateChange.pdf>

⁶ Canadian Institute of Planners. Policy on Climate Change Planning. <https://www.cip-icu.ca/getattachment/Topics-in-Planning/Climate-Change/policy-climate-eng-FINAL.pdf.aspx#:~:text=THE%20ROLE%20OF%20CIP&text=Promote%20climate%20change%20planning%20in,its%20work%20with%20other%20professions.>



Kierny Matthews is a Student Member of OPPI, currently working towards a MEd in Planning at the University of Waterloo. She obtained a BSc in Environmental Science at Simon Fraser University and has over seven years of experience leading habitat restoration projects, placemaking initiatives, and youth environmental leadership programming.

ACADEMIC

Planning student projects

Students at Ontario’s six accredited planning schools are the future of the profession and the Registered Professional Planners of tomorrow. Here is a look at some of the exciting and progressive projects from future RPPs.

SCHOOL OF PLANNING, UNIVERSITY OF WATERLOO

Campus of the future

What does the future of campus look like in 2050 if the University of Waterloo meets its goals for sustainability and climate resilience? Undergraduate students answered this question using cutting-edge visual generative AI tools, digital 3D modelling, rendering, and graphic design software to re-envision a shared outdoor space on campus. Visualizations like these are ways that planners and designers can translate quantitative metrics like reductions in tonnes of carbon into inspiring visions for action and change towards a more hopeful climate future. All final posters and AI-generated images are available to view at <https://uwaterloo.ca/planning/design>.

Instructor: Katherine Perrott, PhD, MCIP, RPP

Course: PLAN 211 Design Studio Foundations

Client: University of Waterloo Sustainability

Student work featured: Urooj Khan, Khalil Heron, Cherilynne Chau, Andra Popp

Students pictured: Vanetina Casas, Paige Thompson, Kavishka Gomes, Tim Ross, Michael Barone



FACULTY OF ENVIRONMENTAL AND URBAN CHANGE, YORK UNIVERSITY

A master parks plan for a future planned neighbourhood

Parks and recreation planning was the focus of the MES @ York Planning Alumni Committee (MYPAC) annual case competition held April 21, 2023. This one-day event was presented by Thinc Design (shout out to MES '19 Leandra Correale-Ferguson) and Town of Caledon. MES planning students devised a master parks plan for a future planned neighbourhood — inspiring “real world” placemaking with professional planners and landscape architects. The jury was impressed by the winning team’s holistic approach to planning their flagship park and trail system.



Program Coordinator:

Laura Taylor, PhD, MCIP, RPP

Students: Mani Singh, Rudia Nam, Nastassia Pratt, Sandhya Suryanarayanan, Elijah Leotaud, Mujtaba Mir, Steven Kakalettris, Elliot Li

SCHOOL OF URBAN AND REGIONAL PLANNING, TORONTO METROPOLITAN UNIVERSITY

The safer way: Addressing underlying issues affecting transit safety

Since the onset of the COVID-19 pandemic, transit agencies across Canada have grappled with the increase in social disorder and crime on transit systems. This studio project resulted in the first comprehensive report that takes a multidisciplinary look at major societal issues affecting safety on public transit systems with particular attention on TransLink in Metro Vancouver, Edmonton Transit Service, Calgary Transit, Toronto Transit Commission, and le Société de Transport de Montreal.

The report aims to shed light on the societal issues and their connection to safety on transit systems with the goal of developing next steps and recommendations for transit agencies. The report will be submitted to public transit agency partners to help inform future transit safety data analysis and program development.

Project Supervisor: David Cooper, MPI, MCIP, RPP

Studio Team: Salma Abdalla, Matthew Derohanessian, Sylvia Jennings, Kaight Rehner, Andrew Robertson, Kartik Rudra



Don McKinnon, MCIP, RPP, has 32 years of experience in environmental impact assessments (EIAs/IAS) and infrastructure planning studies throughout Canada and internationally. He has been involved with EIA/IAS at provincial and federal levels and for various lending institutions, such as the World Bank and Asian Development Bank.

Registered Professional Planner

PROFILE

NAME:

Don McKinnon, MCIP, RPP

LOCATION:

Toronto, Ontario

POSITION:

**Environmental Planner with
Dillon Consulting Ltd.**

He has worked in many different sectors, including transportation, power (generation and transmission), solid waste management, flood control, mining, natural gas, and urban development. He has managed study teams, led socio-economic impact studies, and implemented public and Indigenous engagement programs.

In addition to project planning and approvals work, Don has also been involved in policy studies and contributed to the development of EIA guidance documents, presented at conferences, and delivered EIA-focused training, including for graduate-level courses. His current work focuses on projects involving Indigenous communities.

What led to your decision to choose planning as a career?

I've been an environmental planner my entire career and I've been at Dillon Consulting for most of it. When I was thinking about careers and looking at universities, I was thinking I wanted to be a game warden, a biologist, or something in planning (I liked maps!). At the time, I was looking for an "outdoor job" as I didn't see myself being in an office all the time. I wasn't quite sure what planning really was but I liked the idea of being a planner because, in my mind, it equated to a higher chance of getting a job. When I finished school in the late 1980s, getting a job in your field of study was difficult. I wanted to come out of school with some form of designation or something that pointed me in a career direction. I was attracted to planning because it was practical, usable, and I would get paid to do it.

Who or what inspired you?

I went first to what is now Toronto Metropolitan University in the Applied Geography program, which is a very practical program that I really enjoyed. It set me up with many skills that I carried into my professional planning career. Somewhere during my geography program, I stumbled onto EIA as a career focus. I liked the concept of it – protecting the environment as part of the project planning process. The professors there were really down to earth and practical. Some had done consulting

work. It was, perhaps, the first time I was exposed to the idea of a consulting career.

Then I completed a master's degree at York University in the Faculty of Environmental Studies. Dr. Audrey Armour was a professor and one of the reasons I went there. I took all her courses and she became my thesis advisor. She also practised social impact assessment as a consultant. She taught me a lot about how to think through problems and was an inspiration to my consulting career in EIA.

What is an environmental planner and how is it different from other areas of planning?

Most land use planning tends to be focused on settlement or urban areas – it's about making decisions on how our communities are to grow. In contrast, environmental planners tend to focus on the planning of infrastructure and resource development projects in settings that can range from dense urban areas to more remote natural areas. As an environmental planner, you're basically working with proponents to plan and seek approval for usually large infrastructure projects that will result in changes to the environment. It's not a career strictly focused on protecting the environment – it's about how we plan for infrastructure or resource development that is needed or desired for economic growth, so that this development occurs in a way that minimizes impact as much as is reasonably possible and enhances benefits, particularly for the local communities. Our main planning tool is environmental impact legislation and less use of official plans/zoning tools that land use planners would typically use. But the work we do is still very much related to land use decisions, including where these projects are to be located and input to their designs to minimize adverse effects.

As well, it's important to recognize what we mean by the term "environment." I think the term "environmental planner" might initially scare off those considering a career in planning if they think of "environment" as the natural environment only. I've struggled a bit with whether "environmental planner" is an appropriate label for the work we do, when we spend as much time considering the social, built, economic, and cultural environments as the natural environment. There is a transitioning away from the labelling of "environmental assessment" to a more general "impact assessment" label which I feel is appropriate.

I would say generally that environmental planners tend to feel a little underrepresented by professional planning organizations such as OPPI. There are things that could be done to change that. But not all EIA/IA practitioners come from a planning background. Some come from a science background. And maybe I'm biased, but I would say those who come from a planning background make really good EIA practitioners because of the way we're trained, the way we think, plus the encompassing perspective that we have. We also tend to be generalists by knowing a little bit about a lot of things that are important to EIA/IA.

Tell us about a past project and a current project that you're especially proud of as an environmental planner.

A notable past project I worked on was a large hydroelectric dam on the Nile River in Uganda. At first, I wasn't sure I wanted to be involved with it, because it meant damming a world-class section of white water, and I'm a white-water kayaker. I was like, "Hold on, do I want to work on a project that's going to remove these rapids, which also had significance to Indigenous communities?" But at the same time, Uganda didn't have a sustainable source of power. There were diesel generators throughout Kampala, and air quality was affected and impacting the economic growth of the country. We had an amazing team of international and local consultants on this project who I learned a lot from. We were also following, at the time, new World Bank ESIA requirements that included the requirement for Free, Prior and Informed Consent (FPIC) of the affected communities. This was one of the first projects to figure out how to operationalize these requirements.

Currently, I'm working in Northern Ontario on provincial EAs/federal IAs for proposed new all-season roads to remote First Nation communities and to the proposed Ring of Fire mining development. These are very complex projects but also very rewarding projects to be involved with, considering the project proponents are the Indigenous communities that would benefit from these projects. These projects are challenging for several reasons, including being some of the first projects to go through the new federal IA process. We are breaking new "IA ground" and having to figure out the requirements of this new legislation. Without any precedents to follow, this is a huge challenge.

How have environmental impact assessments evolved over your career?

I certainly have seen a number of changes in EIA over the years. Changes in government expectations on EIA, including what needs to be studied and levels of comprehensiveness. Ongoing discussions on how we can make EIA more effective and perhaps more streamlined are interesting to follow. Increased Indigenous community participation in EIA is a significant change and is rapidly evolving. But I'm not sure there is a heightened public interest in EIA/major projects as I can remember being involved in many public meetings in the 1990s that were standing room only. There seems to be a heightened increase in the expectation of sharing information though – perhaps a product of the internet and the ease at which information can be shared.

One of the bigger changes facing EIA today is the introduction of the concept of Free, Prior and Informed Consent (FPIC) of impacted communities, particularly Indigenous communities. We're certainly trying to work through how to apply this in Canada right now. I think this is going to be a large influencer in how we do EIA in the future and how we navigate major project approvals. There is an increasing expectation by Indigenous communities that their consent is needed for major projects located in their territory.

Another change is EIA moving from a focus of minimizing the negative to maximizing or enhancing project benefits. It's looking at infrastructure or resource development projects from a larger perspective to see how we can make them the best possible projects, and how can we create benefits for the communities hosting these projects. For example, by providing training so that people in the local area can take advantage of employment opportunities.

The other change is to not look at EIA as a one-time static activity, but rather as part of a longer range planning or environmental management tool, which would include the development of environmental protection plans, monitoring, and follow-up measures. EIA sets up this longer term process.

What would you like to see happen with EIAs in the future?

Lately, I'm seeing a growing expectation of what EIA/IA should be particularly with the new federal IA process. We need to be reasonable about what project-specific EIA can accomplish. A good example is a cumulative effects assessment (CEA) – that means, considering the combined effects of existing and possible future projects with the project that is being assessed by its proponent. Conceptually, it makes a lot of sense, but I find it very difficult to do well at the project level. I'm still seeing the same issues around project-level CEA being discussed today that were being discussed 30 years ago when I started my career. We might have to face the fact that there might be better, more effective mechanisms to consider cumulative effects than at the project level – regional assessments, for example.

The second relates to the expectations of project consent by Indigenous communities. Our governments have signed on to the concept, but there is no clarity on what this really means for project approvals. And different interests have quite varying perspectives on what this means. There's definitely work that needs to be done to figure this out in Canada.

Do you have a message for other RPPs and up-and-coming planners?

I work a lot with younger staff and recent grads, and I really enjoy it because they bring enthusiasm and a different perspective to the work we do. Environmental planning needs to be thought of as a much more all-encompassing perspective than just the natural environment. The natural environment is certainly an important part, but there are other major parts associated with the work we do. I would say about half my career was spent on projects in urban settings, and those projects led to city building, including, for example, the creation of new public realm and active transportation facilities – all these things you might think of as what an urban planner would be involved with.

“Be open to trying new things – be comfortable with being uncomfortable. Don't be afraid to stretch yourself. Don't be afraid to make some mistakes. Embrace learning.”

My second piece of advice is to be open to trying new things – be comfortable with being uncomfortable. Don't be afraid to stretch yourself. Don't be afraid to make some mistakes. Embrace learning. My first year of consulting was probably more eye-opening than my six years of university. I still consider myself a student of EIA after 30 years. It's always changing. It's what makes it interesting. I've worked in so many different sectors and different countries and different places in Canada. Every project is unique, and you're dealing with different groups of people, different issues. It's a really good career for people who always want something new and changing.

And lastly, have patience. I stayed at one company throughout my career, and I think a lot of organizations appreciate this, especially in consulting. When we hire younger staff, we invest a lot in training those staff. It takes years to really learn the ropes. Companies will invest in people if they know they're going to stick around. And sticking around usually leads to amazing opportunities, as has been my experience. If you have some patience, opportunities will emerge and you will get the challenges you seek. ☺

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WE HAVE MOVED



CONGRATULATIONS AND THANK YOU TO WAYNE CALDWELL

Wayne Caldwell, PhD, FCIP, RPP, one of OPPI’s longest-serving and most active volunteers, including a term as OPPI President, has retired. As a much-loved Professor of Rural Planning and Development at the University of Guelph, Wayne has inspired innumerable young planners and ensured the vital work of rural planners is recognized. He has also had a career-long connection with the County of Huron Department of Planning and Development and has held positions on a long list of organizations related to the planning profession.

You can learn more about Wayne, his career, and his perspectives in *Y Magazine*, where he was featured as the RPP Profile in the Fall 2022 issue (<https://ontarioplanners.ca/y-magazine>).

On behalf of the OPPI membership, past and current Council and Committee members, and staff, we thank Wayne for his many years of dedication to OPPI and the planning profession and wish him the very best for an enjoyable, rewarding retirement.

OPPI’S NEWEST RPPS

Each year, OPPI is pleased to welcome new Registered Professional Planners (RPPs) as Full Members. Our newest RPPs have completed the certification process administered by the Professional Standards Board for the Planning Profession in Canada which allows them to practise in the province of Ontario and use the RPP designation.

For 2023, 84 individuals have passed the March examinations and received their RPP designation. Welcome and congratulations to you all! We applaud your achievement, dedication, and commitment. RPPs are the professionals specifically educated, trained, and ethically committed to guiding decision makers, the public, and stakeholders in all sectors to help inform choices and inspire communities.

Learn more, including the names of the newest RPPs, at www.ontarioplanners.ca/Newest-RPPs.

OPPI STUDENT DELEGATE

Student planners are the future of the planning profession and OPPI encourages students to get involved early in their careers. Each year, one Student Member becomes the Student Delegate and Chair of the OPPI Student Liaison Committee (SLC).

OPPI is pleased to welcome our Student Delegate for a one-year term: Timurul Hoque Kazi, a student in the Bachelor of Environmental Studies program at the University of Waterloo.

The Student Delegate is the chair of the SLC, which is made up of OPPI Student Members from each of Ontario’s accredited planning programs. This leadership network links planning students to OPPI, represents the interests of planning students across Ontario, and meets throughout the school year to promote student awareness and membership in OPPI, as well as events and programs targeted specifically to students.

We look forward to working with the Student Delegate and the SLC this year!

Learn more at www.ontarioplanners.ca/Student-Liaison-Committee.

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Toronto: Amy Shepherd - amy.shepherd@arcadis.com
 Stephen Albanese - stephen.albanese@arcadis.com
Waterloo: Victor Labreche - victor.labreche@arcadis.com

REAL ESTATE & GROWTH MANAGEMENT

Robyn Brown - robyn.brown@arcadis.com
 Matthew Heather - matthew.heather@arcadis.com

OPPI STUDENT SCHOLARSHIPS

OPPI understands that today's planning students are the Registered Professional Planners (RPPs) of tomorrow and provides Student Members with scholarship opportunities that award excellence and community contributions.

Congratulations to this year's student scholarship recipients:

Jodie Laborde, Ronald M. Keeble Undergraduate Scholarship

This scholarship is named for outstanding member, Ron Keeble, and recognizes an undergraduate student who is making a significant contribution to their community.

Mario Ribeiro Neto, Gerald Carrothers Graduate Scholarship

This scholarship is named for longstanding member Gerald Carrothers and recognizes a graduate student who is making a significant contribution to their community.

Jodie Laborde, OPPI Opportunity Scholarship

This scholarship is offered in acknowledgement of the barriers to education that disproportionately affect Black, Indigenous, and other racialized people and is awarded to either an undergraduate or graduate planning student.

Learn more at www.ontarioplanners.ca/Scholarships.



SCHOLARSHIP RECIPIENT: JODIE LABORDE

Jodie Laborde has been awarded both the Ronald M. Keeble Undergraduate Scholarship and the OPPI Opportunity Scholarship.

With an initial background in civil engineering, Jodie has always had a keen interest in the construction of cities and how people navigate urban spaces. Jodie's discovery of urban planning, recognizing its alignment with her passions during her first year of undergraduate studies, changed her initial trajectory, and she pursued various internships and jobs that aligned with her passion for planning and racial equity. Working alongside mentors and urbanists within the field, she's gained a deeper understanding of how mainstream planning theories and practices have historically been employed

to contextualize racial problems as spatial problems and how they continue to persist in serving as a pretext for the displacement and banishment of Black communities from urban spaces. In addition to this, her future research aims to dismantle ableism within the field. Specifically, exploring the intersectionality of disability and race and its compounding effects on the lived experiences of Black communities accessing essential services, housing and public spaces.

With a commitment to addressing the limited literature and underrepresentation of Black planning practitioners, her ultimate goal is to contribute to the development of more equitable and inclusive planning practices, amplifying the experiences and perspectives of marginalized communities.



SCHOLARSHIP RECIPIENT: MARIO RIBEIRO NETO

Mario Ribeiro Neto has been awarded the Gerald Carrothers Graduate Scholarship.

Having grown up in the outskirts of a Brazilian city, Mario deeply values the collective responsibility of a community in raising children. He recognizes the crucial role played by public services and infrastructure in creating an environment that supports this endeavour, with a particular emphasis on creating the conditions that enable queer individuals and people of colour to thrive. This belief strongly influences his interest in a diversity of areas in planning, including active transportation, public transit, affordable housing, and the development of inclusive and vibrant public spaces that foster meaningful exchanges.

Motivated by his passion to address these issues, Mario obtained a bachelor's degree in architecture and urban planning from his hometown and is currently pursuing a Master of Arts in Planning at the University of Waterloo. His graduate research primarily focuses on policies that promote synergy between cycling infrastructure and public transit. As an emerging queer planning professional, Mario looks forward to bringing his expertise in Latin American practices to the Canadian planning context and is grateful for the support of OPPI's Gerald Carrothers Graduate Scholarship for contributing to his pursuit of this endeavour.

OPPI MEMBERS WHO HAVE RESIGNED IN GOOD STANDING

The following Full Members have resigned in good standing from OPPI for the 2023 membership year:

- | | |
|------------------------|-----------------------|
| Dana Collings | Mark Jepp |
| Timothy Simpson | Akanksha Chopra |
| Brian McHattie | Becky Schlenvogt |
| Valerie Cranmer | Christopher Wilkinson |
| Adam Shamchuk | Wesley Crown |
| Paul Ralph | Mara Burton |
| David Stewart | Andrew McNeely |
| Gaetano Paparella | Hamish Campbell |
| Tyler Searls | Bruno Nazzicone |
| Heather Sadler | Mark Christie |
| Keith Lew | Kenneth Hetherington |
| Christopher Madej | Cameron Palmer |
| Allison Lebow | John Nesbitt |
| Michelle Rowland | Amrita Danieri |
| Susan Lloyd Swail | Anthony Greenberg |
| Evie (Yvonne) Przybyla | June Little |
| Lamyaa Salem | Margaret Wouters |
| Donald Schultz | Steven Chew |
| John Wright | Tiziano Zaghi |
| Jacqueline Burkart | Matthew Kelling |
| Sergio Manchia | |

To raise questions or concerns, contact membership@ontarioplanners.ca.

Note: These names are accurate at time of printing.

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STAFF SPOTLIGHT: MARIA GO, PROFESSIONAL STANDARDS COORDINATOR

If you have ever contacted OPPI about Professional Standards, Continuous Professional Learning (CPL) compliance and audit, or membership applications and renewals, you have likely had the pleasure of communicating with Maria Go. That interaction with people is what Maria likes most about her job.

“I like talking to and meeting members in person, via email, or by phone,” says Maria. “I enjoy making a positive difference to their day, and I find it particularly rewarding when I can respond to their questions satisfactorily or resolve issues regarding their membership.”

And she has been making a positive difference for OPPI members and staff for 15 years.

When Maria joined OPPI in 2007, she was a new resident to Canada from the Philippines. In her home country, she had had a fulfilling 20-year career as a bank officer in a savings bank. Transitioning and adapting to life in Canada gave her the opportunity to make a career change, and she redirected her efforts to finding a job in a non-profit organization.

“Making a career change to a work environment with less stress and a better work-life balance at that stage can be a bold step, but I never looked back after landing my first full-time position in Canada by joining OPPI.”

Maria adds that she was fortunate to have the support and guidance of a group of friends in Canada who came from the same city she did and studied in the same university.

“One big factor that helped us to integrate into the culture and system was having an education with English as the medium of instruction from grade school to university,” she says.

Maria works closely with OPPI’s Registrar to assist in the administration of the mandatory CPL requirement and the RPP certification process in accordance with the Professional Standards policies, including verification of membership applications and status changes and maintaining all related membership policies and procedures. To be successful in this role, Maria focuses on building and maintaining strong relationships between members and the organization as well as ensuring member satisfaction.

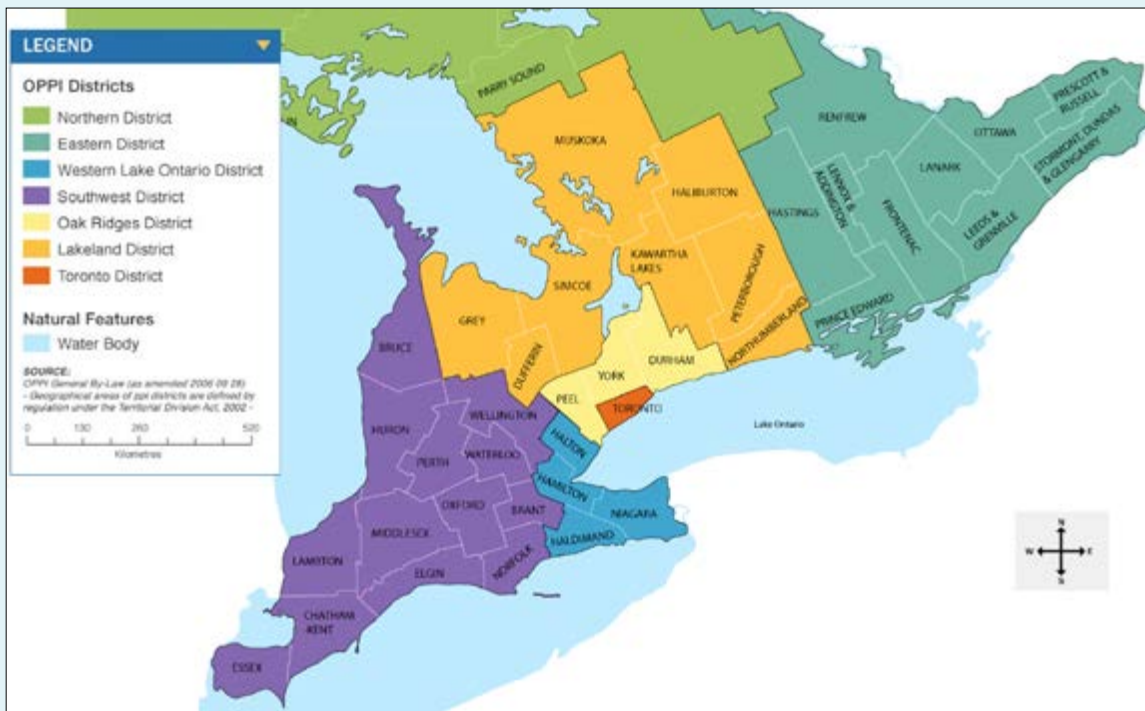
She has participated in various OPPI projects over the years. Noteworthy is the launching of the mandatory CPL requirement, as well as new membership technology – the conversion of OPPI membership records from a largely paper-based system to a computerized database, followed by a third conversion. The latest transition, completed in November 2022, was to the new shared database with the Canadian Institute of Planners and the Provincial and Territorial Institutes and Associations (PTIAs) across Canada.

“As OPPI endeavoured to improve member services, my Membership team took full ownership of the transition from the old database to ensure data integrity, data privacy, and security to the new system, which can become very challenging in the process,” she says.

While technology makes accessing information easier for everyone, the people are what make it all worthwhile.

“Being the first point of contact to members – the job satisfaction I receive from doing so, coupled with working with a dedicated OPPI staff team – makes me genuinely want to come to work each day and contribute to the success of the organization,” says Maria, adding that she loves the new OPPI headquarters and being on the staff team.

Maria announced her retirement this past summer. Please join us in wishing her the very best for her retirement. Thank you, Maria, for your all work and dedication to OPPI over the last 15 years!



VOLUNTEER SPOTLIGHT: OPPI'S DISTRICT LEADERSHIP TEAMS

OPPI's seven District Leadership Teams (DLTs) have an important role in Ontario's planning profession. The purpose of the Districts is to bring members together in their local community for networking, education, local advocacy, and stakeholder/partner relations. Through these efforts, the overall goal is to build the OPPI brand and RPP community at the local level. The role of Districts is two-fold: first, to build and foster local community within the planning profession; and second, to promote the value of hiring and working with an RPP and OPPI as the voice of the profession within the geographic region and local community.

Here, we feature a representative from each DLT to recognize them for their dedication to OPPI and the planning profession, as well as encourage other planners to participate

NORTHERN DISTRICT
Sarah Vereault, MCIP, RPP
Associate, Senior Planner, J.L. Richards & Associates Limited
Chair, Northern District Leadership Team



Sarah has been an RPP since 2014. In her role as associate and senior planner in Sudbury, she undertakes a wide variety of work, including advisory services for many smaller municipalities across Northeastern Ontario, municipal official plan and zoning by-law preparation, and development approvals for private sector clients in larger municipalities. She has been volunteering with OPPI since 2017, when she got involved with the OPPI Symposium in Sudbury, followed by the Northern District Leadership Team (NDLT). For Sarah, the most rewarding part of volunteering is the opportunity to connect with planners across the district and province.

"In Northern District, we are spread out over a very large area but have a small membership, so the vast majority of our members know each other personally," she says. "We are trying something new to celebrate new members by connecting with and recognizing new RPPs personally with a lunch and gift. We also do virtual roundtable discussions and take advantage of existing in-person events to connect."

Sarah's message to other planners in Northern District: "Please reach out! If you have thoughts for events in the Northern District or would like to help out, we're always open to new ideas."

EASTERN DISTRICT

**Nikita Jariwala, Candidate Member
Planner, J.L. Richards & Associates
Co-Chair, Eastern District Leadership
Team**



Nikita is a Candidate Member and intends to write the RPP exam this fall. She is working as a consultant to provide planning support to developers to advance development approvals and also provides advisory services to a number of municipalities. Inspired by the opportunity to be involved in the planning community, Nikita started volunteering with OPPI first as a Student Member then as Eastern District Leadership Team (EDLT) co-chair.

“I truly enjoy collaborating with the EDLT as well as the greater District Leadership Team and OPPI as a whole to create meaningful experiences for planners outside their regular 9 to 5,” she says. “Volunteering with OPPI has enabled me to advance my network and leadership skills.”

While the largest cities in Eastern District are Kingston and Ottawa, EDLT volunteers have been active in providing networking and learning opportunities for all their members through online webinars and events in different locations. Annual events include World Town Planning Day trivia, socials, exam prep sessions, lunch and learn workshops, and a rural/urban workshop with a full day of activities.

Nikita’s message to Eastern District planners: “EDLT is always open to hearing any ideas and feedback you may have. We are looking forward to seeing you at future events and at the conference in Ottawa this fall!”

WESTERN LAKE ONTARIO DISTRICT

**Lauren Vraets, MCIP, RPP
Sr. Planner, Policy Planning,
City of Hamilton
Co-Chair, Western Lake Ontario
District Leadership Team**



Lauren has worked in planning for 10 years, four of them as an RPP. In her current role, she has worked on Hamilton’s recent Municipal Comprehensive Review and Major Transit Station Area planning, as well the Biodiversity Action Plan. She started volunteering with Western Lake Ontario District (WLOD) in 2018 because she wanted to meet planners from different parts of the region and share ideas for networking and tours.

“Western Lake Ontario District is located in an area with a unique geography, with Lake Ontario shoreline, the Niagara Escarpment, prime agricultural lands, and densely populated urban lands,” she

says. “Our district events are focused primarily on getting people out to explore these unique geographies and learn more about the challenges and opportunities of managing different land uses in such a compact area.”

What Lauren finds most rewarding about volunteering is creating opportunities for planners to meet and learn together, and it also builds her leadership capacity in a really fun way.

“Participating in events is a great way to explore topics you might not deal with in your current work and build your overall planning knowledge. Volunteering is so rewarding because you meet new and interesting people, build your teamwork and communication skills, and showcase topics you are passionate about!”

SOUTHWEST DISTRICT

**Kevin Alexander, MCIP, RPP
Senior Planner, Special Projects,
Planning & Building Department,
City of Windsor
Vice-Chair, Southwest District
Leadership Team**



Kevin has been an RPP since 2002. In his current position, his focus is developing community improvement plans for neighbourhoods in decline to attract new residents and create a sense of place. He started volunteering with OPPI in 2011.

“I feel it is important to give back to the profession and share one’s knowledge and experience with others,” says Kevin. “I also think it is important to further the profession by educating students and the general public about the profession.”

Southwest District activities have included organized tours to Detroit, walking and biking tours of downtowns within the district, book club events, and movie nights with planning-related themes. The Southwest District Leadership Team (SDLT) has also worked with other organizations to host prominent speakers on planning and related professions. SDLT helps prepare students for OPPI exams and visits grade schools on World Town Planning Day.

What Kevin finds most rewarding about volunteering is the ability to build connections with other planners, educate youth and the general public, and be a resource to the profession.

“If you have the opportunity, it can be a rewarding experience to give back to the profession and a good career-building opportunity on both a personal and professional level to connect with others in the field.”

OAK RIDGES DISTRICT

Lalita Paray, MCIP, RPP
Senior Planner, City of Pickering,
Member, former Secretary-Treasurer,
Oak Ridges District Leadership Team



Lalita has been an RPP since 2009. Over the last 20 years, she has held a series of diverse positions at the regional and local levels in community planning, economic development, parks planning, zoning administration, and sustainability planning. Currently, she is the project lead for Pickering’s new green standards and urban agriculture initiatives.

Lalita has volunteered with OPPI as a student and as an RPP in both the Western Lake Ontario District and the Oak Ridges District, where she was Secretary-Treasurer until 2022.

Oak Ridges District events she developed and facilitated in concert with the district planners include Stormwater Basics for Planners, Climate Change and Land Use Planning, City Centre Planning: Vaughan Metropolitan Centre Walking Tour, Cemetery Planning, and International Women’s Day: ORD Women in Planning. She is also designing a webinar on municipal sustainability standards and sustainability policy trends related to land use planning.

“Volunteering at the district level has allowed me to channel my passion for community planning and learn about policies and projects from other planners,” says Lalita. “My message to the planners in our district is to attend an event – your conversation with an Oak Ridges District member may become a featured event.”

LAKELAND DISTRICT

Brandi L. Clement, MURP, AICP, MCIP, RPP
Partner, The Jones Consulting Group Ltd.
Member, Lakeland District
Leadership Team



Brandi became AICP-certified in the US in 2001, then an RPP in 2002. Currently, she helps private and municipal clients across Ontario realize the best use of their lands. She joined the Lakeland District Leadership Team (LDLT) in 2001 to meet people in the profession and get involved as a volunteer.

“We have annual events such as hiking in the Blue Mountains, Festivus in the Barrie Area, and Jane’s Walks across our district. Then throughout the year, we try to put on events addressing current planning topics or issues. The LDLT has many volunteers so there are lots of great ideas and most evolve into events during the year or even into the next year.”

What makes volunteering rewarding for Brandi are the friendships and the learning opportunities, as well as watching the planners she mentors move forward and obtain their RPP designations.

“I enjoy being able to shape the future of OPPI if even through a small contribution like planning events or volunteering on committees,” says Brandi. “I always recommend getting involved somehow in your district, especially for new planners. It is an amazing opportunity to meet people, and the contacts you make while volunteering, you can carry with you throughout your career.”

TORONTO DISTRICT

Caroline Samuel, MCIP, RPP
Manager, Zoning Section,
City Planning, City of Toronto
Chair, Toronto District



Caroline has been an RPP since 2008. Currently, she is Manager of the Zoning Section in the City Planning Division at the City of Toronto, where she oversees a team of six professional staff to manage the section’s work program. This includes overseeing the development of zoning regulations to address emerging city-wide planning policies and ensuring regular comprehensive updates to the zoning by-law, resolving zoning by-law appeals, and providing strategic direction on area and site-specific zoning by-laws. Caroline has been volunteering with OPPI for the past nine years.

“I love being engaged in the planning community through running walking tours and mentoring new planners,” she says. “Prior to volunteering with OPPI, I was a co-founder of the York University MES Planning Alumni Committee and spent 10 years volunteering with them.”

While Toronto District has the smallest geography, it has the largest population. District events focus on informative walking tours and social events to provide professional development, mentorship, and networking opportunities.

For Caroline, the most rewarding part of volunteering is seeing new planners progress in the profession and connecting planners through events.

Her message to other Toronto District planners: “Get involved! Meeting and connecting with other planners is a great way to foster relationships in your planning career.”

Learn more about OPPI’s Districts at
<https://ontarioplanners.ca/districts>.

Contributors

Climate change mitigation and adaptation have become priorities for most, if not all, planners in Ontario. Here is what three contributors to this issue of *Y Magazine* have to say about planning for climate change.



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Megan Gereghty, BES, MES, MCIP, RPP
CLIMATE CHANGE ADAPTATION PLANNER
WITH THE CLIMATE RISK INSTITUTE

As a planner with the Climate Risk Institute, climate change adaptation is the focus of my work. My day-to-day involves helping organizations and professionals build capacity through training, policy review, and risk and resiliency assessments to help them reduce their exposure to, and be prepared to handle, more extreme climate events like flooding, drought, and wildfires.

Within this role, the area that interests me the most is mainstreaming. This includes making changes to processes, policies, and procedures to ensure climate change is considered throughout decision-making processes to find solutions that will increase resilience to our changing climate.



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Laura Taylor, PHD, MCIP, RPP
CONSULTING PLANNER AND PROFESSOR
OF ENVIRONMENTAL PLANNING AT
YORK UNIVERSITY

As a university professor, I spend my time thinking and sharing what I learn about climate change. Everything I do is through a climate lens. I teach/advise/supervise/mentor undergrads and graduate students, with whom I learn and share knowledge and skills needed to take climate action in a complex world.

I do unrelenting admin work to run programs and the university and, of course, research, which in my case swings between consulting and social science research on exurbia. I focus on growth management: how to accommodate huge numbers of new people in the Toronto urban region, which is already huge, and at the same time, plan to keep everyone healthy, happy, and safe.

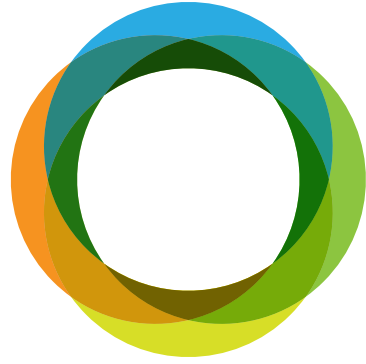


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Meghan MacMillan, MCIP, RPP
MANAGER, URBAN & COMMUNITY
PLANNING WITH WSP

My focus is environmental planning and environmental assessments (EA) for a wide range of public infrastructure projects. The objective of any EA process is ensuring sound decision-making for infrastructure, leading to a solution that meets the project's technical needs balanced with the environmental effects.

I am especially interested in emerging practices around quantifying a project's impact on climate change, as well as climate change impacts on a project. These two considerations are central to integrating climate change meaningfully in the EA decision-making process. I hope to explore this area more in collaboration with the specialists and designers at WSP, so we can apply this to a broad range of projects.



PlanON

AWARDS

Honouring Excellence in Planning

The Ontario Professional Planners Institute (OPPI) honours the outstanding contributions of members across Ontario. The PlanON Awards is a brand-new awards program to honour the exceptional achievements of OPPI members who demonstrate professional excellence and a commitment to advancing the planning profession in Ontario.

The PlanON Awards recognize the important role the planning profession plays in shaping the quality, livability, and sustainability of communities for future generations. Several categories have been created.

The PlanON Public Education Award
The PlanON Innovative Research Award
The PlanON Vision Award
The PlanON Emerging Leadership Award
The PlanON RPP Leadership Award
The PlanON Volunteer Service Award

The ceremony for the recipients of the 2023 PlanON Awards is a highlight of the OPPI Adaptation Transformation Conference in Ottawa.

Find detailed information on categories and eligibility, as well as submission requirements and deadlines for the 2024 PlanON Awards, at www.ontarioplanners.ca/PlanON.



ADAPTATION TRANSFORMATION



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