## Professional Engineers Ontario Nancy Hill, P.Eng., LLB, FEC, FCAE



- Regulation Changes: Council term limits, fees transfer to bylaw, French translation
- Regulatory Conflict Program: Three change letters sent to government in 2018; four in 2019
- New Practice Guideline: Assuming Responsibility and Supervising Engineering Services

- Self-regulators Under Scrutiny: Stream of media reports suggesting regulators putting member interest first
- Continuing Professional Development: External pressure for mandatory CPD (Elliot Lake Inquiry, Downsview stage collapse)
- Employers: Focus group revealed employers are primary target group to which value of licence should be promoted

- External Regulatory Performance Review: Council sought independent review in light of current climate
- PEAK Program: Two-year anniversary of voluntary CPD and reporting program (March 31)—www.peopeak.ca
- Council Term Limits: Ensures fresh perspectives are brought to Council

### **Challenges for the Profession**

- Canadian Experience Requirement: Justification being sought for Canadian experience requirement for licensure
- Governance: External pressures on regulator to examine the governance structure
- Seamless Transition: Creating a natural progression from engineering student to licence holder

### Ordre des ingénieurs du Québec Kathy Baig, Eng., FEC, MBA President



### **Government trusteeship lifted in February**

A result of...

- Improved public protection mechanisms
   Main results of year 2
   of the ENG2020 plan
- Stability in our governance and financial situation



A positive experience...

Maintaining healthy stakeholder relationships

A less positive experience...

Customer experience



- New admission program in force since April 1
- Professional inspection: new self-evaluation questionnaire
- 30 by 30 initiative: 350 + new women ambassadors
- The OIQ's centennial in 2020
  - Promotional and visibility campaign (\$3.6 million)
  - Refreshing our image: a new brand image



### Challenges for the Profession

- Legal framework in Quebec: modernizing the Engineers Act
- Our 2025 Vision: our strategic priorities

#### A few directions

- Anticipating changes in the boundaries of engineering
- E.g.: Make the permit issuance process more efficient for the sake of mobility
- Optimizing our public protection mechanisms
- E.g.: Share best practices between investigative bodies
- Reviving and strengthening employer relations
- E.g.: Training, job offers, mobility, etc.

### Engineers Nova Scotia Mary Miles, P.Eng., FEC



- Membership growth: 5.6%; 20.3% of that is female.
- EIT growth: 17.9%; 26.4% of that is female.

 Women in Engineering and Young Professionals committees have been very active and very visible.

 Our Outreach Program, and our strong external partnerships, help us achieve organizational goals.

- Extremely positive relations with government, our Fair Access Review Officer, and Immigrant Services agencies.
- Recent improvements to our One-Year Canadian Experience Requirement extremely well received.
- Our 100<sup>th</sup> Anniversary will provide us with opportunities to both celebrate, and promote, the engineering profession.

- Associations <u>can</u> successfully impact membership growth.
- Associations <u>can</u> successfully impact diversity. (an example is our upcoming participation in the Halifax Pride Parade)
- But ... associations must stay focused on our core mandate of protecting the public interest.

- National mobility as a key driver for all of our decisions, including CPD mobility and enhanced mobility agreements.
- Even though there are regulatory differences across Canada, we all have essentially the same robust regulatory standard.
- Demonstrating the openness and diversity of our profession.
- Building external partnerships to move organizational goals forward.

### Challenges for the Profession

- The Engineering profession needs to continue to become more open and diverse.
- The CEQB and the CEAB need to focus more on creating and managing that change.
- The work of the Engineers Canada Funding Task Force is of key interest to us.
- Life Membership needs to be re-thought.

# Engineers and Geoscientists New Brunswick (APEGNB) Serge Dupuis, P.Eng., MBA, M.Sc.





Laura Shaw, Diversity & Inclusion Coordinator



Council Members and Premier Higgs, P.Eng., MLA Night Reception

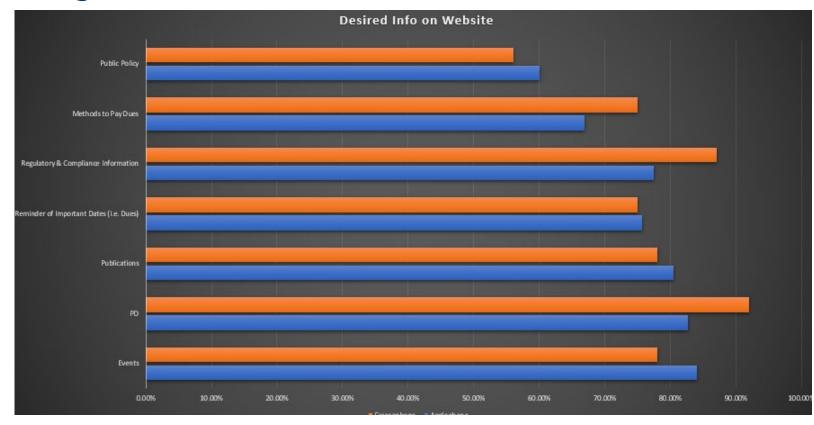




Videos of Past Presidents

# SCHOLARSHIPS

\$50,000 through 13 individual scholarships



- Communications Remain Key (Different Audiences Need Messages)
- Need to reposition APEGNB amongst members from social to regulatory status
- Self-Regulation Perception & Reality
  - Reviewed and continue to review by-laws
  - Cross-checking Act against by-laws, Rules and Code of Ethics
  - Jurisdictional Review under way
  - Government Relations Strategy being developed
- Perception is Reality Must be Above Reproach
- Succession Planning is critical

- Pilot Launched in March
- Full Launch this Summer
- Continued competency online portal
- Initial year will be mandatory without penalty





### Challenges for the Profession

- Member Engagement: work to change the 80/20 rule
- Ensuring adoption of Professional Development requirements
- Perceptions of Self-Regulation (by members, governments and the public)
- Technology and impact on profession (Automation) as well as the organizations (security: IP protection and privacy)

### Engineers Geoscientists Manitoba Ruth Eden, PEng, MSc, FEC



- Defined group chapters:
  - Geographic
  - National origin
  - Special interest
- Community partners:
  - 16 major engineering employers
  - K-12 school divisions
  - University of Manitoba
  - Province of Manitoba



- Government relations is so important.
- Stakeholder engagement.
- Community partners.



- Hire the right people and let them do their part:
  - LLBs do legal practice, CPAs do accounting, marketing specialists do marketing.
  - Engineers do engineering.
  - Engineers don't do legal practice, accounting, marketing, etc.
- Community partners strength in numbers.



### **Challenges for the Profession**

- Diversity Outreach:
  - Balancing gender equality
  - Removing racial bias
- Computer programmers supplanting engineers.
- Culture of low member fee → culture of low value → under-funded profession.



### **Engineers and Geoscientists British Columbia**

Dr. Katherina Tarnai-Lokhorst, P.Eng., FEC



- We leveraged NEGM to promote gender diversity in the professions
- Role models are crucial: You can't be what you can't see.



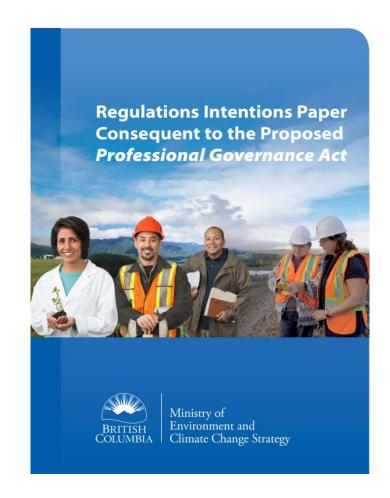


• Engagement and consultation let us have more nuanced conversations with our members.

- Commissioned a report to consider how the Truth and Reconciliation Commission's 94 Calls to Action might align with the our Code of Ethics and duties
- 5 Calls for Action identified, action plan developed to implement recommendations

### Challenges for the Profession

- Changing regulatory landscape, public and political pressure
- New regulatory regime, new obligations and oversight







- Engineers Canada CBA system is being used by several EIT's. Well received by new EIT's at information session. Engineering Qualifications Committee pleased with the information provided.
- Joint application process for AIT transfers of existing P.Eng. applicants continues to simplify transfers and has contributed to growth in membership.
  - Engineers NS, Engineers Yukon, EGBC
- EIT growth 29 %

- Nothing is a easy as it seems
- Need to focus on issues where we can have an impact

- We have a small engaged council (7)
- Engagement with UPEI Faculty of Sustainable Design Engineering
- Use of the CBA system.
- Sharing of practices with other CA's
- Member engagement / Self regulation
  - We actively encouraged Members to participate in AGM, 2018 109 registrations, 2017 14 registrations, 2016 55 registrations.

- Number of foreign trained applicants continues to grow.
- More EIT's working in companies without P. Eng. supervision.

## APEGS Terry Fonstad, P.Eng., P.Ag.



#### **Major Successes**

- Required CPD, including reporting, implemented on January 1, 2019. First reporting due by January 31, 2020
- On-line competency-based work experience reporting implemented on January 1, 2019
- Dream Big: Engineering Our World video provided to every school in Saskatchewan during National Engineering and Geoscience Month:
  - 300 APEGS members volunteered; 150 presentations
  - 100 schools
  - 23,000 students
- Saskatchewan Self-Regulating Professions Working Group continues to provide a forum for sharing information and practices among provincial regulators

#### **Lessons Learned**

- Consultation with members for CPD and CBA was much appreciated by members and reinforced the importance of staying in touch with them
- Continue government relations activities and consultation with both Government and Opposition
- Facilitate opportunities for members to achieve CPD requirements

#### **Promising Practices**

- Following the model of PEG-NL, development of an interactive on-line ethics module for members to achieve verifiable ethics training
- Development and presentation of ethics training with employers and in various locations provides a further opportunity to maintain contact with members
- Sharing of information and best practices with other regulators in Saskatchewan, especially with substantially similar legislation (ex. privacy workshop is leading to amendments to model legislation re: online register)

- Increasing public scrutiny of self-regulating professions
- Large number of applications from international engineering graduates, particularly in response to immigrant nominee quotas (in Saskatchewan)

## APEGA President, George Eynon, P.Geo., FGC, FEC (Hon.)





#### **Major Successes**

1. Qualifications-Based Selection (QBS)

2. Competency-Based Assessment (CBA)

3. Centennial 2020

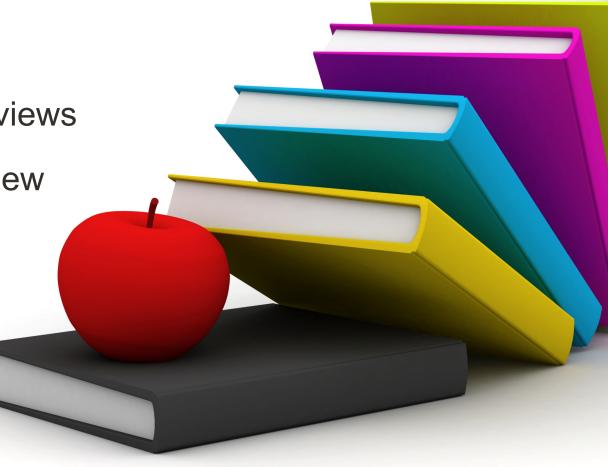


#### **Lessons Learned**

1. Conducting Effective Practice Reviews

2. Engineering/Geoscience Act Review

3. Boeing 737 lessons



#### **Promising Practices**

- 1. Strategic Plan Process
- 2. Public Relations Strategy
- 3. IT Digital Strategy



- Awareness and Attracting Generations of New Members
- 2. Unemployment of our Professions in Alberta
- 3. Threat to Self-Regulation



## PEGNL Darlene Spracklin-Reid, P. Eng.



#### **Major Successes**

- The licensing of project management firms and their employee engineers, where there are significant engineering elements to the project
- Increased focus on regulatory mandate as opposed to membership role
- Successfully completed major disciplinary hearing and completed backlog of allegations
- Digitized all paper Permit to Practice files, providing both backup and online access to staff, further digitization as part of multi year project
- Signed contract with iMIS to utilize its cloud based Client Management System, implementation ongoing
- More focus on volunteers as part of PEGNL's success with new committees and diversity within committees, better volunteer management to achieve Ends of organization

#### **Lessons Learned**

- Design / construction models continue to change.
   Important that engineering regulation be understood and properly exercised within each model
- When disciplinary matters fall behind catching up can be very hard on staff and volunteers, and put the organization at risk. Legal support is critical but expensive.
- Professional Development important to build on existing framework, but to require more meaningful PD
- No Board meetings without a ministerial appointed director / important to work with govt to ensure they are appointed
- Need greater focus on regulatory matters and less on member association matters

#### **Promising Practices**

- Working towards removing of right to title from all non practicing members including life members and moving towards new "Non Practicing Associate" category. Better visibility to public re who is licensed to practice /meet HR law
- Better volunteer utilization and management to achieve ENDS.
- Better diversity within PEGNL committees and the profession.
- Digitizing of all professional files for risk management and staff productivity purposes
- Improved efficiencies for staff and license holders with implementation of new client management system
- Increased working with government to better understand its needs

#### Relevance

- to those working in non traditional, emerging engineering disciplines, and specialized practice? e.g.: ability to meet competency based assessments
- to government and society, especially Authorities Having Jurisdiction?
- to new grads?
- Are engineering regulators changing fast enough to meet society's changing needs?
- How to get the public, clients and members to report a greater percentage of incompetent and non professional practice
- Increasing diversity within the profession
- It doesn't take many allegations to burden the disciplinary process how to manage better?
- Professional Development / making it more meaningful

# Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists Karen D. Costello, P.Geo., FGC





#### **Major Successes**

- Electronic Voting Increased from 17% (2018) to 44% (2019)
- Life Membership now includes payment of annual dues and reporting on CPD activities for Active Life Members; no fees for Retired Life Members
- Continuing diversity (five women (42%); seven men) on Council, including a new Public Member from Nunavut
- Financial growth and registrant growth contribute to stability and sustainability of NAPEG
- Improved financial assistance to students from NAPEG Education Foundation









#### **Lessons Learned**

- Changing auditors brings both improvements and challenges.
- When Council is also the Board for a Foundation, do not have regular meetings together.
- Foundation Board has been able to move forward more quickly after dedicated meetings.







#### **Promising Practices**

- ✓ Networking socials with opportunities for New Professionals and Members-in-Training to interact with more experienced Professionals
- ✓ Directors for Engineers Canada and Geoscientists Canada at all Council meetings, provides for invaluable information sharing
- ✓ Ongoing planning events/brain-storming to receive input from as many registrants as possible
- ✓ Outreach to Youth Coding Event and Bridge Building Competition
- ✓ A group of Northern women, who work with youth in their free time, can win a National competition!





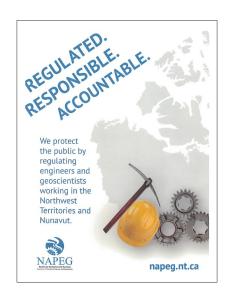


- For NAPEG, the challenge of two very large territories to regulate
  - Enforcement challenge, especially in remote areas
  - Professional Development challenge to provide opportunities to remote locations
  - Discipline, conflict of interest when many Northern practitioners know each other, can be challenging in an area of small population (less than 400 registrants reside in the North (total individual practitioners approx. 2200)
- For the profession, need to be vigilant, need to ensure due diligence

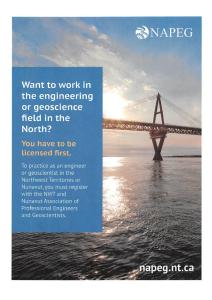












Invitation to 2020 NAPEG Annual General Meeting
Wednesday, March 11, 2020
Katimavik D, The Explorer Hotel
Yellowknife, NT

#### **Questions?**



Photo Credit to CIRNAC

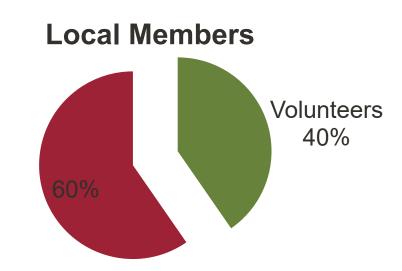
### Engineers Yukon Chris Dixon, P. Eng.



#### **Major Successes**





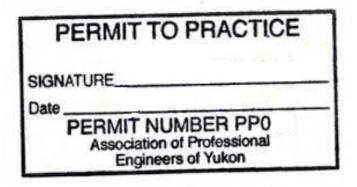


#### **Lessons Learned**





#### **Promising Practices**









Canada · Timeline

#### Elliot Lake mall collapse: tracking the rescue effort



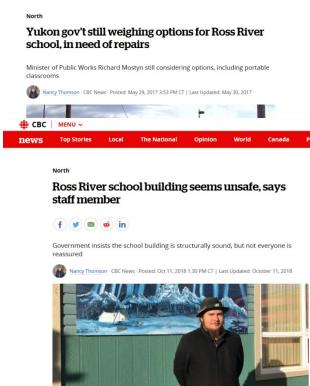
Part of Elliot Lake's Algo Centre Ma plunging two storeys to the floor. R the safety of the team was in quest

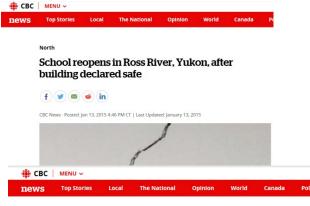
In the aftermath of the collapse, m dating back to 2005, including roof has said repairs were conducted or that an engineering and structural

Here is a chronology of major even

**Thursday June 28** 









Plans for cooling system under Ross River school