Meteorologist Professionalization in Canada

October 19th, 2012
Overview

• Professionalization Framework
• Certification
• Accreditation
• Next Steps
Quality Assurance

Post Secondary Program Accreditation

- Evaluates post secondary programs to ensure learning outcomes meet the needs of the profession

New Graduate Professional Development

- Supports new graduates in gaining on-the-job experience and competencies

Professional Certification

- Evaluates individuals with 5+ years of experience and recognizes competence against a National Standard

ECO has initiated its efforts towards Meteorologist professionalization here
PROFESSIONAL CERTIFICATION
What is Certification

• Process that evaluates experienced professionals against a National Standard to ensure a minimum level of competence
• Holds members accountable to a Code of Ethics, with complaints and discipline processes
• Enforces certification maintenance requirements for maintaining competence through ongoing professional development
• Provides professional liability insurance
• Offers professional development opportunities including education/training and networking
# Becoming Certified

## National Standard for Meteorologists

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Evaluation</th>
<th>Validation</th>
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</table>
| • 5 years experience  
• Relevant Degree | • Competence Assessment  
• Ethics Examination | • Peer Competence Validation |

- **Eligibility**: 5 years experience, Relevant Degree
- **Evaluation**: Competence Assessment, Ethics Examination
- **Validation**: Peer Competence Validation
Certification Governance

ISO 17024 Practices
- Internationally accepted best practices

Certification Approvals Board-CECAB
- Assures impartiality

Management System
- Ensures consistency of policies, procedures, and applicant assessment
Developing PMet-Overview

• Partnerships- CMOS, Environment Canada, private sector, HRSDC,
• Established a National Steering Committee
• Completed a Meteorology Sector Study
• Developed and validated certification criteria,
• Developed relationship with CECAB,
• Implemented certification scheme,
• Communicated with meteorological professionals
Developing PMet- Publications

- 2005- Changing Climate- Canadian Meteorological Employment
- 2007- Meteorological Certification Feasibility Study
- 2011- National Occupational Standards for Meteorology

Available at www.eco.ca
Developing PMet

- Documented National Occupational Standards:
  - Meteorologists: Applied, Research & Operational specializations
  - Meteorological Technicians: certification program not developed, to date

- Defined minimum eligibility requirements:
  - 5 years work experience
  - Relevant education

- Established a professional ethics exam
Developing PMet (cont’d)

- Launched Summer 2011
- 11 Certified Members
- Over 50 people in the application process
PROGRAM ACCREDITATION
What is Accreditation

• Process that assess post secondary environmental programs against a National Standard, and relevant curriculum standards
• Holds members accountable to four basic principles:
  – Protect the Public Interest
  – Quality Assurance
  – Quality Enhancement
  – Accountability
• Monitors and encourages continual improvement
• Provides assurance to the public, students and industry that the program and its graduates will meet the needs of the sector
Accreditation National Standard

1. Program development and maintenance
2. Program Curriculum
3. Faculty complement
4. Admissions
5. Student services
6. Institution facilities and learning resources
7. Program Financial Resources
8. Research & Scholarly Activity
National Accreditation Partners

• National Steering Committee
• Canadian College Environmental Network, CCEN
• Canadian University Environmental Science Network, CUESN
## Becoming Accredited

**National Standard – Curriculum Standard**

<table>
<thead>
<tr>
<th>Application</th>
<th>Self Study</th>
<th>Site Visit</th>
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<tbody>
<tr>
<td>• Ensures eligibility</td>
<td></td>
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<tr>
<td>• Secures resources</td>
<td></td>
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<td>• Establishes commitment</td>
<td>• Documents program in comparison to the standards</td>
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<td>• Validates the self study through an on site, detailed review</td>
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Accreditation decisions are made by the Canadian Environmental Accreditation Commission
Accreditation Governance

- Association of Accrediting Agencies of Canada (AAAC)
  - Nationally accepted best practices

- Canadian Environmental Accreditation Commission
  - Assures impartiality
  - Grants accreditation

- Management System
  - Ensures consistency of policies, procedures, and program assessment
Accreditation to date

• Began development in 2007; Commission established in 2009
• First program accredited in 2010
• Offer accreditation for:
  – Environmental Diploma’s
  – Environmental Science Undergraduate Degrees
  – Environmental Studies Undergraduate Degrees
  – Environmental Masters Degrees
• 15 programs accredited to date
NEXT STEPS
Next Steps

• Continue growth of PMet certification
• Explore interest in accreditation for meteorological post secondary programs
Questions?

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