Canadian Federation of Earth Sciences

21st Annual General Meeting

April 17-18, 2020

By Teleconference

Respectfully submitted to the Canadian Association of Geographers, Mary-Louise Byrne

The Annual General Meeting is usually held in Ottawa, but given the pandemic, it was held virtually using GoToMeeting. There was a full agenda that required the evening of 17 April and four hours on 18 April.

Graziella Grech (CFES President) highlighted changes in the Board:

- Iain Samson and Christian Bohm both completing their terms. Thanked both for their contributions over the past 4 years.
- Welcomed Rachel Newrick, nominated for President-elect.
- Katherine Dunnell (Media Relations) resigned. Discussion will look at where to go on this.
- National Geoscience Research Plan (NGRP) championed by Mostafa Fayek. NGRP to raise awareness of geoscience research and to secure greater funding. Different from Pan Canadian Geoscience Strategy of Daniel Lebel.
- CFES Strategy (Ollie Bonham) moving from 5-year to 3-year rolling strategy to be reviewed annually.

A Financial report and budget proposal (Jen Parks) were reviewed noting the following:

- \$12,000 proposed for the CGEN website upgrade, likely offset by less executive travel
- Net operating loss due to CGEN website costs, previously budgeted but not spent in previous years with surplus, therefore no net loss over time.
- Discussion of member association dues

PAGSE (Partnership Group for Science and Engineering) presentation by Jérôme Marty who is continuing as Chair of PAGSE from Maria De Rosa. Reviewed PAGSE:

- After 25 years in operation, comprises 20-25 science and engineering member organizations whose members in turn total 50,000. CFES is one of the largest.
- Best known for Bacon and Eggheads, the only one to give top quality monthly presentations on Parliament Hill. Audience comprises MPs and Senators and usually some of the public.
- SciEng Pages are 2-page policy briefs on key topics, distributed on the hill to mailboxes of all MPs and Senators. The last one was on Cannabis.
- PAGSE is invited annually to comment on the upcoming federal budget and appears in front of the Finance Committee. PAGSE follows up on and supports recommendations in the C.
- Funding from annual fee from members, also from sponsorships, key being NSERC and CANARIE who specifically carry costs of B&E
- Each member has a rep who sits on PAGSE Council, 2-3 times per year.

- SCIENG PAGES can be viewed at <u>www.sciengpages.ca</u>.
 - These are free; aim to increase discussion on topical issues that have science and engineering at their core. Summarize current state of knowledge and the policy landscape and translate knowledge into language that is readily understandable to politicians and public.
 - Objectives for 2020-21: Hired a new manager Emma Brown: <u>ebrown@nature.ca</u>
 - Hope to resume Bacon and Egghead presentations when safe and Parliament resumes
 - Aim to reinvigorate SciEng Pages
 - Develop new website and rebranding
 - Incorporate PAGSE as official non-profit organization.
- Follow PAGSE on Twitter @ottawaeggheads
- Any questions on PAGSE operations please email Emma Brown: <u>ebrown@nature.ca</u>
- Any general PAGSE questions please email Jérôme: <u>imarty@uottawa.ca</u>

National Geoscience Research Plan, (NGRP Mostafa Fayek): started about a year ago. Earth Scientists are disorganized regarding NSERC, always lagged in funding compared to chemists, biologists, physicists. Need to determine big questions to raise profile. Came up with NGRP concept. Spoke with several Earth Scientists and gained input through the CCCESD (Council of Geology Chairs) which is a problem because Physical Geography is not represented, nor do we have a voice.

Current status of NGRP - given the above, with the encouragement of the CFES, Mostafa compared similar initiatives in Australia, United States and Europe. Australian one was successful, European one not at all. National Geoscience Research Plan focuses on research and is directed toward NSERC more than anything else. Should certainly coordinate with Pan-Canadian Geoscience Strategy, open for suggestions. At this meeting, comments welcomed, input sought from the Member Organizations.

Geographers need to be brought in along with the CCCESD. Physical Geographers are researching various Earth Science topics including Hydrology, Geomorphology, Climatology that would fit in on these big topics, and they are NSERC funded. The process should be expanded to include geographers.

- Member organizations reminded that big topics, not disciplines are sought. Are there any additional complicated big questions? Example Geoethics is another big topic raised by Jan Boon.
- Need to determine what constituted success in Australia vs. failure in Europe. We need to know how this is measured.
- Discussion about role of CGEN
- Question for Councillors: what should we do with the Media Liaison position? How to tackle? Additional need: list of experts available to respond if there are media questions.
- Larger discussion held Saturday.

Friday evening recessed.

Saturday Morning Session, April 18, 2020

The **formal CFES Annual General Meeting** (includes election of officers) (Graziella Grech) took place from 11:00 - 11:20.

Pan-Canadian Geoscience Strategy (P-CGS) discussion that called for renewed collaboration on New minerals for green economy. Canadian Minerals and Metals Plan (CMMP) started 2 years ago, new policy framework for minerals. Ministers of mines and all provinces supported this. P-CGS to be renewed every five years. Has required meeting with Directors of Provincial and Territorial geological surveys that do not have policy branches.

Strategy needs to answer several questions:

- 1. How do you see the role of CFES in the Pan-Canadian Geoscience Strategy (P-CGS) and next generation geoscience vision?
- 2. Do you consider the following Pan-Canadian priorities listed below to be priorities for you to do your work? If yes, what is most important?
 - a. Framework geological mapping and associated thematic studies;
 - b. Mineral and petroleum potential assessments;
 - c. Improved access to online data and information.
- 3. What areas of geoscience in Canada require enhanced federal/provincial/territorial coordination?
- 4. How can Canada's geological surveys remain globally competitive in an era of unprecedented technological advancements?
- 5. How can Canada's geological surveys improve communication and coordination with communities and Indigenous Canadians to assist with land-use planning?
- 6. What challenges do you experience as a geoscientist in Canada? How could these challenge(s) be mitigated by a pan-Canadian strategy (and hence a greater alignment of federal/provincial/territorial priorities)?

ACTIONS series for CFES, to be overall completed within about 1 month, endorsed by Councillors:

- CFES Board to request Councillors/MOs to send further input within 1 week following AGM.
- CFES Board to draft letter and return to Councillors for final input within next 1 week.
- CFES Councillors to respond re draft letter within next 1 week
- CFES Board to finalize via May 7 Board meeting and submit to Daniel on behalf of Councillors.

Canadian Federation of E	Canadian Federation of Earth Sciences, Council Meeting, April 17-18, 2020	il 17-18, 2020	
Agenda # 7a. National Geoscie	eoscience Research Plans		
Australia *1	USA ^{*2}	Europe/UK *3	Canada *4
Food and water sustainability The Early Earth	/ The Early Earth	Global geological/solid Earth cycles Climate change	Climate change
Mineral Resources	Thermo-Chemical Internal Dynamics and Geomorphology	Geomorphology	Natural resources (mineral, water, soil)
	Volatile Distribution		
Energy Futures	Faulting and Deformation Processes	Geohazards	Geohazards
Geohazards	Interactions among Climate, Surface	Energy futures	Energy futures
	Processes, Tectonics, and Deep Earth		
	Processes		
	Co-evolution of Life, Environment, and	Outreach and education	Global geologic cycles (atmosphere-
	Climate		biosphere-geosphere interactions)
	Coupled Hydrogeomorphic-Ecosystem		Global change and the enviornment
	Response to Natural and Anthropogenic		
	Change		
	Biogeochemical and Water Cycles in		Geoethics, outreach and education
	Terrestrial Environments and Impacts of		
	Global Change		
	Geochronology		
*1: Please see 7b. Our Planet,	*1: Please see 7b. Our Planet, Australia's Future. A decade or transition in Geoscience. A decadal plan for Australian Geoscience 2018-27	in Geoscience. A decadal plan for Au	stralian Geoscience 2018-27
and 7c. Background	and 7c. Background information and extended commentary underpinning the above.	nderpinning the above.	
*2: Please see 7d. New Reseau	*2: Please see 7d. New Research Opportunities in the EARTH SCIENCES. By the National Science Foundation, Washington D.C.	By the National Science Foundation,	Washington D.C.
*3: Please see 7e. EARTH SCIENCE EU	ENCE EUROPE: DEVELOPING EARTH SCIENCE FOR EUROPE	E FOR EUROPE	
*4: For discussion by Councille	*4: For discussion by Councillors of the Canadian Federation of Earth Sciences, April 17-18, 2020.	iences, April 17-18, 2020.	

National Geoscience Research Plan (NGRP) continued discussion seeking Councillor input.

Table 1 Summarized plan comparisons.

- NGRP complementary to Pan-Canadian Geoscience Strategy which focuses on making government geoscience relevant to Canadians
- NGRP audience is funding agencies, focus on NSERC

Why has Australian plan been more successful, and does this have a bearing on Canada?

- One difference is that Europe's was grass roots trying to propose to government, whereas US and Australia are top down. In Canada, the chemists and physicists gave NSERC 3 priorities and were successful. Geoscientists gave a dozen unfocused.
- Now NSERC's applied programs are being replace by the Alliance Grant Program, the idea being to get prepared for when a government agency asks for what we can do.
- Also, in Australia CSIRO is in the business of developing technology that industry can use. These bridge the industry-academia area. Australia is more successful as top-down and industry is engaged.
- NSERC clearly supports industry-academia collaboration; NGRP should target this.
- Aim to emulate Canadian physicists whose permanent funding committee is on their website. Physicists plan ahead and work regularly on the plan to achieve success. Need a smaller group of highly respected scientists.

How to move NGRP forward:

- CFES working group to build document and deliver it: begin with smaller group selected from CFES' 13 Member Organizations.
- Work to move forward quickly. Try determine i) 3-4 grand challenges, ii) outline what kinds of research could contribute to the grand challenges.
- Member Organizations send ideas to working group, e.g.: what member of working would represent their interests, what are two major needs, who is interested in contributing and proposed time frames.
- Working Group to generate draft and Mostafa to circulate to and from Member Organizations. Input from MOs within next couple of weeks, delivery by next April.

A working group was created and council voted unanimously to support it.

The following volunteers from the current CFES Council Meeting to form a nucleus to work with Mostafa on the NGRP: Sandy Archibald, Mary-Louise Byrne, Andrew Conley, Mike Hall, Dan Marshall and Beth McLarty Halfkenny. Working group to reconvene within a month, on about the first week of June 2020.

• Ollie re budget: CFES will support using GoToMeeting. CFES will budget for graphics, desktop publishing and other communications materials as may be needed.

CFES Strategic Plan 2020-2023, (Ollie Bonham) reviewed 5-year plan that is coming to an end.

Proposed to move CFES to a 3-year Strategic Plan, more of an organic working document. The CFES Board sought acceptance from Council for this tabulated, hierarchic structure with broad strategic initiatives under which short tactical actions would be achieved in set time periods.

Reviewed the Mission Statement. Accepted it as a continuing mission.

Discussed tactical actions.

Strategic Plan was discussed and is presented as Table 2 on the next two pages. Updates from the meeting to be added to document post-meeting.

CFES – Strategic Plan 2020-2023

"Our Mission

CFES is the coordinated voice of Canada's Earth Science community, ensuring that decision makers and the public understand the contributions of Earth Science to Canadian

society and the economy.

The mandate of CFES is carried out through its committees. We coordinate overlapping efforts among member organizations to maximize efficiency and impact. Nationally, CFES advocates for the importance of Earth Science to all Canadians through our memberships in the Partnership Group for Science and Engineering (PAGSE) and the Science Media

1. Objective #1 - Provide coordinating role and common voice for MOs and the ES community in Canada a) Develop, implement communications strategy and monitor i) Develop and implement CFES Communication Plan by end Y1 for effectiveness ii) Monitor, adjust and assess Plan effectiveness by end Y2		
a) Develop, implement communications strategy and monitor i) L for effectiveness ii) / 2010 end	MOs and the ES community in Canada	
	 i) Develop and implement CFES Communication Plan by end Y1 	
	ii) Monitor, adjust and assess Plan effectiveness by end Y2	
() (9)		
<u>(ii)</u>		
2. Objective #2 - Coordinate Public Policy Advocacy on behalf of ES in Canada	S in Canada	
a) Facilitate the development of a national Research Plan for <i>i</i>) S	i) Support CFES volunteers and others to draft plan;	
ES	engage MOs in review/finalization; and foster plan	
en	endorsement and release by mid Y2	
<u>ii)</u>	ii) Monitor response and Plan effectiveness by end Y3	
b) Issue Climate Change Statement i) C	i) Conclude committee work drafting, achieve MO	
en	endorsement and release Statement by end Y1	
3. Objective #3 - Facilitate public awareness of Earth Science and Earth Science literacy	Earth Science literacy	
a) Ensure all existing ES public awareness and ES literacy i) A	i) Assist CGEN with transition to its new website for	
initiatives under the auspices of CFES thrive and expand, cor	completion by end Y1	
including CGEN and EdGEO.	ii) Champion CGEN completion/release of Education and	
Ou	Outreach Handbook for National Meetings by end Y1 (a	
RFG	RFG2018 legacy project)	
())	iii) Incrementally expand Geoscientists-in-National-	
Par	Parks program through Y1-Y3	
[iv]	iv) Expand Ottawa-based Geoheritage Day to become	
Na	National Geoheritage Week by end Y2	

Centre of Canada (SMCC), and other communications efforts."

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Strategic Initiatives	Tactical Actions – with timelines (Y1, Y2 or Y3)	Discussion points
	 v) Champion introduction of a national Geoweek event for Canada by end Y3 	
(p)	()	
	ii)	
c)	()	
4. Objective #4 - Represent Canadian Earth Science internationally	nally	
a) Maintain active engagement in IUGS-CNC, IGCP and other	()	
international ES entities	(i)	
(q)	()	
5. Objective #5 - Provide service to MOs in particular, and to the Earth Science community in general	he Earth Science community in general	
a) Provide public clarity on ES issues though release of CFES	i) Conclude and release Climate Change Statement by	
Fact Sheets and apolitical Position Statements	end Y1 (including committee work drafting, achieve MO endorsement and public release)	
	ii) Resolve SciEngPages matter with PAGSE (i.e. advance or abandon by end Y1.	
	ii) Decide on desire/feasibility of CFES introducing ES	
	Fact Sheets to bring current ES topics to attention of the	
	public and policy makers by end Y1	
c) Increase CFES engagement in public policy discussion, and in	iii) Establish CFES Board position with responsibility for	
government and media liaison on ES issues	public policy, and government and media liaison by end Y1	
	iv) In collaboration with the MO create and maintain	
	national ES Expert List for media access purposes by end Y2	
 d) Shift from updating CanGeoRef to support for Open Data system for Canadian geoscience bibliographic records. 	 i) Decide about go-forward support or not of CanGeoRef by end Y1. 	
	ii) Shift from updating CanGeoRef to supporting federal/provincial surveys to transition to Open Data	
	system to make ES records readily and widely discoverable. National transition - complete by end Y2.	
6. Coordinate support for professional and academic organizations in Canada.	tions in Canada.	
a)	i)	
	()	
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