

CANADA'S CLIMATE CHANGE

ANNUAL REPORT

April 2019 – March 2020 Natural Resources Canada





TABLE OF CONTENTS

1.	Message from the Chair		
2.	2. Canada's Climate Change Adaptation Platform		3
3.	Equipping Canadians for a Changing Climate: 2019 – 2020 Highlights		4
	3.1	Plenary	4
	3.2	Working Groups	7
4.	Other Activities		12
	4.1	Adaptation Canada 2020	12
	4.2	National Knowledge Assessment: Canada in a Changing Climate	12
	4.3	Building Regional Adaptation Capacity and Expertise	14
5.	Annex		15

1.0 MESSAGE FROM THE CHAIR

It is impossible to look back on the work of Canada's Climate Change Adaptation Platform in 2019-2020 and not marvel at how much the world changed in such a short period of time. How stark is the contrast between the Adaptation Canada 2020 conference, which brought Canadian adaptation practitioners and partners together in greater numbers than ever before, and the world we found ourselves living in only a few weeks later? The juxtaposition in time of the conference and the COVID-19 response measures is the most immediate illustration of how quickly things changed but not the only one.

When we planned discussions on how social equity considerations might improve adaptation results at the Adaptation Platform Plenary, we might have used a word like "emerging" to describe the idea. By the end of the March 2020, that word might have changed to "inevitable." We were fortunate to learn from examples of how First Nations approach adaptation with holistic, multidimensional and integrated responses before we then experienced how COVID-19 demands similar ways of thinking to protect people, communities, and livelihoods. Presentations on health dimensions of climate change impacts from colleagues in New Brunswick echoed as the cascading impacts of COVID-19 on our communities, our health care system and professionals became clear. These elements of our work, among others, have been reframed, and the speed with which it happened emphasizes not only the need to continue our commitment, but to accelerate action where and how we can.

Accelerating our efforts would be impossible without the network of networks that come together with the Platform. You will read about examples of the work that network achieves in this report. I am grateful to the participants and Chairs who make up the Platform Working Groups, and who have advanced our understanding in key areas including nature-based solutions, resilience for coastal regions, and disclosure of climate-related financial risks. I am also grateful to the many people who make up the advisory groups for Canada in a Changing Climate, the national knowledge assessment of climate change impacts and adaptation, and the Building Regional Adaptation Capacity and Expertise (BRACE) program. This has been a key year for both of these initiatives, and both have required broad collaboration with a broad group of partners and stakeholders as they work to address our need for up-to-date knowledge and the capacity and expertise to use that knowledge effectively to adapt.

While our usual ways of working have been on pause, climate change has not. We continue to adapt to the new realities to maintain our relationships and our networks in challenging times, and to maintain the momentum we have all worked so hard to create. I am looking forward to seeing what we can achieve.

Chris Jennings

Director, Climate Change Impacts and Adaptation Division Natural Resources Canada

2.0 CANADA'S CLIMATE CHANGE ADAPTATION PLATFORM

The complexity of our natural, social, economic, complicates climate and cultural systems adaptation decision-making. Adapting to climate change requires knowledge, as well as the capacity and resources to be able to use and apply that knowledge. It requires significant collaboration that incorporates many disciplines and diverse sectors to inform a web of decisionmaking processes that ultimately have an impact on one another. The increased collaboration in knowledge creation results in more effective decision-making across communities, businesses, and sectors for long-term climate change resilience.

Canada's Climate Change Adaptation Platform (the "Adaptation Platform") provides a structure to address the complexities of adapting to climate change and supports collaboration. The Adaptation Platform convenes different disciplines and sectors, with representatives from all levels of government, national Indigenous organizations, universities, professional and non-governmental groups, and the private sector. It comprises several key components to create an enabling environment for climate change adaptation: the Plenary body, a series of subject-matter specific Working Groups, the Secretariat, and a broad network of individuals engaged in delivering adaptation actions. In addition, the Regional Adaptation Collaboratives (including the Pan-Territorial Adaptation Partnership) are hubs of regional expertise and resources across Canada, performing outreach and enhancing dissemination of Platform results.

Since 2012, this unique collaboration between the public and private sectors, and across jurisdictions and disciplines, has supported and enhanced collaboration, knowledge creation and dissemination and has equipped sectors and

regions with the tools to address the complex and crosscutting issue of climate change.

Plenary allows different jurisdictions and sectors to leverage resources, knowledge, and skills. The broader reach of the membership (Annex I) creates a "network of networks" (Annex II), a critical component of the Adaptation Platform's knowledge mobilization strategy. This expanded network helps to increase dissemination to targeted audiences, enhance engagement at senior levels within members' organizations, and utilize extended networks to promote the mainstreaming of adaptation in management practices.

Working Groups focus efforts on shared adaptation priorities within their particular subject matter area. Plenary members can nominate participants from their organizations and networks. Participants are then responsible for providing the time, expertise, and in some cases, financial resources needed to implement group activities. Working Group Chairs and the Platform Secretariat also recruit additional members.

Natural Resources Canada (NRCan) chairs and provides the primary resources to support the Adaptation Platform and delivers the secretariat function. The Secretariat supports Plenary; manages a shared online workspace; facilitates interactions amongst Working Group Chairs; runs a webinar series; and produces a regular newsletter and annual report. NRCan's Climate Change Adaptation Program also catalyzes the development of knowledge by providing targeted financial support for projects that address priorities informed by the Working Groups. This contribution funding was allocated through a 2017 Call for Proposals.

3.0 EQUIPPING CANADIANS FOR A CHANGING CLIMATE: 2019-2020 HIGHLIGHTS

3.1 Plenary

The Adaptation Platform Plenary ("Plenary") meets biannually to identify shared adaptation priorities and opportunities for enhanced collaboration and partnerships.

Plenary meetings combine information on actions taken by member organizations and Working Groups with in-depth discussions of emerging issues and strategic approaches to adaptation and implementation. These "deep dives" encourage a holistic approach to identify opportunities, explore new collaborations, and enhance engagement on a more strategic level.

The Plenary held two meetings in 2019. Discussions continued to provide insight on the implementation of adaptation solutions in Canada and to leverage the diverse resources of the group, including knowledge and expertise.



Spring 2019 Meeting

The Spring 2019 meeting was on Tuesday, May 7 and Wednesday, May 8 at Canada's Centre for Geography and Exploration. There were 55 participants: 32 member organizations, 10 invited speakers, and 10 observers.

The agenda featured sessions on Sustainable Finance, First Nations-led Adaptation Approaches, and Including Social Equity in Adaptation.

Sustainable Finance

Two sessions explored sustainable finance and the role of the finance and investment community in accelerating action to adapt. Members discussed the recommendations of the Expert Panel on Sustainable Finance report, *Mobilizing Finance for Sustainable Growth*, and focussed on aligning the financial sector with broader objectives of sustainability to facilitate adaptation. Some of the key directions discussed include:

- Voluntary climate-related financial disclosure to enable markets to price climate-related risk and allow investors to better assess the real costs;
- Coordination between public and private sectors; and
- Ensuring data is accessible, reliable, and applicable to multiple users.

First Nation-led Adaptation Approaches

Building on the spring 2017 half-day session on Indigenous engagement jointly organized and delivered by representatives from the Assembly of First Nations (AFN) and Inuit Tapiriit Kanatami (ITK), the spring 2019 meeting launched an extended focus on Indigenous-led adaptation that will span the next three Plenary meetings. These sessions recognize the climate leadership of Indigenous Peoples and the holistic,

multidimensional, and integrated nature of Indigenous-led adaptation solutions. Led by AFN, the first session of the series focussed on First-Nation-led adaptation approaches. The session emphasized the role of First Nation communities as active agents of change in Canada and highlighted the importance of leadership-based narratives that recognize the assets and abilities of First Nation communities.

Including Social Equity in Adaptation

This session was the first to formally put the social equity dimensions of vulnerability to climate change impacts on the Plenary agenda. The session described the intersecting nature of climate vulnerability and social equity, detailing how equity can influence climate exposure, sensitivity, and adaptive capacity. Discussion explored the ways in which climate change impacts are inherently unequal, detailing the uneven burdens of climate change risks to different people and communities, and the different responses to climate risks that may reinforce problematic behaviours and expectations (for example, how gender norms can shape responses to extreme events). Presentations provided practical examples of how different organizations are starting to integrate social equity and social dimensions, such as a gender, low-income, and age, into adaptation planning and implementation.

Adaptation practitioners and researchers report that integrating social equity into adaptation planning, implementation, and reporting has so far been limited in Canada and there are many opportunities to improve. Adaptation solutions can be more effective, culturally sensitive, and long-term when the social contexts and roots causes of vulnerability are included in their design and implementation.

Fall 2019 Meeting

Delivered in partnership with the Government of New Brunswick, the Fall 2019 meeting was held on Tuesday, November 5, and Wednesday, November 6 in Fredericton, New Brunswick. There were 53 participants: 31 member representatives, 12 invited speakers, and 11 observers.

In addition to the two-day meeting, the Government of New Brunswick hosted a reception. This provided an opportunity for regional adaptation practitioners to highlight projects and programs and meet Plenary members.

The agenda built upon previous discussions from the spring 2019 meeting, and introduced new areas to explore, such as Health and Multi-sectoral Adaptation and Measuring Progress. As the Government of New Brunswick cohosted, there was a strong focus on efforts to advance climate change resilience within the Province. This focus included a session focussed on health and another emphasising flood-risk management.

Sustainable Finance

The session focussed discussion on opportunities to advance sustainable finance within areas of provincial jurisdiction. The Government of British Columbia (BC) completed their Preliminary Strategic Climate Risk Assessment. The resulting report assessed, compared, and prioritized potential climate-related risks, including both discrete events (for example, extreme storms), as well as slow-onset events (for example, sea-level rise). The report evaluated the likelihood and consequences of these events in a high-emissions scenario (RCP 8.5). The Government of BC is now

engaging the full spectrum of the finance and investment sector in discussing climate risks and adaptation to increase investment towards adaptation in BC. With support from NRCan and Environment and Climate Change Canada (ECCC), the Government of BC expressed interest in convening provincial and regional financial experts and senior executives for a deeper dive on the issue in the Province.

Inuit-led Adaptation Approaches

Inuit Tapiriit Kanatami (ITK) presented on the National Inuit Climate Change Strategy to detail Inuit-wide climate priorities and goals that are core to the protection of Inuit culture, language, livelihood, and way of life. The strategy identifies coordinated actions that are necessary to meet adaptation and resilience building needs. It lays out practical objectives to advance Inuit-driven climate actions and guidance on how to work with ITK. The presentation emphasized that Inuit have voiced a clear desire for increased agency, selfdetermination, and leadership over climate action built on partnership and recognition of Inuit governance and rights. The strategy details five priority areas to guide collaboration in order to support these principles, which include advancing Inuit capacity and knowledge, improving Inuit and environmental health, reducing the climate vulnerability of Inuit food systems, closing the infrastructure gap, and supporting regional and community-driven energy solutions for energy independence.

Including Social Equity in Adaptation

Building on the spring 2019 Plenary session, this session aimed to continue engagement on the linkages between climate change, social equity, and the role of adaptation. In a breakout session format, members worked through case study scenarios of real municipalities in Canada. The activity consisted of identifying communities that faced disproportionate risk, collaborating with stakeholders outside traditional partnerships, and determining the role of different actors,

specifically noting the positions of national and regional organizations.

The case studies highlighted the need to apply an "equity lens" into all stages of adaptation planning and implementation, build diverse teams (including organizations that serve marginalized and at-risk populations), and begin from a human-centered approach.

Health and Multi-sectoral Adaptation

The session brought together government health experts from the federal, provincial, and municipal levels, as well as academia, to explore the intersections between health and well-being and climate change. Climate change incidents, such as very hot days and more frequent storm events, have impacts on the physical and mental health of Canadians. In turn, these impacts increase the demand on health services and cause disruptions to health service delivery. The panel provided an informative overview of the ways in which climate change affects health services and the system as a whole, and highlighted the need for crosssectoral collaboration that is co-ordinated and addresses disproportionate impacts within a community.

Measuring Progress

With the increasing demand for climate change adaptation, the session discussed the growing need to re-establish the mandate of the Measuring Progress Working Group in order to support informed decision-making, continuous improvement, and enhance resilience across sectors and regions in Canada. The Measuring Progress Working Group operated under the Adaptation Platform between 2012 and 2016. The objectives of the working group were to build capacity in order to measure progress and to determine the availability and suitability of existing tools, techniques, and data that could be applied in adaptation measurement in Canada.

3.2 Working Group Updates

Over the course of 2019-2020, the Working Groups under the Adaptation Platform have been active in advancing their priorities and Program of Work. Seven of the nine working groups have provided updates below: Biodiversity, Climate Services, Coastal Management, Economics, Forestry, Infrastructure and Buildings, and Mining.

Biodiversity



The Biodiversity Adaptation Working Group met six times in 2019-2020.

The group's work plan, discussions and knowledge

sharing focussed on an emerging area of interest from the 2018 State of Play Report: Promoting natural infrastructure – how protecting, restoring, or enhancing natural infrastructure can be a winwin for biodiversity and people.

The group completed a Biodiversity & Natural Infrastructure Project that yielded three deliverables:

- Targeted interviews with key practitioners to identify best practices and lessons learned to maximize biodiversity benefit;
- Database of Canadian natural infrastructure projects; and
- Simple flowchart summarizing the biodiversity benefits, opportunities and challenges associated with different natural infrastructure approaches.

A session at the fall 2019 Canadian Parks Congress shared the results of both the Biodiversity & Natural infrastructure Project and the 2018 State of Play Report. In late 2019, the Working Group connected with the newly established Federal Engagement on Resilient Natural Solutions Working Group, internal to the federal family and agreed to establish standing items for one another on their respective agendas in an effort to promote collaboration and knowledge sharing.

In January 2020, Alex MacDonald (Climate Change Scientist, Parks Canada) assumed the role of Chair from his colleague, Dr. Elizabeth Nelson (Science Advisor on Conservation & Climate Change, Parks Canada), who stepped down following two years of leadership and several significant achievements for the Working Group, including the 2018 State of Play Report. We thank Elizabeth for her tremendous service.

Alex MacDonald, Parks Canada, is the Chair.

Climate Services



The Climate Services Working Group comprises two subgroups: Monitoring and Training.

The Monitoring Sub-group's activities continue to support two

national efforts: the Standards Council of Canada's (SCC) initiative on the development of *Standardized Guidance for Weather and Climate Data Collection Systems* and ECCC's Collaborative Monitoring program.

The top activities in 2019-2020, included:

- Providing input to SCC and the Canadian Standards Association on the scope and development of standards for weather and climate data in Canada. The Monitoring Subgroup helped to identify and recruit experts, data users, and network operators to participate in the technical committees overseeing the work.
- Initiating a contract to develop an inventory of monitoring networks and stations owned and / or operated by local governments, industry, and private organizations across the country. Over the past year, members identified contacts for existing networks and developed a survey to gather information on the characteristics of each network. Once complete, the inventory will provide clarity on the status of networks across the country, and identify larger scale gaps for weather and climate monitoring in Canada.

Supporting the establishment of a national council for weather and climate monitoring, with representatives from each province and territory and the federal government. The sub-group provided input on the council's Terms of reference, as well as endorsed a national data management and dissemination strategy for consideration during the council's first meeting. The council is a Federal-Provincial-Territorial forum whose purpose is to improve communication amongst weather and climate-monitoring stakeholders, share standards and best practices, and explore the potential for cross-regional collaboration.

Members are currently setting the strategic priorities for the upcoming fiscal year. Completion of the inventory of monitoring networks and stations, as well as continued support for the national council for weather and climate monitoring remain top priorities to guide work moving forward.

The Monitoring Sub-group Co-chairs are Ted Weick, Government of BC, and Jamie Smith, ECCC.

The Training Sub-group's top activities in 2019-2020, included:

The co-development of beginner-level introducing training materials climate information (led by the Canadian Centre for Climate Services, Ouranos, and the Pacific Climate **Impacts** Consortium). The presentation is available for educators and trainers to use in their own sessions and introduce basic historic and future climate change concepts to support the use of climate information in decision-making. The Training Sub-group provided input and feedback at every stage of development and piloted an early version of these training materials. These training materials are freely available for download.

- The final deliverables from the 2018-2019 contracted scan of climate services related training disseminated to the Training Subgroup in 2019-2020.
- The priorities have emphasized sharing training experiences, resources, and lessons learned as the Training Sub-group grew to more than 40 members this year.

During 2020-2021, the Training Sub-group will continue to explore opportunities to collaborate on training development and scale up training products. The group will continue to emphasize shared learning. The Sub-group is considering training videos and providing input on best practices for ClimateData.ca.

In March 2020, Kari Tyler (Pacific Climate Impacts Consortium) assumed the role of Co-Chair from Stephanie Austin (ECCC) who contributed significantly to the work conducted over the past two years.

The Training Sub-group Co-Chairs are Isabelle Charron, Ouranos and Kari Tyler, Pacific Climate Impacts Consortium.

Coastal Management



In May 2019, the Coastal Management Working Group (CMWG) supported a Climateresilience Coastal Natural Infrastructure Workshop and

Field Trip, hosted by Saint Mary's University and the Cold Regions Living Shorelines Community of Practice (CRLS CoP). Participants traveled from across Canada and the US, and included coastal practitioners, natural and social scientists, students, government officials, and Indigenous groups. The workshop engaged participants in a critical discourse around the feasibility of nature-based adaptation (NbA) by defining successful cases, developing frameworks, and mobilizing collective lessons learned to inform future action. Presentations and other workshop resources are available through CRLS CoP.

During 2018-2019, the CMWG collaborated with the Geological Survey of Canada (GSC) to initiate a process to develop national sea-level guidance in consultation with provinces and territories. The proposed guidance will support governments and communities in applying relative sea-level projections in a Canadian context and lead to a more consistent approach for adaptation planning. The guidance will incorporate emerging sea-level projections and best practices. Tom James, GSC, hosted a workshop during Adaptation Canada 2020 to gain feedback from scientists and adaptation practitioners on how the guidance could better support Canadians.

Work in the year ahead will focus on a number of priority areas, including managed retreat. In February 2020, NRCan contracted Gevity to conduct a scan and needs analysis on the current state of managed retreat approaches and policies in Canada.

Seven NRCan supported adaptation projects are scheduled to be completed by November 2020. The projects focus on two key topics, alternative and innovative approaches to hard protection infrastructure and innovative policy instruments. An early deliverable from this program was the OECD report "Responding to Rising Seas" that profiled coastal infrastructure realignment and salt marsh restoration in Nova Scotia.

Mary-Ann Wilson, NRCan, and Erin Taylor, Government of Prince Edward Island, are the Co-Chairs.

Economics



This year, the Economics Working Group (EWG) has focussed on the implementation of eight projects that address the overarching objectives of the

working group: creating economic knowledge and tools to help decision-makers in both the private and public sector to make better adaptation investment choices and policy decisions.

The Chartered Professional Accounts of Canada (CPA Canada)-led project made significant progress this year. The intent is to build the capacity of corporations and municipalities to disclose the risks posed by climate change impacts and to encourage use of climate change information in internal decision-making. Progress on this project includes:

- Release of <u>Disclosing the Impacts of Climate</u> Change: A Process for Assessing Materiality;
- Roundtables with the financial <u>Mining</u> and <u>Energy</u> sectors to share views on growing investor requests for climate-related information; and
- Release of <u>Enhancing Climate-related</u>
 <u>Disclosure by Cities: A Guide to Adopting the</u>
 <u>Recommendations of the Task Force on</u>
 Climate-related Financial Disclosure.

A session at Adaptation Canada 2020 highlighted the work on municipal disclosure.

The EWG's goals for 2020 will be to wrap up the projects and ensure that their results are widely disseminated.

Pam Kertland, NRCan, is the Chair.

Forestry



The Forestry Adaptation Working Group (FAWG) subcommittee engaged in a series of teleconference meetings in order to develop key documents.

The Chair presented FAWG members with the opportunity to review, comment, and endorse for implementation the following documents:

- The Revised Program of Work, which is anticipated to be finalized at the end of March 2020;
- Annual work plan, which is in progress; and
- Revised Terms of Reference, reflecting the changes to the Program of Work and annual work plan.

Some of the strategic priorities for the upcoming year include:

- Connect with the Canadian Council of Forest Ministers on shared priorities;
- Set priority actions and procuring resources to inform the annual work plan under the strategic objectives to strengthen the evidence base, build capacity, and outreach; and
- Mobilize and target knowledge exchange.

Winnifred Hays-Byl, NRCan, is the Chair.

Infrastructure & Buildings



The Infrastructure and Buildings Working Group (IBWG) conducted four meetings in 2019, including a meeting focussed on strategic discussion of the IMWG

in March 2019. This meeting included a status review of the IBWG and discussion of current and future priorities. Members reaffirmed the current functions of the IBWG, which includes serving as an information dissemination and discussion forum.

Representatives of the following organizations were guest speakers at IBWG meeting in March, June, October and December 2019:

- University Health Network (hospitals / health facility adaptation, Toronto);
- Canadian Centre for Climate Services;
- National Research Council (National Wildland-Urban Interface Fire Guide);
- Global Water Futures Project (climate-related precipitation extremes project);
- Western University (Multi-Hazards Risk Initiative); and
- The Council of Canadian Academies (Expert Panel on Climate Change Risks and Adaptation Project Report).

Throughout 2019, individual members provided overviews of their organizations' ongoing work concerning infrastructure and buildings adaptation

topics. The following groups provided presentations:

- Manitoba Infrastructure and Transportation;
- Government of New Brunswick:
- Natural Resources Canada;
- Canadian Home Builders' Association;
- Engineers Canada;
- Federation of Canadian Municipalities; and
- Vancouver Coastal Health.

The IBWG has agreed to continue its function as a knowledge dissemination and discussion forum. The IBWG Co-Chairs will continue to work with the buildings, infrastructure, and adaptation community to identify relevant speakers and participants for upcoming IBWG meetings.

Priorities identified during the March 2019 IBWG strategic discussion meeting included expanded membership in the IBWG.

In 2017, the IBWG produced a State of Play report. Whilst the WG does not have resources to pursue priorities identified in the report, membership has learned that the report has been applied widely by various federal agencies and has served as a resource for infrastructure and buildings adaptation. An assessment of the priorities identified in the IBWG's 2017 State of Play is a further objective for work in 2020.

During the March 2020 meeting of the IBWG, the new Co-Chairs were named — Chad Nelson (Infrastructure Canada) and Dan Sandink (Institute for Catastrophic Loss Reduction).

Mining



The Canadian Minerals and Metals Plan (CMMP) launched in 2019. The CMMP has an ambitious vision and targets that will drive Canadian mining to the

forefront. The <u>CMMP March 2020 Action Plan</u> includes a strong focus on climate adaptation, including the goals of the working group and leveraging Adaptation Platform projects such as assessing climate change risks to orphaned and

abandoned mines and the development of adaptation best practices. Updated action plans will be released in 2021 and 2022, respectively, with subsequent ones following every three years. The MWG engages with this process.

In May 2019, the Chartered Professional Accountants of Canada (CPA Canada) hosted a roundtable that concluded that industry needed consistent definitions and guidance on how to document and interpret climate-related risk disclosures. Building off these initial findings, NRCan was tasked at the 2019 Energy and Mines Ministers' Conference (EMMC) to assess how the mining industry can meet the needs for disclosure of physical climate change risks and actions required to build the capacity of industry to meet this need. EMMC 2020 will present the results of this analysis.

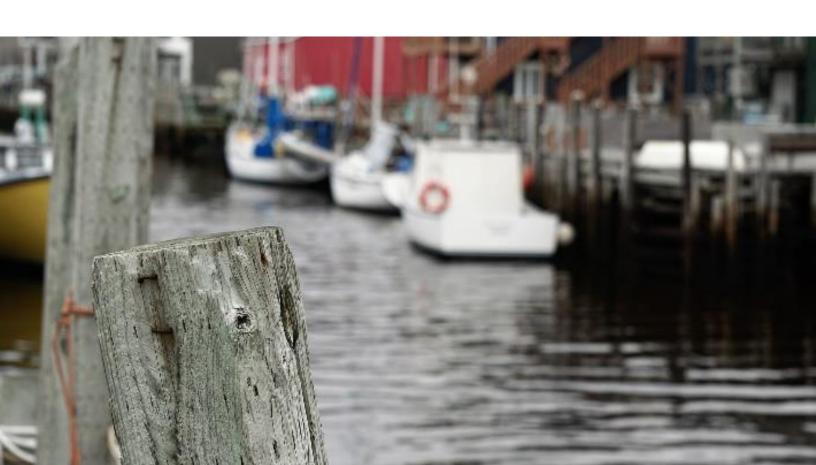
The Mining Association of Canada (MAC) has been leading a project to develop guidance for the incorporation of climate change risk and adaptation in all stages of mine life. They presented their work at Adaptation Canada 2020. This spring, the results will be presented to MAC's Board of Directors.

Work in the year ahead will focus on a number of priority areas, including addressing adaptation in a re-imagined National Orphaned and Abandoned Mines Initiative (NOAMI). The NOAMI Secretariat is holding a two-day workshop on the long-term management and remediation of orphaned and abandoned mine sites in Canada, including the impacts of climate change and implications for current management practices.

Five NRCan supported adaptation projects will be completed in 2020. The projects focus on two key topics, adaptation best practices in the mining sector, and climate risk assessments on existing orphaned and abandoned mines.

Results from these projects will be presented to the working group and through webinars, and available through the NRCan Adaptation Platform webpage.

Pam Kertland, NRCan, is the Chair.



4.0 OTHER ACTIVITIES

4.1 Adaptation Canada 2020

Adaptation Canada 2020, Canada's national conference on climate change adaptation, took place from February 19 – 21, 2020 in Vancouver, British Columbia. Hosted by the Fraser Basin Council, this was the second iteration of the Adaptation Canada conference, following the Ottawa, Ontario event in 2016. Adaptation Canada is the only national conference that exclusively centers issues related to climate adaptation. This the sessions focussed on practical vear application. The program schedule had eight key tracks, including Financing Resilience, Showcasing Solutions, Ecological Resilience, Professional Practice and Capacity Building, Raising Awareness and Broadening Engagement, Addressing Climate Change Inequities, Health, and Youth.

The conference was oversubscribed and convened 750 participants, representing all levels of Indigenous communities government, organizations, non-governmental organizations, private sector, industry, and academia. There were concerted efforts to be more inclusive on the agenda and in participation, recognizing the barriers that many communities face in accessing these spaces. There was a Youth Panel and Crown-Indigenous Relations and Northern Affairs Indigenous Canada and Services Canada supported Indigenous participants with funding opportunities.

4.2 Canada in a Changing Climate

For many years, key stakeholders and partners, including members of the Adaptation Platform, have been advocating for digital, interactive versions of our Assessment reports. In 2019-2020, we started delivering our reports on ChangingClimate.ca, a new, interactive web site, in addition to delivering them as traditional PDF reports.

The first report in the series, <u>Canada's Changing</u> <u>Climate Report</u>, was released on April 1, 2019 through the new digital platform. Led by ECCC, this report provides comprehensive information on how and why Canada's climate has changed, and the future projected changes. The report received massive Canadian media coverage with nearly 500 articles in Canadian media outlets in the first week, as well as international attention. The new digital version has had over 90,000 visitors to date and a recent survey indicated that 94% of users accessed the online version.

There is steady progress towards the development and release of the next reports in the series, which include the National Issues and Regional Perspectives, Health in a Changing Climate, and Indigenous Resilience.

National Issues and Regional Perspectives Reports

Led by NRCan, these reports will provide national and regional perspectives on how climate change is affecting our communities, environment and economy, and how we are adapting.



Starting in mid-2020, chapters on specific topics and regions will be released on a rolling basis through ChangingClimate.ca. Over the past year, the authors focussed on finalizing their first order drafts, preparing for the external review process and addressing review comments. This is the first assessment to include both invited and self-registered expert reviewers through the external review process. We have observed an exceptional level of commitment and dedication by reviewers, who have submitted insightful and constructive comments that are improving the overall quality and credibility of the reports.

We held our third in-person meeting in September 2019, bringing together the coordinating lead authors and Advisory Committee members to share lessons learned, discuss challenges and begin planning for release. We continue to be thoroughly impressed and motivated by the high degree of expertise and engagement of the entire assessment team in this process.

Health in a Changing Climate Report

This report provides an assessment of the risks posed by climate change to the health of Canadians and to the health care system, and will support actions by a range of actors involved in health-related decision-making. The external review process is currently underway, with the full report expected to be released in 2021.

Indigenous Resilience Report

Graeme Reed, Senior Policy Analyst at the AFN, and Shari Fox, Research Scientist with the National Snow and Ice Data Centre, are co-leading the report. The report will draw on Indigenous knowledge, perspectives and experiences, and will explore multi-dimensional and intersecting aspects of climate change impacts and adaptation. The first in-person gathering of authors took place in February 2019, and focussed on co-producing key themes and messages for the report. The report is expected to be released in 2022.



Canada in a Changing Climate Survey

The team launched a user survey in late 2019 to gather feedback on how information about climate change impacts and adaptation is used, and to identify what topics and formats are most useful. We thank all respondents for sharing their views, which will help inform future national knowledge assessment processes and products.

Interested in learning more about the Assessment process?

Visit the <u>Canada in a Changing Climate</u> website, <u>follow our progress</u> or contact the <u>National</u> Assessment Secretariat.

4.3 BRACE

The Building Regional Adaptation Capacity and Expertise (BRACE) Program is a five-year (2017-2022), \$18M initiative under the Pan-Canadian Framework on Clean Growth and Climate Change. BRACE addresses a critical barrier to increasing action on climate change impacts in Canada: knowledge and tools exist, but the capacity to use them is limited. The Program is increasing the ability of communities, organizations, small and medium-sized enterprises and practitioners to access, use, and apply knowledge and tools on climate adaptation in their work. The BRACE Program comprises over 18 cost-shared projects in 10 provinces (Projects in Quebec and Manitoba are under development). Through the BRACE Program, projects are increasing adaptation action by undertaking a variety of capacity-building activities, such as specialized training, learningby-doing, internships, and regional communities of practice. BRACE Projects are working in partnership with provinces, non-governmental organizations, universities, **Indigenous** communities, industry, professional associations, and local governments to deliver capacity-building objectives and to reach target audiences.

BRACE projects share common objectives, themes, target audiences, and capacity-building activities. Projects, therefore, benefit from opportunities to collaborate and exchange ideas and information. To support this pillar of the program, NRCan developed a BRACE Knowledge-Exchange and Mobilization Plan (2019) that identifies a list of activities for fostering collaboration and knowledge-exchange among BRACE Projects. Over the past year, NRCan has organized and facilitated the launch of a quarterly presentations, BRACE Newsletter, webinar conference call meetings, and an in-person workshop. At the BRACE Committee Workshop held in February 2020, BRACE Project leads exchanged lessons learned to date, developed opportunities for cross-cutting capacity-building activities, and built relationships and professional networks.

The BRACE Program held two poster presentations at national conferences this year. BRACE posters raised awareness of the program and its objectives at the National Adaptation Forum in Wisconsin, USA (April 2019) and Adaptation Canada 2020 in Vancouver, B.C. (February 2020). The program also provides public-facing updates on the NRCan BRACE webpage, including a searchable list of projects.

Future planning for the BRACE Program is currently underway. The program will continue to facilitate cross-regional and thematic collaboration through knowledge-exchange initiatives, including a new web-based platform for sharing project activities. Planning is also underway for an inperson meeting with BRACE project leads and provincial representatives.

5.0 ANNEXES

Annex I: Plenary Membership

- Plenary Chair Natural Resources Canada, Lands and Minerals Sector; Chris Jennings
- Plenary Co-chair November 2019 –
 Government of New Brunswick; Jeff Hoyt

Territorial and Provincial Governments

- British Columbia Ministry of Environment Climate Action Secretariat; Archie Riddall
- Manitoba Manitoba Conservation and Water Stewardship; Neil Cunningham
- New Brunswick New Brunswick Environment and Local Government; Robert Capozi
- Newfoundland and Labrador Office of Climate Change and Energy Efficiency;
 Joshua Barrett
- Northwest Territories Environment and Natural Resources; Michele Culhane
- Nova Scotia Nova Scotia Environment; Jason Hollet
- Nunavut Climate Change Secretariat;
 Andrew Dunford
- Ontario Ministry of Environment and Climate Change; Heather Pearson
- Prince Edward Island Department of Environment, Labour and Justice; Erin Taylor
- Saskatchewan Ministry of Environment; Lynn Kelley
- Yukon Climate Change Secretariat; Rebecca World

Federal Government Departments and Agencies

- Agriculture and Agri-Food Canada;
 Alexandre Lefebvre
- Crown-Indigenous Relations and Northern Affairs Canada; Marlene Doyle
- Environment and Climate Change Canada;
 Laniel Bateman
- Fisheries and Oceans Canada; Keith Lennon
- Health Canada; Carolyn Tateishi
- Infrastructure Canada; Chad Nelson
- Natural Resources Canada, Canadian Forest Service; Winn Hays-Byl
- Parks Canada; Alex MacDonald
- Public Health Agency of Canada; Christina Lee-Fuller
- Public Safety Canada; Arjun Vinodrai
- Standards Council of Canada; Brady Allin
- Transport Canada; Maxine Bilodeau

National Indigenous Organizations

- Assembly of First Nations; Tonio Sadik
- Inuit Tapiirit Kanatami; James Kuptana
- Métis National Council; Kathy Hodgson-Smith

National Associations and Research Organizations

- Chartered Professional Accountants of Canada; Gord Beal
- Canadian Electricity Association; Jay Wilson
- Engineers Canada; David Lapp
- Federation of Canadian Municipalities; Devin Causley

- Forest Products Association of Canada; Robert Laroque
- Insurance Bureau of Canada; Claudia Verno
- Institute for Catastrophic Loss Reduction; Paul Kovacs
- Mining Association of Canada; Brendan Marshall
- Ouranos; Alain Bourque
- University of Waterloo; Jean Andrey

Observers

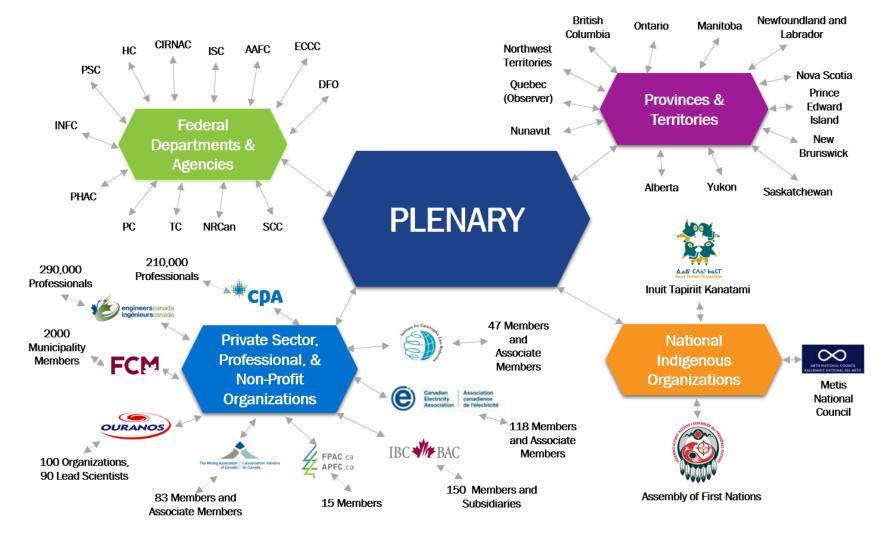
 Québec - Ministère du développement durable de l'environnement et des parcs; Sandra Garneau

Adaptation Platform Secretariat (Natural Resources Canada)

Elizabeth Atkinson | Ericha Moores

For more information or to contact individual members please email: NRCan.Adaptation.RNCan@Canada.ca

Annex II: Plenary Organization



AAFC: Agriculture and Agri-food Canada, CIRNAC: Crown-Indigenous Relations and Northern Affairs Canada, DFO: Fisheries and Oceans Canada, ECC: Environment and Climate Change Canada, HC: Health Canada, ISC: Indigenous Services Canada, INFC: Infrastructure Canada, NRCan: Natural Resources Canada, PCA: Parks Canada Agency, PHAC: Public Health Agency of Canada, PSC: Public Safety Canada, SCC: Standards Council of Canada, TC: Transport Canada.