



# UNIVERSITY OF NORTHERN BRITISH COLUMBIA

## MEMORANDUM

**To:** Dr. Ranjana Bird, Vice President Research  
Dr. John Young, Chair, Senate Committee on Academic Affairs

**From:** Dr. Darwyn Coxson

**Date:** 28 April 2015

**Re:** NRESi's 2014-2015 Annual Report and 2015-2016 Workplan

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Dear Drs. Bird and Young,

As per UNBC's Policy and Procedures for Centres and Research Institutes, please find attached the 2014-2015 Annual Report for the Natural Resources and Environmental Studies Institute (NRESi) covering the 2014-2015 fiscal year and NRESi's workplan of activities for 2015-2016. Both have been reviewed and discussed by its members at their 2015 Annual General Meeting.

On behalf of NRESi, I would like to thank you for your ongoing support. NRESi was focused on continuing the activities and initiatives that its members and the community have come to expect, as well as exploring and expanding possible research and project opportunities for NRESi and its members. Work has been focused on providing value to members, to UNBC, and the broader community, in a number of different ways. This will be explained in detail in the accompanying 2014-2015 Annual Report. NRESi continues to work towards the goals and objectives described in its five-year Strategic Plan, while also being flexible to new opportunities and ideas as they arise, as described in the 2015-2016 workplan of activities.

NRESi had another productive year, resulting in a positive financial report and is exploring opportunities for long-term financial planning and sustainability, the continuance of ongoing activities, as well as the addition of new projects and initiatives to further support the work of NRESi's members, UNBC, and its community partners.

Enclosures: NRESi Annual Report 2014-2015

NRESi Workplan 2015-2016

cc: NRESi Steering Committee Members  
Alex Koiter (NRES Graduate Student Representative)



## Natural Resources & Environmental Studies Institute

### 2014-2015 Annual Report

#### Overview of NRESi

The Natural Resources & Environmental Studies Institute (NRESi) works to promote and implement integrative research to address natural resource systems and human uses of the environment, with a particular focus on northern regions and creating solutions-based approaches.

NRESi is an association of researchers from the UNBC faculty and external community that work and have interest in themes related to natural resources and the environment. This association of members have committed to learning from each other and seeing the value in collaborative initiatives that take an interdisciplinary approach. It is recognized that many, if not most themes related to this broad research area cannot be viewed or understood in isolation. Every research theme takes place in a complex world that surrounds and interacts with it, factoring into planning, management, monitoring, and policy. NRESi provides a venue and network to link together otherwise distinct research themes and topics for a broader understanding.

NRESi works towards its objectives of knowledge sharing and identification of collaborative research opportunities in a number of different ways. The most recognizable and well-known is through lectures, both in terms of its weekly colloquium series, as well as other special lectures and events that NRESi hosts. These events also provide networking opportunities between participating NRESi members and the community. In addition, through the guidance of NRESi's Steering Committee and the activities of its staff, NRESi works to support its members by identifying and pursuing possible project opportunities on behalf of its members. NRESi also has an important communications role to a range of audiences, including: within its membership, UNBC, the broader the natural resource and environment community, and the general public.

#### *Our Mission*

The focus of NRESi is to bring together members of the university and research community to promote and facilitate integrative research on natural resource and environment issues. From here, it is recognized that issues arise in northern BC and beyond that NRESi members, together with the community and partners, have the ability through expertise and experience to address and look for solutions. NRESi has an important role in helping to coordinate and be a venue for important dialogues and research projects that address natural and anthropogenic changes.

NRESi can also assist in sharing research results that can be integrated into policy and management approaches and decisions.

NRESi has important role in creating linkages between researchers. This includes communication and the opportunity for interaction among UNBC and other university faculty, graduate students, and other associated researchers and research centers. It also recognizes the importance of making knowledge sharing and project participation open to the public, creating dialogues, and building linkages across a wide range of perspectives and expertise.

As a result of this integration across expertise, information can be developed in local communities to address local issues. Research findings can also be disseminated through NRESi's channels to allow for information to be shared to other areas facing similar issues or management and planning concerns. This has taken the form of presentations and extension, through NRESi's publication series and/or sharing current events and activities through the newsletter that others may find useful in their own work. NRESi continues to engage its members in discussions about how they would like NRESi to support their work, as well as the research needs of the broader community for mutual benefit that NRESi could help address.

#### *Governance*

The NRESi is overseen by a Director, selected for a 3-year term. The 2014-2015 fiscal year saw a transition in Directors, from Dr. Bill McGill to Dr. Darwyn Coxson, who was appointed director July 1, 2014. In addition to a Director, NRESi is supported by a Research Manager who moves forward the day-to-day activities and needs of NRESi and its members, NRESi's initiatives, project development and communications.

The Director and Research Manager works closely with an internal Steering Committee. This group includes: three individuals elected to 2-year terms by the membership of the Institute, one member representing the Pacific Institute for Climate Solutions, and another representing the NRES Graduate Program. See Table 1. The intent of this group is to reflect the perspectives of NRESi's members, provide guidance to support the work and activities of NRESi, and ensure that the Institute functions in accordance with its vision statement and purpose.

**Table 1.** Steering Committee membership during 2014-2015 fiscal year.

\*Steering Committee Members who will be leaving in the 2015-2016 fiscal year.

<b>Name</b>	<b>Role</b>	<b>Term</b>
Darwyn Coxson	Director	1 July 2014 – 30 June 2017
Art Fredeen*	Elected Member	1 January 2013 – 30 June 2015
Steve Helle	Elected Member	1 July 2014 – 30 June 2016
Paul Sanborn	Elected Member	1 July 2014 – 30 June 2016
Ian Hartley	NRES Grad Program Rep	Began 1 July 2014 with No Fixed Term
Kyle Aben	PICS Representative	No Fixed Term
Leanne Elliott	Research Manager	11 February 2014 – 31 March 2016

During the 2013-2014 fiscal year, a framework was developed to consolidate the previous Management Committee and Advisory Committee into one group, the NRESi Advisory Panel. This new committee was presented and discussed at the 2014 Annual General Meeting and approved by the membership as an appropriate way to gather external insight and advice to NRESi's Steering Committee and membership. With the Director transition and other emerging priorities, identification of individuals is currently in the preliminary stages and will be a focus for the upcoming fiscal year. Efforts will be made to develop a clear list of discussion points and items where advice would be valuable as NRESi moves forward. Members of the Advisory Panel will include the following individuals and representatives:

- Ex Officio members – Vice-President (Research) as Advisory Panel Chair, NRESi Director, Vice-President (External Relations), NRESi Research Manager
- Appointed members – One Steering Committee representative, five members external to the university community
- Advice, support, and/or involvement from other UNBC representatives – Dean of CSAM, Dean of CASHS, Dean of Graduate Programs, Chair of NRES Graduate Committee, Directors of other Research Institutes

### *Membership*

NRESi has three types of memberships. They are: (a) Full Members for UNBC tenured faculty, (b) Associate Members for other types of UNBC faculty and researchers external to the UNBC community, and, (c) Lifetime Members who have received recognition through NRESi's Lifetime Achievement or Community Advancement awards for lifetime membership spanning beyond their active research careers. It was decided at NRESi's 2014 Annual General Meeting to adjust the existing membership process. Any new applications for Associate Members, which have 3-year terms, will have their renewal extended from their membership anniversary to the date of the NRESi's next Annual General Meeting plus three years. Existing Associate Members will have renewals reviewed prior to NRESi's Annual General Meeting and those that have expired during the previous 12-month period will be notified and given the opportunity to renew for another 3-year term.

The below (Table 2) provides an overview of NRESi's current membership, the membership category that each belongs to, and the most recent date of renewal (if applicable). This table shows that there are currently 68 NRESi members (Table 2). Membership activity during the reporting period included the addition of one new Associate Member, the renewal of one Associate Member, and the loss of three Associate Members. Information about NRESi's members can be found on its website, such as their: research interests (<http://www.unbc.ca/nres-institute/institute-members>) and contact details (<http://www.unbc.ca/nres-institute/members>).

**Table 2:** Summary of NRESi’s current membership, membership type, and the most recent renewal dates for Associate Members

Aben, Kyle	Associate Member: April 15, 2013	Lindgren, Staffan	Lifetime Member
Arocena, Lito	Full	Maher, Patrick	Associate Member: Mar 26, 2015
Burton, Philip	Full	Massicotte, Hugues	Full
Connell, David	Full	McGill, Bill	Full
Costello, Allan	Full	Meletis, Zoe	Full
Coxson, Darwyn	Full	Menounos, Brian	Full
Curry, John	Full	Mullins, Philip	Full
Dawson, Russ	Full	Murray, Brent	Full
Déry, Stephen	Full	Nolin, Catherine	Full
Egger, Keith	Full	Opio, Chris	Full
Erasmus, Daniel	Full	Otter, Ken	Full
Fondahl, Gail	Full	Owens, Philip	Full
Fredeen, Art	Full	Parker, Katherine	Full
Gantner, Nikolaus	New Associate Member: April 9, 2015	Petticrew, Ellen	Full
Garcia, Oscar	Full	Procter, Dennis	Full
Gillingham, Mike	Lifetime Member	Rea, Roy	Full
Green, Scott	Full	Rutherford, Mike	Full
Haeussler, Sybille	Associate Member: Sept 25, 2012	Ryan, Dan	Full
Halseth, Greg	Full	Sambaraju, Kishan	Associate Member: April 9, 2015
Hanlon, Neil	Full	Sanborn, Paul	Full
Hartley, Ian	Full	Schwarzfeld, Marla	Associate Member: Oct 9, 2013
Hawkins, Chris	Full	Shrimpton, Mark	Full
Hawley, Alex	Lifetime Member	Shultis, John	Full
Heard, Doug	Associate Member: March 7, 2013	Sui, Jueyi	Full
Helle, Steve	Full	Summerville, Tracy	Full
Henry, Philippe	Associate Member: Oct 31, 2012	Tang, Youmin	Full
Huber, Dezene	Full	Thielman, Aynsley	Associate Member: Oct 17, 2015
Jackson, Peter	Full	Thring, Ron	Full
Johnson, Chris	Full	Wheate, Roger	Full
Karjala, Melanie	Associate Member: April 22, 2013	Whitcombe, Todd	Full
Lautensach, Alex	Full	Wilkening, Ken	Full
Lavallee, Loraine	Full	Wilkerson, Orland	Full
Lewis, Kathy	Full	Wright, Pam	Full
Li, Jianbing (Jason)	Full	Young, Jane	Full

## Report on Activities for 2014-2015

*Background:* In 2011-2012, NRESi’s Steering Committee undertook a Strategic Planning process in order to identify the longer-term requirements and a sustainable model for the resourcing of NRESi. At the same time, increased overhead contributions from the NRESi project on Biodiversity Monitoring and Assessment Program (BMAP), under the leadership of Dr. Mike Gillingham, has provided for a period of financial stability. This has allowed NRESi to hire a dedicated Research Manager and work towards growth in activities and operations.

The below is a summary of NRESi's 2014-2015 initiatives, projects, and activities:

*General Activities*

- The Institute hosted 22 colloquia as part of the weekly NRESi Colloquium Series and was organized by NRESi member Dr. Allan Costello. Most of the colloquium presentations have been posted to NRESi's video archive (<http://www.unbc.ca/nres-institute/colloquium-webcasts>). A listing of past presentations and their abstracts can be found on NRESi's website and the presentations during the winter 2015 semester are also posted in a way that is also searchable (<http://www.unbc.ca/nres-institute/colloquium-series>). This new format for posting upcoming and past lectures on NRESi's website will be continued in future colloquium series.
- Of the 22 colloquium that took place, many were special events and/or co-hosted with NRESi together with other groups on campus:
  - NRESi's special UNBC 25<sup>th</sup> Anniversary Panel Discussion and reception – a collection of NRESi members and community members who explored opportunities for NRESi and natural resource research for the future (described in more detail below)
  - NRESi hosted the NRES Graduate Student Icebreaker event, which included a special lecture by a guest presenter followed by a NRES grad student poster session and reception – Dr. Connie Nelson from Lakehead University
  - The presenter who did the 2014 Doug Little Lecture also presented during the NRESi colloquium – Dr. Richard Waring from Oregon State University
  - NRESi co-hosted a guest presenter with Global Fridays during its weekly colloquium, who was exploring the impacts of sporting events ahead of the Canada Winter Games – Dr. Harry Hiller from the University of Calgary
  - Each year, in partnership with the Peace Fish & Wildlife Compensation Program (PFWCP), NRESi organizes a special lecture during the colloquium that includes a presentation by a guest lecturer on a theme related to the PFWCP and is followed by a reception to provide further networking opportunities (more details below) – Dr. Dale Seip from the BC Ministry of Environment
  - NRESi hosts a special Annual Lecture event each year on a Thursday evening (more details below) and the presenter also provides a second presentation during the colloquium that week – David Hughes, a Geoscientist exploring energy forecasting and usage
- Each year, NRESi organizes a special Annual Lecture event. It begins with a by-invitation event for NRESi members, UNBC administrative representatives, and NRESi partners within the community. This event is in the form of a reception that includes a NRES graduate student poster session for the opportunity to share their research and learn from others within the community, followed by dinner. The Annual Lecture then takes place, which is a public event for the community with a reception to follow and is also

available via Livestream and Elluminate/Collaborate for remote participants. This year's reception and dinner hosted 65 participants and the Annual Lecture drew approximately 150 attendees. The guest lecturer was David Hughes, a Geoscientist, Independent Energy Policy Analyst and formerly with Geological Survey of Canada. David's presentation was titled: BC LNG and the Shale Revolution: Myths and Realities. It was a very informative presentation and it provided lots of opportunity for an interactive discussion following the lecture. The presentation will be posted to NRESi's video archive for future viewing.

- NRESi also hosted six special lectures, where guests to UNBC had the opportunity to share their research. Video recordings of most presentations were also uploaded to NRESi's archive for future public viewing (<http://www.unbc.ca/nres-institute/colloquium-webcasts>):
  - Eric Peterson, Hakai Institute
  - Dr. Lynn Quarmby, Simon Fraser University
  - Dr. Renfei Feng, Canadian Light Source
  - Dr. Brock Fenton, Western University
  - Dr. Karen Hodges, University of British Columbia Okanagan
  - Dr. Regine Hock, University of Alaska Fairbanks
- Work is ongoing with UNBC's Communications Department to create a new video archive webpage for past NRESi lectures that will provide a more user-friendly interface that will be searchable by lecture topic, presenter, date, and keywords. A draft of this new webpage was developed and will be refined in the new fiscal year. All videos currently on NRESi's archive will be assigned categories and put into a format that can be uploaded to the new area and also searchable. The videos will also be converted to a public platform (e.g. YouTube), making them even more broadly available, accessible and searchable through Google and other search engines.
- In almost all cases, those interested in NRESi presentations and not able attend in person were able to participate via Livestream (video and slides) and Elluminate/Collaborate (slides and audio). Those attending on Elluminate/Collaborate were also provided the opportunity to contribute questions to the discussion through the system's chat feature.
- Travel costs for an external speaker through NRESi's matching funds program allowed a special lecturer (Dr. Ken Brealey, University of the Fraser Valley) come to UNBC to present a colloquium talk and participate in other activities on campus.
- NRESi once again organized the annual Undergraduate Thesis Presentation Day. Students completing a fourth-year thesis project are required to present their project and results. This year's event had 14 presentations during a day-long event by students from NRES, BCMB, HHSC, CHEM, and Biol students. The event was supported in

partnership with the Biochemistry and Molecular Biology department and the Northern Medical Program.

- NRESi explored the opportunity to house data from NRESi member research in a way that would be more broadly accessible. Some options are available and further investigation into each's benefits, the cost associated, and implementation needs will be looked at further in the new fiscal year.

### *Communications*

NRESi continues to provide a means of internal communication between its members, as well as providing linkages where possible with external researchers and members of the community. This takes a number of different forms:

- NRESi event announcements and updates are distributed through a managed NRESi distribution list and to UNBC college mailing lists. NRESi also has a members-only list, where communications relevant specifically to the membership can be distributed. Event announcements are also posted to UNBC's public events listings, as well as on NRESi's website.
- NRESi maintains a website, to provide information to the public about NRESi and its members, as well as an information platform for the public. The process to update NRESi's website began this year, by revising text to reflect the work and focus of NRESi. This work will continue in the 2015-2016 fiscal year, by adding website features, making revisions, and refining its structure to make it more user-friendly and visually appealing.
- All NRESi lectures are recorded and posted to a video archive (<http://www.unbc.ca/nres-institute/colloquium-series/archived-colloquium-series>). NRESi has been working with UNBC's Communications Department to create a new webpage to host these past presentations, in a way that is searchable by a number of characteristics, such as by: title, presenter, abstract, date, keywords, and thematic categories. The intent is to make the videos more accessible to the broader public and in a way that is more user-friendly. The process for developing this new page is ongoing, with the expected launch of the new webpage the summer of 2015.
- NRESi has created two social media accounts to share information and updates. They are: (a) Twitter ([https://twitter.com/UNBC\\_NRESi](https://twitter.com/UNBC_NRESi)) and (b) Facebook (<https://www.facebook.com/unbcnresi?ref=hl>).
- NRESi did a marketing materials refresh, by revising its brochure to update the language and better reflect the current work and focus of NRESi and its members, as well as a newly designed banner that is used for NRESi events and branding in archived lecture videos.
- NRESi's weekly newsletter returned in 2014-2015, being posted to NRESi's broad network distribution list each Friday. Each edition includes: 'NRESi Notes' which provides updates or special announcements for members and the community, event announcements and information, recent NRESi member publications, sharing of travel or conferences details attended by members, links to NRESi members in the media and



other UNBC media releases of relevance to the NRESi audience, NRES graduate student defense details and events of interest, as well as other UNBC or community events of interest to the network. NRESi members are invited to contribute information, announcements, and news, as well as stories and photos that might be of interest to others in the NRESi community.

### *Research*

The NRESi links a community of researchers, with varied backgrounds and research interests, empowering them to pursue their disciplinary research in an interdisciplinary context. Consequently, many of the research initiatives undertaken by Institute members are collaborative efforts with other Institute members. Individual members of the Institute have strong disciplinary expertise in the natural, physical, environmental and social sciences; NRESi works to capitalize on this, by providing project and networking opportunities for knowledge sharing and finding new linkages. Work began, through scoping NRESi members and exploring opportunities, for building new NRESi projects that further connects multiple researchers and their interests. This will be expanded and a focus of activities for the 2015-2016 fiscal year, as well as identifying possible funders and project partners.

### *Biodiversity Assessment*

The Biodiversity Monitoring and Assessment Program (BMAP) continued in the 2014-2015 fiscal year and will be completing its work in 2015-2016. The project involves 15 NRESi members, plus research staff, post-doctoral researchers, and graduate students. The BMAP has the goal of developing best practices for pipeline and linear corridor construction and is in addition to any regulatory or First Nations' accommodations requirements.

### *Cumulative Effects*

A successful workshop was held in January 2014, organized and led by UNBC's three research institutes (NRESi, Community Development Institute, Health Research Institute), titled: *Cumulative Environmental, Community and Health Effects of multiple Natural Resource Developments in Northern British Columbia*. Building on the momentum from this event and the recognized need as a result of this event for continued discussion, knowledge sharing, and research to address existing and emerging issues, the tri-institute partnership created the Cumulative & Community Impacts Research Consortium (CCIRC). There are three main objectives of the CCIRC:

1. Foster integrative understandings of the increasingly intense challenge of cumulative impacts;
2. To conduct research in support of policy options for community development that local, regional, and provincial authorities can consider and potentially adopt; and,
3. To provide a platform for community engagement and dissemination of knowledge that will assist in understanding issues and options.

This year saw an initial funding agreement from the Pacific Institute of Climate Solutions for this project. The funding has allowed the project to recruit and hire a Research Associate to lead the initiative, create a foundation around the project, build a network of appropriate contacts, and explore opportunities for engaging interested participants in a CCIRC Kick-Off Workshop planned for fall 2015. This scoping, background research, and project planning will provide the opportunity to develop a project that meets the needs of northern British Columbia and beyond.

### *Member Surveys*

NRESi is in the process of a membership survey to ask for their input, ideas, and feedback on a range of topics. This exercise is to help in future planning and identifying member priorities to be incorporated into NRESi's core activities. Questions that have been discussed range from high level impacts and opportunities NRESi can provide to northern BC and beyond, to small scale benefits and desires of individuals that NRESi can work to support. Member surveys will continue in 2015-2016 and feedback will be sorted, ranked and incorporated into NRESi's activities and planning in an ongoing manner.

### *Peace Fish and Wildlife Compensation Program Lectures*

For the past number of years, NRESi has partnered with the Peace Fish and Wildlife Compensation Program to put on a lecture that has themes related to the natural resources around the Peace region and Williston Reservoir. As this year's presenter, Dr. Dale Seip, was based in Prince George, it provided the opportunity for NRESi to organize a second lecture in Fort St. John. Dale and Darwyn Coxson (representing NRESi) will be traveling to present this second event on May 7<sup>th</sup>. NRESi is partnering not only with the PFWCP to put on this event, but also has the support of the Association of Professional Engineers and Geoscientists of BC Peace River Branch. This will also be a public event that will take place at the Lido Theatre starting at 7pm. Darwyn Coxson, NRESi's Director, will be attending and hosting the event.

### *NRESi's UNBC 25<sup>th</sup> Anniversary Project*

UNBC is celebrating its 25<sup>th</sup> anniversary in 2014-2015. NRESi submitted a successful proposal to UNBC's Anniversary Fund to undertake a number of events and activities to help commemorate the milestone. The activities included those in which NRESi organized and led, as well as ones which NRESi organized that were incorporated into other anniversary events and campus activities.

NRESi proposed organizing and coordinating a ceremonial tree planting, which took place during the 25<sup>th</sup> anniversary kick-off event on September 2<sup>nd</sup> in UNBC's Ceremonial Loop at the Prince George campus. UNBC's Anniversary Office coordinated the ceremony that included representatives from UNBC's past through involving the Founders, its present with participation by student leaders, and the future with children from UNBC's daycare. A plaque will be mounted by the tree, explaining its significance. NRESi also facilitated and coordinated volunteers to help with the distribution of seedlings to the participants at the kick-off event, as

well as finding a location and the logistics around planting approximately 100 seedlings on campus as one of the activities part of the kick-off day's events.

NRESi organized a Special UNBC 25<sup>th</sup> Anniversary Panel Discussion during one of its colloquium timeslots in September 2014. This event was to look back at the evolution of NRESi, the impact and benefit it has provided to its members, UNBC, and the community, as well as exploring new opportunities for NRESi and its role into the future. Perspectives were shared from four panelists: Dr. Mike Gillingham (UNBC & NRESi member and Founding Director), Dr. Kathy Parker (UNBC & NRESi member), Shannon Carson (BC Ministry of Forests, Lands, and Natural Resource Operations), Dr. Sybille Haeussler (Bulkley Valley Research Centre & NRESi member), and Dr. Jim Pojar (botanist and forester, retired from the BC Forest Service). At this event, NRESi also presented its annual awards to four deserving NRESi members (more information about the awards is below).

In honour of the 16,000 individuals who signed a petition in the 1980s which resulted in the dream of UNBC becoming a reality, NRESi proposed to plant 16,000 trees. Initially, the intent was to plant these trees on UNBC campuses and properties; due to logistical and space issues, this was not be possible. Some of these trees will indeed be planted at the John Prince Research Forest, which is associated with UNBC. The remainder will be planted through a contract with the BC Ministry of Forests, Lands and Natural Resources Operations in an area close to Prince George that is considered non-sufficiently stocked and is in need of trees. The intent is for both sites to have plaques describing their significance and connection to UNBC's 25<sup>th</sup> anniversary. The planting will take place in spring 2015.

To meet the commitment of planting trees at UNBC campuses and properties, NRESi is supporting UNBC regional campus plantings during 2015 convocation activities, as well as at the other research forests and properties. In partnership with representatives at each site, a ceremony will take place to commemorate the milestone and a plaque will be posted to describe the trees' significance.

#### *Sustainable Communities Demonstration Project*

UNBC is working on a series of initiatives, to explore how issues that northern BC communities are faced with could be addressed. It is using the UNBC Prince George campus as a demonstration site that could be replicated in other northern BC communities, using more sustainable options. NRESi was invited to participate on the project team for the bioenergy and sustainable energy component of this project. This part of the initiative includes creating three videos describing the benefits and challenges of implementing a bioenergy system between buildings, the technology, and outcomes, using the UNBC Prince George campus and other small northern communities as case studies. The first video has been completed and the other two are planned for release in 2015-2016.

## *NRESi Awards*

In past years, NRESi has recognized members who have made valuable research contributions over their career with the Distinguished Fellow award. With the support of an Awards Committee, NRESi reviewed the award characteristics and expanded its recognition to three awards, adding one that celebrates ongoing achievements of NRESi members and one that recognizes individuals and organizations in the community who has made a valuable research contribution in NRESi's thematic areas. This resulted in the three awards NRESi has today:

1. Distinguished Scholar - a NRESi member who has achieved any or a combination of the described criteria over the past 12 months (it is possible to receive this award more than once over a career)
2. Lifetime Achievement – a NRESi member who has achieved a combination criteria over the course of their career (both as NRESi members and, if appropriate, in previous positions/activities) and recipients are given a lifetime membership to NRESi
3. Community Advancement Award – an individual or organization from the broader community who has demonstrated achievement of any or a combination of the described criteria through their research and/or service and recipients or an identified representative from the recipient organization is given a lifetime membership to NRESi

Further information, nomination guidelines, and criteria can be found on NRESi's website (<http://www.unbc.ca/nres-institute/special-events-activities>).

This year, NRESi presented four awards to deserving researchers in the NRESi community. The Distinguished Scholar Award was presented to Dr. Mike Gillingham for his work on the Biodiversity Monitoring and Assessment Program. The Lifetime Achievement Award was presented to Dr. Staffan Lindgren and Dr. Mike Gillingham for their contributions to research at UNBC and in Mike's case, his commitment and tireless efforts that resulted in the creation of NRESi and bringing it to the place it is today. The Community Advancement Award was awarded to Dr. Susan Stevenson and unfortunately, with her recent passing, the award was presented to her family, recognizing her contributions she made to teaching as an Adjunct Professor at UNBC and her contribution to research on interior rainforest ecosystems in northern BC.

### *Susan Stevenson Scholarship Fund*

A dedicated NRESi member and UNBC adjunct professor, Dr. Susan Stevenson, passed away in August 2014. In honour of her contribution and memory, NRESi set up the Susan Stevenson scholarship fund. NRESi has been working to raise \$15,000 which will be matched by UNBC to create an annual \$1000 student scholarship. Currently, thanks to generous donations of NRESi's community, as well as Susan's family and her personal networks, the scholarship has received over \$8,000. Further efforts and donation opportunities will be continued in the coming months and years (as necessary). Details of candidate criteria and the decision-making process will be explored as NRESi gets closer to its goal.

### *Event Participation*

NRESi had a presence and booth at Resources North Association's conference held in June. The conference was attended by a diverse group of representatives and focused on the theme: Breaking Down Silos. NRESi also participated in the Premier's Resources Forum in Prince George in January 2015 and the Knowledge Exchange and Exploration: A Gathering for Aboriginal and Academic Communities conference in October 2014. It is anticipated the NRESi will continue to identify relevant events in the coming year to attend, sharing with the community the knowledge and expertise within NRESi's membership, projects and focus of activities, as well as building knowledge on natural resource research needs that NRESi could help to address.

### *Publication Series*

Dr. Art Fredeen has been the Editor for the NRESi publications series since their inception. In the past, NRESi had two publication series that NRESi members and NRES graduate students could contribute to:

1. **NRESi Occasional Papers** are peer-reviewed publications of papers and symposia sponsored or produced by members of the Institute. They provide an outlet for position, idea, concept, and opinion oriented papers.
2. **NRESi Research Extension Notes** are peer-reviewed publications of the research findings of NRESi members and of graduate students in the NRES Graduate Program. This series is intended to provide an outlet through which Institute members can make their research findings available to a non-technical audience.

In 2014-2015, it was identified that there are times where reports are not broadly available, but have useful information and results. To provide a venue for to make this data accessible, NRESi created the Technical Report Series:

3. **NRESi Technical Reports** are comprehensive, but not peer-reviewed final reports of research projects. They contain results relevant to the region and the broader research community. This publication series creates an opportunity for NRESi members to make their research project results that would otherwise not be published or available either in part or in whole.

More information about the awards and the guidelines are found on NRESi's website (<http://www.unbc.ca/nres-institute/publication-series>). In addition, NRESi worked with UNBC's library to make the articles available to a wider network, by posting all publications to UNBC's online databases. Past and future reports will now available and more readily searchable.

Two new publications were added to the NRESi publication series this year:

1. Research Extension Note: Sittler, K.L., Parker, K.L., Gillingham, M.P., Wheate, R.D. & Heard, D.C. 2014. Burning for northern mountain ungulates: effects of prescribed fire.

Natural Resources and Environmental Studies Institute. Research Extension Note No. 9, University of Northern British Columbia, Prince George, B.C., Canada.

2. Technical Report: Otter, K.A., Hartley, M.I., d'Entremont, M., Johnston, N.N., Walsh, D, Bradley, J., Willie M., & Pomeroy, A.C. 2014. Avian Movement at the Dokie 1 Wind Energy Project 2008-2012: analysis of potential conflict between wind development and avian migration in the northern Rocky Mountains. Natural Resources & Environmental Studies Institute (NRESi) Technical Report #1. University of Northern British Columbia. Prince George, B.C., Canada.

Each year, NRESi also presents an award for a Research Extension Note written by a NRES graduate student. This is awarded during the NRES Graduate Student Icebreaker event held in September. The 2014-2015 winner was Krista Sittler, for the above mentioned Research Extension Note.

## **Budget Report**

Revenues for the 2014-2015 fiscal year were derived from overhead on NRESi and member projects, a grant from Peace Fish and Wildlife Compensation Fund, the UNBC 25<sup>th</sup> Anniversary Fund, and from interest on endowment funds.

NRESi provided financial contributions to a number of events and activities throughout the year that it organized or help to organize:

- Annual Lecture, NRESi member and special invitation dinner and poster session, travel for a special lecturer, reception, and compensation for webcasting
- Undergraduate thesis presentation day and refreshment costs
- Graduate Icebreaker presentation, poster session, and travel for a special lecturer
- Events and activities surrounding UNBC 25<sup>th</sup> Anniversary: planting a ceremonial tree during the kick-off event, a Special NRESi Panel discussion, looking at the accomplishments of NRESi and its members
- Special guest lecture presentations
- Colloquium series – assistance for travel for a presenter who participated in NRESi's colloquium series, advertising costs, compensation for allowing Livestreaming and Blackboard Collaborate

Our year-end closing balance was \$553,176. The financial situation for NRESi is sound. The revenues exceeded expenditures by \$207,178 (Table 3).

**Table 3.** NRESi operating budget (30181): Summary for FY 2014-2015.

Opening Balance (April 2013)	\$345,998
Revenue: Grants	\$4500
Revenue: Research Overhead	\$300,107
Total Revenues (FY 13-14)	304,607
Expenditure: Labor	\$86,315
Expenditures: Events, other	\$11,314
Expenditure: Transfer	\$-200
Total Expenditures	\$97,429
Year End Balance (March 2015)	\$553,176

The Biodiversity Monitoring and Assessment Program (BMAP) was the main source of research overhead for NRESi in 2014/2015. Because of the absence of a final investment decision, however, the 2014/2015 calendar year may be last year in which overhead contributions are received from the BMAP program. Beyond 2015, the ongoing revenue stream for the institute will derive mainly from the reallocation of research overhead by members, which totaled \$25,619 in 2014/2015. It is thus important for NRESi to work towards new funding opportunities and projects that can continue to move ahead the goals and objectives of its members, while also having financial benefit back to NRESi. Work towards this began in 2014-2015 during surveys with members to identify project interests and opportunities that could link together members, as well as working with UNBC's Development Office to identify potential foundations whose interest align with NRESi. In the meantime, NRESi will be drawing down our reserves to continue salary support for the Research Manager position.

NRESi has three additional endowments: (a) Canfor Endowment, (b) NRESi Endowment, and, (c) Linnea Fund. The main endowment (70105) is the Northwood/Canfor endowment, originally from Northwood Pulp & Paper for the use of the Dean of the Faculty of Natural Resources and Environmental Studies. When NRESi was developed, NRESi's Director at the time met with Canfor and a decision was made to use the endowment to fund the NRESi Annual Lecture and other special events consistent with the original intent of the endowment. In years when the return on the endowment has been low (or even negative), NRESi's operating budget (30181-9918) has been used to fund such activities in order to maintain an adequate balance in the endowment. This year, the Canfor endowment gained \$12,693 during 2014-2015 (Table 4). The 'NRESi endowment' was established several years ago at the suggestion of the Allan Berezny (then head of UNBC fund raising). It was created with a donation from Dr. Art Fredeen and exists to receive future donations as they are made. Art has made additional contributions to this endowment and other NRESi members have also donated income from contracts to this account. This is a true endowment fund in that only the interest/revenues from this account can be spent. The 'NRESi Endowment' (46055) has an FY 2014-2015 year-end balance of \$8,166

(Table 5). The Linnea fund was created several years ago by Drs. Art Fredeen, Kathy Lewis, and Hugues Massicotte from remuneration they had received for doing some research-related work. The intent was to grow this general interest fund and then support students through scholarships or other means. NRESi has administrative control over this fund. The Linnaea Fund (34164) remained unchanged with a balance of \$4,350 (Table 6). The Linnaea Fund permits the spending of the principle to fund activities, while the Canfor and NRESi Endowments are traditional endowments in which only a portion of the earnings can be used.

**Table 4.** Northwood/Canfor endowment (70105): year-end budget statement for FY 2014-2015.

Opening Balance (April 2014)	\$110,596
Revenue: Interest	\$12,693
Total Revenues (FY 14-15)	\$12,693
Expenditure:	\$3102
Total Expenditures	\$3102
Year End Balance (March 2015)	\$120,188

**Table 5.** NRESi Endowment (46055): year-end budget statement for FY 2014-2015.

Opening Balance (April 2014)	\$7,046
Revenue: Interest	\$757
Revenue: Donations	\$401
Total Revenues (FY 13-14)	\$1,158
Total Expenditures (overhead)	\$38
Year End Balance (March 2014)	\$8,166

**Table 6.** Linnaea Fund (34164): year-end budget statement for FY 2014-2015.

Opening Balance (April 2013)	\$4,350
Revenue: Interest	\$70
Total Revenues (FY 13-14)	\$70
Expenditure: Overhead recovery	\$70
Total Expenditures	\$70
Year End Balance (March 2014)	\$4,350

The Funds held by NRESi in combination increased by \$217,668 during 2014-2015 for a combined total of 685,658 (Table 7).



Capital assets of the institute include a computer. It was purchased previously, but switched at no cost for a new one of equal capacity in 2014.

**Table 7.** Summary of NRESi Fund totals and change during FY 2014-2015.

NRESi Funds	2014-2015 FY End	Change during FY
30181	\$553,177	\$207,179
70105	\$120,188	\$9,592
46055	\$8,166	\$1,120
34164	\$4,350	\$0.00
Totals	\$685,881	\$217,668



## Natural Resources & Environmental Studies Institute

### 2015-2016 Workplan

This workplan describes how NRESi's 2015-2016 activities will build on the momentum of the previous fiscal year and further the objectives of NRESi through engagement, identification of new project opportunities, funders and partners, as well as providing networking across members and the community. Further to this, it will also describe how NRESi will work with other research institutes and organizations at UNBC and its partners on some key initiatives.

The focus of activities for the new year are described under five broad headings, which includes a purpose, description, and desired outcomes for each. A proposed 2015-2016 budget can be found at the end of this report, outlining anticipated expenditures for the coming year.

### Project Descriptions

#### A. Partnerships & Project Development

**Purpose:** To develop partnerships and project opportunities to support the research goals of NRESi members and address the issues of UNBC's community through solutions-based approaches and projects.

#### *Description of Activities:*

NRESi will be working to identify project and funding opportunities on behalf of its members and NRESi more broadly, working together with the Development Office and the Office of Research. Work on this began in 2014-2015 by exploring possible foundations that have linkages to NRESi's themes and the research interests of its members. Further work will be undertaken to create project themes that could be included in letters of interest to funders and to begin to build relationships. There will be a conscious effort to develop initiatives spanning across a broad set of research interests and thus engaging multiple members on collaborative projects, being as inclusive as possible and/or identifying multiple projects where researchers having diverse interests can engage. This exercise will also explore the opportunity to create projects that are applicable to multiple funding agencies or foundations and/or developing project ideas will be tailored to specific needs of individual funders.

Information and suggestions collected from NRESi members through the membership survey exercise will assist in developing potential project themes, both to their own work, but also to the needs of northern BC and beyond. Opportunities to engage with the other UNBC research institutes, in addition to the cumulative impacts work currently underway, will also be considered in this exercise.

Exploring project opportunities will be approached in two ways: (a) collaboratively with NRESi members by engaging them to help develop project themes, and, (b) developing topics of broad interest and research needs, connecting these ideas to the membership through research clusters to improve grant success. Not only is the intent to build the research capacity, scope and the work of NRESi members, new projects would provide access to additional resources, exposure to external stakeholders of the value, benefit, and opportunities working with NRESi can provide, as well as better solidify UNBC's standing as a small, research-intensive university.

*Desired Outcomes:*

- Creation of project ideas that engage multiple NRESi members in collaborative research, being as inclusive as possible to members who wish to participate on one or more initiative, building on suggestions heard through NRESi's survey exercise with members
- Identification, research into and engagement of potential funders that may have interest in the research and areas NRESi members' expertise, building relationships that could lead to funding partnerships to move forward mutual goals and objectives
- Work with the Development Office and the Office of Research to identify additional opportunities and build on existing networks that could further contribute to NRESi member research
- Identify opportunities to work with other UNBC research institutes, in addition to the continued work of the Cumulative and Community Impacts Research Consortium (CCIRC)
- Combination of reactive and proactive research project opportunities realized with diverse stakeholders and partners from outside of UNBC, engaging a diverse set of NRESi members and expertise, identifying needs and resulting solutions
- Continued focus on developing interdisciplinary research approaches (e.g. making linkages across disciplines and addressing complex issues)
- Collaborative partnership development and fundraising processes with other UNBC departments and Institutes are developed and implemented and aligned with the efforts of individual NRESi members

*B. Service to NRESi Members and UNBC*

Purpose: To maintain service delivery and networking between NRESi members and other UNBC departments for knowledge sharing, celebrating successes, building on each other's strengths, and reducing duplication of efforts where possible.

### *Description of Activities:*

NRESi represents 68 researchers, with the majority being faculty or adjunct professors at UNBC, plus some active researchers based at external organizations. NRESi undertakes the role of providing opportunities to build linkages across departments and research communities through networking and collaborative events and initiatives. It works on behalf of its members to explore partnership opportunities, as well as representing and promoting the work of its members. NRESi also engages appropriate groups within UNBC's administration (e.g. Office of Research and Development Office), to provide a linkage and communications between these groups on behalf of its members and explore project opportunities.

NRESi works to be UNBC's public face for environmental issues and knowledge. Conferences, workshops, and meetings are attended where there are opportunities to learn and further the goals and objectives of NRESi and promote the Institute, its members, and the NRES Graduate Program. NRESi also provides the venue for sharing information and reports prepared by its members through the lectures it organizes, its Publication Series, weekly newsletter, and through social media. During the last fiscal year, NRESi worked with the UNBC library to make NRESi publications accessible through the library catalogue and will continue to share new NRESi reports as they are available.

NRESi will continue to celebrate the achievements of its members and those in the natural resources research community. This will continue to be achieved in a number of ways. One example is providing NRESi's weekly newsletter as a venue for sharing new publications, awards NRESi members have received, conference presentations and other announcements. NRESi also has its awards program that is presented each fall. The awards include: (a) Lifetime Achievement for career accomplishments, (b) Distinguished Scholar for project related accomplishments, and, (c) Community Advancement for individuals and organizations outside of NRESi's membership, but part of its network and making valuable contributions to natural resource research.

NRESi will continue to build opportunities for supporting its members' research and expertise. This includes investigating how to best make the expertise of NRESi members readily available to other members, potential partners and the broader community. It could also mean further accessibility of NRESi member data and information, such as continuing to explore tools for data sharing.

### *Desired Outcomes:*

- Representation of NRESi members in partnership discussions, public venues and identifying ways to support members through projects and potential funders
- Represent NRESi members in discussions with UNBC administration for supporting the building of external relationships and engagement for members where appropriate
- Sharing of information to NRESi members about potential funding and/or partnership opportunities where possible and open doors for members to build new relationships
- Provide a venue to celebrate successes of NRESi's members within the membership, as well as to UNBC and the wider community, through sharing of accomplishments, media and other recognition in the newsletter, social, media, and other appropriate venues

- Summary of member expertise that is shared within the membership, other Research Institutes, and UNBC's Development and External Relations Offices, as well as the Office of Research, to better understand the capacity and opportunity to engage on different topics

### C. NRESi Special Projects & Events

Purpose: To engage NRESi members, UNBC, and the broader community in events and activities on relevant topics of interest, providing the opportunity for sharing knowledge and a forum for discussion.

#### *Description of Activities:*

One of the main roles and functions of NRESi is to create opportunities for sharing knowledge, as well as networking across its membership and the broader research and natural resource community. A number of NRESi venues exist for this, including the weekly colloquium lecture series, the NRES Graduate Student Icebreaker, Annual Lecture and poster session, as well as others events and activities that include NRESi members and NRES graduate students. It also actively works to identify opportunities for relevant topics of discussion and projects that NRESi members can engage in, to feed their expertise into dialogues where experience and knowledge are valuable contributions. NRESi will continue to identify areas where it can support knowledge sharing, organize events for dialogue and discussion, and provide promotion within its membership and broader network of activities to create an ongoing culture of learning from each other.

NRESi will also be continuing to work on some of the components of the proposal it submitted as part of UNBC's 25<sup>th</sup> anniversary. There are two components left to complete: (a) campus tree plantings during regional convocation ceremonies and tree planting at UNBC's research forests and properties, and, (b) planting 16,000 seedlings in honour of the 16,000 people who signed a petition which made the dream of UNBC a reality.

NRESi was successful in its proposal to extend its ongoing relationship with the Peace Fish and Wildlife Compensation Program for a lecture series in 2014-2015. This year NRESi will be organizing three lectures, one in Prince George during the usual spring timeslot, plus two additional presentations in the fall and winter in a northeastern BC community.

#### *Desired Outcomes:*

- NRESi events and joint initiatives are continued, capitalizing on collaborative opportunities with other Institutes and partners where appropriate
- Continued support and planning of NRESi activities and networking opportunities between members and with the broader research, natural resource and environmental studies community
- Develop and/or fill the role of representing NRESi members in discussions with UNBC and external agencies

#### D. Communications

*Purpose:* To facilitate communication within the membership, to UNBC and external stakeholders, governments, communities, and other partners.

##### *Description of Activities:*

NRESi uses a number of different venues to share information across its network. This includes external communications efforts, such as through the weekly newsletter, social media feeds, posters in UNBC hallways about upcoming events, as well as through email announcements. NRESi also works to provide information about opportunities to its membership list and engaging researchers where possible to do so.

NRESi is in the process of updating its website; the content itself has been revised, with further plans for this year to streamline its structure and make it more user-friendly. The intent is to include stories about members and NRESi activities, spotlighting accomplishments and research. Last year, investigation was made into creating an interactive blog or news feed, to provide a two-way dialogue with NRESi members and the community; NRESi is still exploring the opportunity of setting up such a system and will continue to work with UNBC Communications to identify options that could be undertaken. In cooperation with the UNBC Communications and IT departments, NRESi is also creating a new video archive website for its past colloquium presentations and special lectures. This new site will have a search function where videos can be queried based on topic, keywords (in the title, abstract), date and presenter. Further to this, videos will also be uploaded to YouTube to make them easier to be searched through broad web-searches. NRESi will be continuing to post information about upcoming events to UNBC's Events webpage, to create broader distribution of activities.

##### *Desired Outcomes:*

- NRESi's weekly newsletter and current social media sites, and other communications tools used to provide a venue to share information to wide audiences and allow for networking within the research, natural resource, and environmental studies community, as well as an opportunity to create a dialogue where possible on current issues, activities and opportunities that could be built upon
- Improvements to NRESi's web presence by making updates to allow information to be streamlined, found easier and in a more interactive fashion

#### E. Governance & Administration

*Purpose:* To develop a future direction and organizational approach that works to meet the needs of NRESi and its members

##### *Description of Activities:*

NRESi will be identifying candidates that would provide beneficial, insightful and valuable advice to NRESi through its external Advisory Panel. This includes those who have experience and/or insights that will help to move forward the goals and objectives of NRESi, as well as helping to create new research and strategic opportunities to support NRESi members, in

addition to meeting needs of northern BC and beyond. Once the members of the Advisory Panel are confirmed, an initial meeting will be arranged to begin the dialogue.

As NRESi continues its membership survey exercise, suggestions are being collected about how NRESi can better serve their needs, and what they see NRESi's role and function to be. On an ongoing basis, NRESi is consolidating these recommendations and will begin to incorporate the suggestions into its planning and activities, both for the short- and long-term.

Tasks required for organizational management will continue, such as holding an Annual General Meeting, developing an Annual Report of the past year's activities, summarizing a financial report and ongoing monitoring, creating a workplan for the coming year, monthly Steering Committee meetings, Advisory Panel meetings, and other administrative needs. The Steering Committee will continue to provide an important role in guiding the ongoing activities of NRESi, by providing support to the Director and Research Manager.

*Desired Outcomes:*

- Engagement of NRESi members through completion of NRESi's members survey, to further contribute ideas and suggestions to direction of NRESi
- Identification of possible representatives to NRESi's Advisory Panel and conduct at least one initial discussion with this group to provide insights to NRESi opportunities
- Administration requirements needed to ensure appropriate management of the organization, including but not limited to: ongoing meetings and engagement from the Steering Committee, reporting, budgeting, project and organizational planning, etc.

## NRESi Proposed 2015-2016 Budget Expenditures by Category

	2015/2016	2014/2015
<b>Opening Balance:</b>	<b>\$552,930</b>	<b>\$345,998</b>
<b><u>Revenues:</u></b>	<b>\$24,000</b>	<b>\$304,607</b>
<b><u>Expenditures:</u></b>		
Salary and Benefits:	\$75,194	\$75,194
PD	\$1,000	\$314
Course Buyout (5 SCH):	\$11,121	\$11,121
Office (supplies/copying/phone):	\$1,100	\$1,311
Event/Speaker costs*: (travel, event setup, honoraria)	\$5,000	\$7,637
Student Grants:	\$500	\$500
Other Printing:	\$300	\$352
Relocation expense:	\$0	\$1000
<b>Total expenditures:</b>	<b>\$94,215</b>	<b>\$97,429</b>
<b><u>Year end balance:</u></b>	<b>\$482,715</b>	<b>\$553,176</b>
<b><u>Year to year change in balance:</u></b>	<b>-\$70,461</b>	

\*Excluding sponsored speaker series.