

# Report on the Regional Meetings & Convergence Workshop for:

In Whose Backyard? - Exploring Toxic Legacies in Mi'Kmaw & African Nova Scotian Communities

Environmental Noxiousness, Racial Inequities & Community Health (ENRICH) Project

March 3rd, 2014

# Ingrid Waldron, Ph.D.

Assistant Professor School of Nursing Faculty of Health Professions Dalhousie University

Through community engagement, relationship-building, interactive solution-oriented dialogue, media, community-based social action research, and innovative knowledge sharing methods, the ENRICH Project intends to support community efforts for mobilizing on the health effects and socio-economic outcomes associated with environmental racism-

# TABLE OF CONTENTS

ACKNOWLEDGEMENTS	4
EXECUTIVE SUMMARY	8
OVERVIEW OF REGIONAL MEETINGS & CONVERGENCE WORKSHOP	14
MEETING & WORKSHOP OBJECTIVES	15
OVERVIEW OF THE ENRICH PROJECT	16
Project Objectives & Activities	16
Project Stages	16
FUTURE RESEARCH STUDIES & PROJECTS	17
Philosophical Foundation	17
Critical Theory	17
Anti-Colonial Theory	17
Anti –Racism Theory	18
Indigenous Knowledge: Two-Eyed Seeing Model	18
African-Centered Theory	
Research Approaches	19
Community-Based Participatory Action Research	
Advocacy Research	
THE TEAM	21
Research Staff	
Faculty	
Meeting & Workshop Organizers	
Advisory Committee	
Documentary Filmmakers	
ERICH: THE EVOLUTION	
The Genesis	26
Engaging Communities & The Case of Pictou Landing	
First Nation: Pitfalls, Stumbles & Coming out on the	
Other Side	26
Methodology for Regional Meetings & Convergence	
Workshop	28
Discoveries, Highlights & Lasting Impressions	29
SETTING THE STAGE: BACKGROUND & CONTEXT	31
Health Effects	32
Socio-Economic Outcomes	33

# TABLE OF CONTENTS

Community Profiles	34
Yarmouth	34
Membertou	34
Lincolnville	35
North Preston	35
Halifax Regional Municipality (HRM) & Surrounding Area.	35
KEY FINDINGS FROM REGIONAL MEETINGS	36
Sunnyville Meeting	36
North Preston Meeting	38
Yarmouth Meeting	40
Membertou Meeting	42
Halifax Regional Municipality (HRM) & Surrounding Area	
Meeting	44
CONVERGENCE WORKSHOP	46
Overview of Workshop Activities	46
Key Findings from Convergence Workshop	48
SUMMARY OF KEY SHORT-TERM OBJECTIVES FOR WORKSHOP FOLLOW	-Up
Activities	55
ACTIVITIES	55
	55
Sharing & Communicating Workshop Findings & Project Resources	
Sharing & Communicating Workshop Findings & Project Resources	55
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity	55
Sharing & Communicating Workshop Findings & Project Resources	55 57
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement &	55 57
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH	555758
Sharing & Communicating Workshop Findings & Project Resources	55575859
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH Key Research Priorities Key Research Objectives	5557585959
Sharing & Communicating Workshop Findings & Project Resources	5558595960
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH  Key Research Priorities Key Research Objectives Key Research Questions  KNOWLEDGE SHARING & MOBILIZING ACTIVITIES	555859596061
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH  Key Research Priorities Key Research Objectives Key Research Questions  KNOWLEDGE SHARING & MOBILIZING ACTIVITIES  FINAL WORDS	555859606161
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH Key Research Priorities Key Research Objectives Key Research Questions  KNOWLEDGE SHARING & MOBILIZING ACTIVITIES  FINAL WORDS  APPENDICES	555859606165
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH  Key Research Priorities Key Research Objectives Key Research Questions  KNOWLEDGE SHARING & MOBILIZING ACTIVITIES  FINAL WORDS  APPENDICES  Appendix #1: Glossary	55585960616568
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity. Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH  Key Research Priorities Key Research Objectives Key Research Questions  KNOWLEDGE SHARING & MOBILIZING ACTIVITIES  FINAL WORDS.  APPENDICES  Appendix #1: Glossary Appendix #2: HRM Meeting & Convergence Workshop Agenda	5558596061616568 a69
Sharing & Communicating Workshop Findings & Project Resources Building Research Capacity Supporting Residents' Community Engagement & Mobilizing Efforts  RESEARCH  Key Research Priorities Key Research Objectives Key Research Questions  KNOWLEDGE SHARING & MOBILIZING ACTIVITIES  FINAL WORDS  APPENDICES  Appendix #1: Glossary	55585961616568 a68 a69

# **ACKNOWLEDGMENTS**

I would like to thank the following individuals, organizations, and businesses for their assistance with and participation in the regional meetings and convergence workshop:

# RESEARCH STAFF

Dave Ron, Research Coordinator Shelina Gordon, Research Assistant Ashlee Hinchey, Graphic Design

# **UNIVERSITY FACULTY**

Dr. Ingrid Waldron, School of Nursing, Dalhousie University

Dr. Swarna Weerasinghe, Community Health & Epidemiology, Dalhousie University

Dr. Sheri Price, School of Nursing, Dalhousie University

Dr. Mikiko Terashima, Environmental Science Program, Dalhousie University

Dr. Cynthia Alexander, Department of Political Science, Acadia University

### **ADVISORY COMMITTEE**

Lynn Jones, Community Member, Halifax

James Desmond, Community Member, Lincolnville

Tuma Young, Assistant Professor, Mi'kmaw Studies, Cape Breton University

Denise Allen, Community Member, Africville

Jonathan Beadle, Community Member, Pictou Landing First Nation

Louise Hanavan, Managing Director, Ecology Action Center, Halifax

Dr. Wilber Menendez Sanchez, General Science Instructor, Nova Scotia Community College, Dartmouth

Gwen Coleman, Managing Director, GPI Atlantic, Halifax

Aimee Carson, Community Food Coordinator, Ecology Action Center, Halifax

Allison Petten, Educator & Health Consultant, Environmental Health Association of Nova Scotia. Halifax

Ann Marrian, Program Director, Canadian Race Relations Foundation, Toronto

### COMMUNITY-BASED MEETING & WORKSHOP ORGANIZERS

Dawn Harwood-Jones, Pink Dog Productions (Lead Workshop Organizer)

Catherine Hartling (Sunnyville Meeting)

Miranda Cain (North Preston Meeting)

Sonya Isaac Surette (Yarmouth Meeting)

Yvonne Mosely (Membertou Meeting)

Lynn Jones (Halifax Meeting & Workshop)

# **HOSTESSES/HOSTS**

James Desmond (Sunnyville Meeting)
Dolly Williams (North Preston Meeting)
Lynn Jones (Halifax Workshop)

# **KEYNOTE SPEAKERS**

James Desmond (Sunnyville Meeting) Denise Allen (North Preston Meeting) Alan Knockwood (Halifax Workshop) Irvine Carvery (Halifax Workshop)

# MI'KMAW ELDERS AT MEMBERTOU MEETING

Albert Marshall Murdena Marshall Ernest Johnson Lillian B. Marshall Jane E. Meader John Cremo Michael Denny

# **MEETING & WORKSHOP FACILITATORS**

Denise Allen (North Preston Meeting)
Lynn Jones (Halifax Meeting & Workshop)
Alan Knockwood (Halifax Meeting)
Wanda Thomas (Halifax Meeting & Workshop)
Cathy Murphy (Halifax Meeting & Workshop)
David Maxwell (Halifax Meeting & Workshop)
Kwesi Firempong (Halifax Meeting & Workshop)

# **ENTERTAINMENT**

Lucky Campbell, Singer & Musician (Sunnyville Meeting) Cindi Cain, Singer (North Preston Meeting) Josee Bourgeois, Dancer (Halifax Workshop) Joe Sylliboy, Drummer (Halifax Workshop) El Jones, Spoken Word Artist (Halifax Workshop)

# **DOCUMENTARY FILMMAKERS**

Dawn Harwood-Jones, Pink Dog Productions, Halifax Sobaz Benjamin, In My Own Voice, Halifax

# **PUBLICITY & PROMOTION**

Pink Dog Productions, Halifax

# **CATERING**

Tracadie United Baptist Ladies Auxiliary (Sunnyville Meeting)
Del's on the Run Catering Service (North Preston Meeting)
Rodd Grand Yarmouth – Rodd Hotel & Resorts (Yarmouth Meeting)
Yvonne Mosely (Membertou Meeting)
South Park Catering (Halifax Meeting & Workshop)

# **VENUES**

Sunnyville Community Hall
North Preston Community Center
Rodd Grand Yarmouth – Rodd Hotel & Resorts (Digby West Meeting Room)
Membertou Heritage Park (Meeting Room)
Halifax Forum (Maritime Hall)

# **FUNDING AGENCIES**

Social Sciences & Humanities Research Council, 2013 Connections Grant (SSHRC), Ottawa

Faculty of Health Professions, 2013 Special Purposes Fund, Dalhousie University, Halifax Office of African Nova Scotian Affairs, 2013 Grants & Contributions Program (Tier 3), Halifax

Black Educators Association, Halifax



# MI'KMAW ETHICS WATCH

Please note that this project was approved by Mi'kmaw Ethics Watch on February 25, 2013.

For more information:

# **ENRICH Project Website**

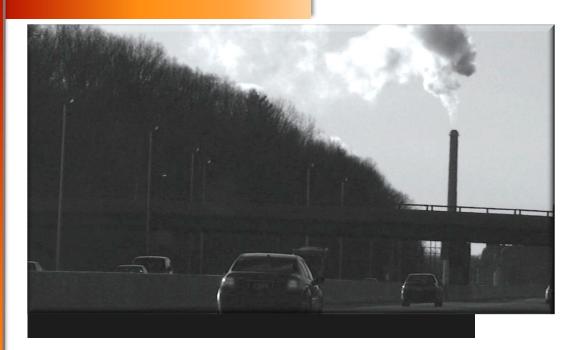
http://www.enrichproject.org/

# **ENRICH Project Facebook Page**

https://www.facebook.com/pages/Environmental-Noxiousness-and-Racial-Inequities-Enrich-Project/417745134992417

# The ENRICH Project c/o School of Nursing

Dalhousie University 5869 University Avenue Forrest Building P.O. Box 15000 Halifax, Nova Scotia B3H 4R2



# **EXECUTIVE SUMMARY**

# **OVERVIEW OF THE ENRICH PROJECT**

The Environmental Noxiousness, Racial Inequities & Community Health (ENRICH) Project was established in the spring of 2012. ENRICH is a collaborative community-based project investigating the cause and effects of toxic industries and waste dumps situated near to Mi'kmaw and African Nova Scotian communities. The ENRICH team is comprised of university faculty/researchers and an Advisory Committee comprised of community members and non-profit organizations coalescing to support and connect long-standing community initiatives. The activities of the ENRICH Project focus specifically on the links between industrial contaminants, health, environmental epidemiology, racial inequities, and policy/planning decisions. The main purpose of ENRICH is:

- To explore both the socio-economic outcomes and health effects associated with toxic industries and waste dumps near to Mi'kmaw and African Nova Scotian communities;
- To improve the flow of research benefits to these communities by ensuring that these
  activities serve as a platform to investigate, while potentially informing provincial
  regulatory requirements for environmental justice and access to clean resources in
  Mi'kmaw and African Nova Scotian communities in Nova Scotia; and
- To support community efforts for mobilizing on the effects of toxic industries in their communities.

# **OVERVIEW OF THE ENRICH REGIONAL MEETINGS & CONVERGENCE WORKSHOP**

The meetings and the convergence workshop outlined in this report are based on the ENRICH project. Four regional meetings and one convergence workshop entitled "In Whose Backyard? - Exploring Toxic Legacies in Mi'kmaw & African Nova Scotian Communities" were held in Sunnyville, North Preston, Yarmouth, Membertou, and Halifax with residents from the following Mi'kmaw and African Nova Scotian communities:

- Eastern Nova Scotia, Lincolnville, Sunnyville, Upper Big Tracadie (September 28, 2013)
- Central Nova Scotia, North Preston, East Preston, Cherry Brook, Lake Loon (October 5, 2013)
- Western Nova Scotia, Yarmouth, Acadia First Nation (October 19, 2013)
- Cape Breton, Membertou, Eskasoni (November 23, 2013)
- Halifax Regional Municipality (HRM) and Surrounding Areas (January 11, 2014)

## **MEETING & WORKSHOP OBJECTIVES**

The regional meetings and final convergence workshop had the following main objectives:

- To bring together Mi'kmaw and African Nova Scotian communities that are currently or historically proximal to toxic industries and waste dumps to share experiences around environmental racism and democratic inclusion;
- To identify residents' concerns and priorities about the health effects and socio-economic outcomes (property value, labour, employment, demographic patterns) associated with their proximity to toxic industries and waste dumps;
- To obtain suggestions and guidance from residents about if or how a future research study could support ongoing and new advocacy efforts around the removal or re-direction of toxic industries and waste dumps proximate to their communities; and
- To document residents' personal anecdotes and stories about the health effects and socioeconomic outcomes associated with toxic industries and waste dumps proximate to their communities in a workshop documentary film and workshop report.

# SUMMARY OF KEY FINDINGS FROM REGIONAL MEETINGS

# Sunnyville Meeting:

Participants at the meeting shared the following concerns about how toxic industries and waste dumps near to their community have impacted the health and the socio-economic well-being of their community:

- High rates of certain illnesses in the community, including cancer (prostate, stomach, lung, and skin cancers) and diabetes;
- Water contamination due to leaking from the first generation landfill;
- The opening of a second-generation landfill in 2006 at the site of the old dump;
- Toxins in the soil;

- Lack of support from and responsiveness by Community Liaisons responsible for waste management; and
- Lack of response from and follow-up by the Council to the presentation in April 2013 by the Lincolnville Environmental Group Society.

# North Preston Meeting:

Participants at the meeting shared the following concerns about how toxic industries and waste dumps near to their community have impacted the health and the socio-economic well-being of their community:

- High rates of certain illnesses in the community, including cancer, diabetes, heart disease, asthma and skin problems;
- Water contamination, including arsenic in the wells;
- Toxic waste dump near to the North Preston Community Center;
- Toxic waste from the North Preston dump running into the East Lake;
- Installation of wind turbines in the community; and
- Failure by the Nova Scotia Department of Energy to consult the community about the proposed plan to install wind turbines in North Preston in the next few years.

# Yarmouth Meeting:

Participants at the meeting shared the following concerns about how toxic industries and waste dumps near to their community have impacted the health and the socio-economic well-being of their community:

- High rates of certain illnesses in the community, including cancer, allergies, and asthma;
- Diesel fluid dumped into an area on the Yarmouth Reserve;
- Arsenic in the water at the Gold River Reserve;
- Wind turbines in Pubnico that may be associated with high rates of cancer and that can be attributed to families vacating their homes and depreciating property values;
- Yarmouth Reserve was built on an old dump, resulting in contaminated soil and patchy, yellow grass; and
- A junk yard that was used as a dumping ground for car parts has existed underneath the Reserve for over 60 years.

# Membertou Meeting:

Participants at the meeting shared the following concerns about how toxic industries and waste dumps near to their community have impacted the health and the socio-economic well-being of their community:

- High rates of certain illnesses and disabilities in the community, including cancer, diabetes, high blood pressure, asthma, and learning disabilities (e.g. autism);
- Chemicals in the water, resulting in toxins in food;
- Toxic waste in the sewer system, including diesel, paint, and paint thinner;
- Garbage from Yarmouth flowing into the Guysborough waste dump site;
- Contamination of the bay and fish due to pulp wood from the pulp industry; and
- Power lines running through reserves.

# Halifax Regional Municipality (HRM) & Surrounding Areas Meeting:

Participants at the meeting shared the following concerns about how toxic industries and waste dumps near to their community have impacted the health and the socio-economic well-being of their community:

- High rates of cancer and other illnesses in Mi'kmaw and African Nova Scotian communities;
- Failure of government to clean up arsenic in the water;
- The siting of the Nova Scotia Power plant in the Mi'kmaw community of Tuff's Cove on the Halifax Harbour (which was a traditional Mik'maw community that was destroyed with the Halifax Explosion), which is impacting the ecosystem of Halifax Harbour;
- Failure of government to respond to residents' concerns about the government's decision to use Hammonds Plains (a sub-community of Indian Brook) as a mercury dump;
- The environmentally hazardous methods used by Nova Scotia Sand & Gravel to dig up and clean sand in Indian Brook. This method, which involves digging down to the level near to where the community's water table flows, has resulted in the water table flowing into their site. This has resulted in huge reservoirs of water the community can no longer use since the water supply comes from the water table; and
- The siting of the landfill at Otter Lake, which is right next door to the African Nova Scotian community of Beechville.

# Convergence Workshop:

Participants at the workshop shared the following suggestions for engaging and mobilizing Mi'kmaw and African Nova Scotian communities in research, community mobilizing, and advocacy efforts around environmental racism in their communities:

- Ensure that the community has ownership of the research;
- Ensure the safety of residents by building meaningful, trusting relationships between researchers and residents;
- Ensure transparency around the future research study by keeping community members informed about the research process, decision-making, and study results. For example, share this information with residents at town hall meetings, churches, and high schools;
- Build a research team that involves community members and researchers working collaboratively and in solidarity;
- Train community members about how to conduct research in their communities, including identifying community resources, developing research questions, writing grant proposals, collecting and analyzing data, and communicating to media;
- Give youth the tools to advocate around environmental racism in their communities;
- Tap into traditional ways of communicating within different communities, including agency resources, churches, community centers, and immigration agencies;
- Encourage environmental groups to play a bigger and more effective role advocating around environmental racism and building solidarity with diverse communities across Nova Scotia;

- Develop media campaigns (e.g. press releases) that create awareness in the general public about environmental racism;
- Ensure that government policies address environmental racism in multiple ways, including through compensation, removal or remediation; and
- Engage various agencies and organizations in advocacy and mobilizing efforts around environmental racism in the HRM, including HRM Councillors, the Department of Community Services, the Nova Scotia Department of Health and Wellness (Diversity Roundtable), churches in the African Nova Scotian community, and the African Nova Scotian Affairs Integration Office.

# SUMMARY OF KEY SHORT-TERM OBJECTIVES FOR WORKSHOP FOLLOW-UP ACTIVITIES

The short-term objectives listed below will support new and ongoing advocacy efforts around environmental racism in their regions. These objectives will be carried out by members of the ENRICH team and student/youth volunteers.

# Sharing & Communicating Workshop Findings & Project Resources:

- Submit the meeting and workshop report to key federal, provincial, and municipal government departments and agencies;
- Submit the meeting and workshop report to other key individuals, agencies, and organizations;
- Conduct outreach using project newsletter, Facebook, Twitter, phone, and email to sustain public interest and engagement in the project and to unite the larger Nova Scotian community around environmental racism;
- Share the documentary film with community members, government, and community-based agencies in broad, accessible, and transparent ways, including online platforms, libraries, junior high and high schools, the School Board, the Department of Education (including the African Canadian Services Division), and environmental agencies; and
- Share interactive Environmental Justice Mapping Portal.

# **Building Research Capacity:**

- Review existing recorded historical data on the location of waste dumps in Mi'kmaw and African Nova Scotian communities from the municipal and provincial governments;
- Review government policies on environmental waste, toxic dumps, and toxic industries in the identified communities;
- Collect spatial data;
- Research information for community health surveys;
- · Develop community health survey templates; and
- Develop research partnerships with community leaders/facilitators who are trusted community members who would be interested in becoming "the face of the project".

# Supporting Residents' Community Engagement & Mobilizing Efforts:

 Organize a meeting with key leaders from each of the five regions to help forge collaborative relationships amongst these leaders and to create a sense of unity and cohesion among residents;

- Engage Mi'kmaw, African Nova Scotian, and other youth, including coordinating a youth arts-based project/program; and
- Consult with agencies and individuals that could support residents in their mobilizing and advocacy efforts around the elimination, removal, and re-directing of toxic industries and waste dumps in their communities.

# **KEY RESEARCH OBJECTIVES**

The key research objectives include the following:

- To map air pollution levels of commonly known waste disposal pollutants data using geographic information system (GIS) techniques for the selected communities;
- To document and analyze personal stories/qualitative accounts of the health experiences of Mi'kmaw and African Nova Scotian communities residing near to toxic industries and waste disposal sites;
- To explore health risk profiles of Mi'kmaw and African Nova Scotian communities residing near to toxic industries and waste disposal sites using medical service insurance databases:
- To examine the impact that residence near to toxic industries and waste disposal sites has on local employment opportunities, land value, standard of living, local services and utilities, and demographic trends in the regions using secondary data;
- To map socio-economic data obtained from census and statistics data using GIS techniques for the selected communities; and
- To inform future best regulatory practices for topics including environmental protections, regulation and legislations, environmental health assessments, democratic decision-making, and community consultation.

### **KNOWLEDGE SHARING & MOBILIZING ACTIVITIES**

Current and future knowledge sharing and mobilizing activities include the following:

- Report on the Regional Meetings & Convergence Workshop
- Documentary Film Based on the Regional Meetings & Convergence Workshop
- Environmental Justice Mapping Portal
- Toxic Legacies Timeline
- Media
- Youth Video Contest & Arts-Based Project
- Project Website/ & Social Media
- Project Newsletter
- Email Listserv
- Photo Essays
- Community Meetings
- Future Research Study Report

# OVERVIEW OF REGIONAL MEETINGS & CONVERGENCE WORKSHOP

The meetings and the convergence workshop outlined in this report are based on the project entitled *Environmental Noxiousness*, *Racial Inequities & Community Health (ENRICH)*, which was established in the spring of 2012. ENRICH is a collaborative community-based project investigating the cause and effects of toxic industries and waste dumps situated near to Mi'kmaw and African Nova Scotian communities.

Please note that this project was approved by Mi'kmaw Ethics Watch on February 25, 2013 (please see approval letter in Appendix #3 on page 68).

The ENRICH Team is comprised of university faculty/researchers and an Advisory Committee comprised of community members and non-profit organizations coalescing to support and connect long-standing community initiatives. The activities of the ENRICH Project focus specifically on the links between industrial contaminants, health, environmental epidemiology, racial inequities, and policy/planning decisions.

Four regional meetings and one convergence workshop entitled "In Whose Backyard? - Exploring Toxic Legacies in Mi'kmaw & African Nova Scotian Communities" were held in Sunnyville, North Preston, Yarmouth, Membertou, and Halifax with residents from the following Mi'kmaw and African Nova Scotian communities:

- Eastern Nova Scotia, Lincolnville, Sunnyville, Upper Big Tracadie (September 28, 2013)
- Central Nova Scotia, North Preston, East Preston, Cherry Brook, Lake Loon (October 5, 2013)
- Western Nova Scotia, Yarmouth, Acadia First Nation (October 19, 2013)
- Cape Breton, Membertou, Eskasoni (November 23, 2013)
- Halifax Regional Municipality (HRM) and Surrounding Areas (January 11, 2014)

The regional meetings and convergence workshop provided opportunities for residents to share their concerns and priorities around the health effects and socio-economic outcomes associated with toxic facilities/industries and waste dumps near to Mi'kmaw and African Nova Scotian communities. Health effects and socio-economic outcomes refer to the impact that environmental risks have on population health and on the financial/economic, social, human and environmental well-being and functioning of residents, organizations and institutions. **Environmental racism** is a central issue in this project. It refers to the inequitable and disproportionate placement of LULU's and noxious facilities (please see definitions for environmental racism, LULUs, and noxious facilities in the Glossary on page 65) near to racialized communities and the working poor (please note that the term "racialized" is a sociological term that is often used to refer to non-white and non-European heritage communities that lack social, economic, and political power in white

dominant societies). It also refers to the lack of democratic engagement of such communities in making decisions about where these facilities are situated.

# **MEETING & WORKSHOP OBJECTIVES**

The regional meetings and final convergence workshop had the following main objectives:

- To bring together Mi'kmaw and African Nova Scotian communities that are currently or historically proximal to toxic industries and waste dumps to share experiences around environmental racism and democratic inclusion;
- To identify residents' concerns and priorities about the health effects and socioeconomic outcomes (property value, labour, employment, demographic patterns) associated with their proximity to toxic industries and waste dumps;
- To obtain suggestions and guidance from residents about if or how a future research study could support ongoing and new advocacy efforts around the removal or redirection of toxic industries and waste dumps proximate to their communities; and
- To document residents' personal anecdotes and stories about the health effects and socio-economic outcomes associated with toxic industries and waste dumps proximate to their communities in a workshop documentary film and workshop report.

# OVERVIEW OF THE ENRICH PROJECT

# **PROJECT OBJECTIVES & ACTIVITIES**

The main thrust of the ENRICH Project is to explore both the socio-economic outcomes and health effects associated with toxic industries and waste dumps near to Mi'kmaw and African Nova Scotian communities. At the same time, the ENRICH Project seeks to acknowledge and validate the histories, cultures and local contexts of Mi'kmaw and African Nova Scotian communities by integrating Mi'kmaw and African-centered knowledge, traditions, ways of knowing, and learning approaches into all Project activities. In so doing, it seeks to build on the research knowledge, skills and expertise of Mi'kmaw and African Canadian/Nova Scotian scholars and community members. The project also seeks to improve the flow of research benefits to these communities by ensuring that these activities serve as a platform to investigate, while potentially informing provincial regulatory requirements for environmental justice and access to clean resources in Mi'kmaw and African Nova Scotian communities in Nova Scotia. Through community engagement, relationship-building, interactive solution-oriented dialogue, media, community-based social action research, and innovative knowledge sharing methods, the ENRICH Project intends to support community efforts for mobilizing on the effects and socio-economic outcomes

associated with environmental racism in their communities.

Through community engagement, relationship-building, interactive solution-oriented dialogue, media, community-based social action research, and innovative knowledge sharing methods, the ENRICH Project intends to support community efforts for mobilizing on the effects and socio-economic outcomes associated with environmental racism in their communities.

### **PROJECT STAGES**

The five main stages of the ENRICH Project include:

- Building and converging a team comprised of faculty/researchers and Advisory Committee members (community members and activists, community-based agencies, health agencies, environmental agencies) (2012-ongoing);
- Hosting a series of meetings and a final convergence workshop (September 2013-January 2014);
- Using traditional and social media to create awareness, share knowledge, and mobilize community members and the wider public around the health effects and socioeconomic outcomes associated with toxic industries and waste dumps near to Mi'kmaw and African Nova Scotian communities (2013-ongoing);
- Engaging in community engagement and community development activities to support community advocacy and mobilizing activities, and
- Responding with community-based participatory action research studies (2014 and beyond).

# **FUTURE RESEARCH STUDIES & PROJECTS**

# **PHILOSOPHICAL FOUNDATION**

Future research studies and projects conducted through ENRICH will use naturalistic inquiry, a philosophical foundation that acknowledges the complexities of the human experience and the implications of historical, social, economic and political factors and processes in the lives of individuals and communities. The main purpose of naturalistic research is exploration, understanding, description, and explanation. Adhering to the principles of naturalistic research, future research studies and projects conducted through ENRICH will be bounded along a number of dimensions, including location or physical setting (i.e. the regions that are the focus of this project, as well as other regions identified by the project team), cultural groups (Mi'kmaw and African Nova Scotian communities), and the range and nature of experiences examined (health effects and socio-economic outcomes associated with toxic industries and waste dumps; indigenous/cultural ideologies about health and illness). ENRICH will engage with a number of intersecting theories and models/paradigms to build a philosophical foundation that recognizes, legitimizes, and incorporates into all project activities the histories, traditions, and "ways of knowing" of Mi'kmaw and African Nova Scotian peoples. These theories and models/paradigms are outlined below.

# Critical Theory:

ENRICH studies and projects will use a critical theory lens to challenge dominance, as well as hegemonic ideologies around race, culture, social class, socio-economic status, and other social factors. Critical theory validates participants as valid and authentic knowers. Its objective is to interrogate the many "taken-for-granted" assumptions that we hold and that often mask the realities and lived experiences of individuals and communities. At its core is a focus on addressing the competing interests that result from competing ideologies and discourses, as well as an interest in resolving conflicts or injustices for the good of socially oppressed communities. In other words, critical theory is concerned with challenging normative ideologies and practices that are often deeply embedded within social structures, institutions, and relations in order to critique and resolve current injustices and bring about positive social change. This critique may take many forms, including interrogating social discourse, as well as examining unjust social conditions in order to reveal the often hidden and invisible structures and processes that create, sustain, and mask unjust conditions. Therefore, critical theory provides researchers with the tools for gaining insight into the various ways in which marginalized communities can mobilize and transform the injustices that affect their lives. In essence, then, critical theory views theory and social action as inextricably linked.

# Anti-Colonial Theory

Anti-colonial theory can be viewed as but one strand of critical theory. In revealing the processes through which colonial relations and inequalities are produced and reproduced within each successive generation, anti-colonial theory questions the privilege and dominance that result from unequal relations of power in societies marked by hierarchies of difference. Colonialist ideologies of racial superiority and inferiority are used to legitimize the oppression and

dominance of racialized peoples. These ideologies unfold in many ways, including the imposition of Euro-Western ideologies, values, and worldviews upon racialized peoples; the imbuing of negative traits upon these peoples; and the marginalization and subordination of indigenous cultures, traditions, knowledges, languages, and practices within education, art, media, popular culture, and healthcare. Consequently, understanding the historical and present-day impact of colonialism allows us to interrogate how deeply "relations of power and privilege" permeate and are embedded within post-colonial societies and institutions (Waldron, 2012). At its core, anti-colonial theory is a theory of liberation that demonstrates how solidarity can be realized through counter-hegemonic consciousness and acts of resistance. It also offers a space for articulating the counter-knowledges of marginalized communities that are rooted in their histories, cultural traditions, as well as their individual and collective experiences (Waldron, 2002). Both the indigenous knowledges of Mi'kmaw peoples and African-centered theory (discussed below) are examples of counter-knowledges that seek to subvert normative discourses within Euro-Western thought.

# Antiracism Theory

Antiracism theory is an action-oriented political strategy to address the problem of race through institutional and systemic change. Its social and political agendas are to rupture the status quo through a commitment to political activism. Antiracism theory examines the ways that racist policies, procedures, and actions are manifested, entrenched, and unconsciously supported by institutional structures to consciously or unconsciously and directly or indirectly promote and sustain differential advantage or privilege for certain racial communities. While it argues for the saliency of race, it acknowledges that one cannot fully understand the social effects of race without appreciating how race intersects with other forms of social difference, such as socio-economic status, social class, poverty, gender, sexual orientation, and other social factors. Moreover, antiracism theory centers the saliency of race alongside a critique of whiteness. It interrogates historically constituted relations of domination and subordination by questioning white male power and privilege and the rationality for dominance in society. It examines how whiteness plays a role in preserving and reinforcing racial bias, exclusion, and cultural and ideological hegemony. Antiracism theory also problematizes the marginalization of certain voices in society and, specifically, the deligitimation of the knowledges and experiences of racialized communities.

# Indigenous Knowledge: "Two-Eyed Seeing Model":

Indigenous knowledge is premised on the following belief systems: a) believing that humans and nature make up a whole; b) validating the knowledge of Elders by integrating it into present-day knowledge; c) giving respect to those who have passed, those who are living, and those who make up future generations; and d) acknowledging a higher power. Despite the increasing propensity to embrace spiritual, indigenous, and traditional approaches in Western society, initiatives to forge authentic alliances between Western medicine and Indigenous health practices are often fraught with challenges. Opportunities for syncretism between both health systems need to continue to develop and evolve since all knowledge systems offer possibilities (and limitations) for understanding the social world (Waldron, 2002; Waldron, 2010). There are various examples of successful collaborative

models that attempt to bridge the gap between Indigenous and Western health knowledges. For example, Two-Eyed Seeing or Etuaptmumk (the Mi'kmaw word for Two-Eyed Seeing) is the guiding principle brought into the Integrative Science co-learning journey by Mi'kmaw Elder Albert Marshall in Fall 2004. Two-Eyed Seeing refers to the importance of validating multiple perspectives and knowledges by understanding and embracing the strengths of Indigenous ways of knowing of Mi'kmaw peoples and the strengths of Western or "mainstream" knowledge systems. In other words, Two-Eyed Seeing recognizes that learning to use both of these eyes (i.e. Indigenous and Western ways of knowing) by "learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing" benefits everyone (Institute for Integrative Science & Health, 2014).

# African-Centered Theory:

African-centred theory situates the interests and priorities of African peoples of the diaspora at the center of any discussion. It suggests the need for African peoples to examine their cultures and histories from an African frame of reference and to interrogate and challenge the validity of Western (i.e. Eurocentric) knowledge as universal and classical. Africancentred theory is grounded in an African social reality that borrows from the history, culture, and philosophy of African civilization. According to this theory, the collective orientation to reality and nature that characterizes the world view of African peoples defines what it means to be African biologically, culturally, psychologically, historically, and politically. The African world view is governed by the overriding theme of "human-nature unity", "oneness with nature", or "harmony with nature". The human-nature relationship that is embraced in African-centered theory is premised on creating equilibrium and harmony amongst the various components of the universe. Therefore, the notion that "I am, because we are" means that "we are, therefore, I am" in the African-centred world view. While Western cultures place more importance on the individual than the collective (i.e. a "survival of the fittest" ethos), the African-centred world view sees the "I" (self) and the "We" (community, nature) as interdependent. Consequently, the survival of the family, community, nation, and humanity, as a whole, is considered to be more important than the individual. It is an ethos that is based on values and customs that emphasize inclusiveness, commonality, cooperation, harmony with each other and with nature, interdependence, collective responsibility, complementarity, understanding, generosity, compassion, and spiritualism (Waldron, 2002; Waldron, 2010).

# RESEARCH APPROACHES

Community-based participatory action research and advocacy research will be core components of the research studies and projects that the ENRICH project team will conduct in the future.

# Community-Based Participatory Action Research:

Future research studies conducted as part of ENRICH will use a community-based participatory action research approach. This approach involves researchers and communities working in partnership in ways that enable power to be shared between all participants and that facilitate action for change. It also requires the involvement of community members at every stage of the research process, including research design, data collection and analysis, and knowledge dissemination and mobilization. It is an approach to research that values mutual respect and co-learning between partners, capacity building, systems change, and balancing research and action. Through this approach, partners contribute their expertise to enhance understanding of a given phenomenon and to integrate the knowledge gained with action to benefit the community involved.

Research studies conducted through ENRICH will inform and enhance research capacity in Mi'kmaw and African Nova Scotian communities by engaging Mi'kmaw and African Canadian/Nova Scotian community members, academics/researchers, students, community agencies, and policymakers throughout Nova Scotia and Canada. Study results will be used to inform community consultations and democratic decision-making with Mi'kmaw and African Nova Scotian communities around the socio-economic outcomes and health risks associated with toxic industries and waste dumps. Ultimately, ENRICH seeks to create a culturally relevant platform—such as an online application process—through which community members, particularly in remote areas, can efficiently connect with academics and non-profit organizations to pursue meaningful research that serves their health and environmental interests.

Community ownership is an integral aspect of ENRICH. The project recognizes that community-based projects involving marginalized communities must be premised on equitable power sharing with respect to how communities are engaged, how projects are conducted, and how knowledge and resources resulting from these projects are shared with community members. Therefore, ownership will involve co-ownership by both the community and faculty of all knowledge and resources resulting from the meetings and workshop, other Project activities and future research studies.

# Advocacy Research:

Research and other activities conducted through ENRICH will reflect the principles of advocacy research outlined in the article *How to conduct research: An overview* (2014) (found on the Community Tool Box website) by providing evidence-informed data to support community members' advocacy and mobilizing efforts in the following ways:

- Provide information to help community members make their case;
- Give advocacy and mobilizing efforts substance by adding facts and statistics to beliefs;
- Provide anecdotes, human stories, and examples that describe and illuminate an issue;
- Confirm beliefs and opinions about a particular issue;
- Position community members as experts on the issue who are recognized as the authority, resulting in a stronger advocacy position;

- Give community members credibility as serious advocates who have done the groundwork, which will make people more willing to listen to community concerns;
- African Nova Scotian communities;
- Hold government officials accountable for the siting of toxic industries and waste dumps near to Mi'kmaw and African Nova Scotian communities;
- Influence the formal and informal policies established by policymakers and others in power:
- Influence legislators and other policy makers to change policies;
- Raise the profile of environmental racism in Mi'kmaw and African Nova Scotian communities, as well as in the wider community;
- · Garner public support around the issues; and
- Help prevent harm to community members' health and well-being.

# THE TEAM

Not surprisingly, coordinating a project team comprised of community members, research staff, community agency professionals, and faculty has not been without its challenges. As the project leader, I have had to negotiate the competing perspectives, priorities, concerns, and demands of team members who have different interests, perspectives, world views, opinions, and approaches. Fortunately, I felt supported throughout the project by members of the project team who were as invested as I was in the meetings and workshop, as well as the impact the project, in general, could potentially have on the health and well-being of community members. As the project leader, I was responsible for the following activities:

- Holding and facilitating monthly meetings with the ENRICH Project team;
- Supervising the activities of research staff, workshop and meeting organizers, and Advisory Committee members;
- Communicating with the project team, workshop organizers, workshop participants, and the general public through email, facebook, and phone;
- Providing guidance around the development of the project website, documentary film, mapping portal, youth video contest, and workshop and meeting promotional material;
- Helping to organize the regional meetings and the convergence workshop;
- Developing meeting and workshop questionnaires;
- Facilitating discussions at the regional meetings and convergence workshop;
- Identifying and recruiting new members for the project team, including faculty and Advisory Committee members;
- Reviewing and summarizing meeting and workshop transcripts;
- Communicating with and appearing in the media (television, print, radio, blogs);
- Conducting literature reviews; and
- Writing and submitting grant applications in collaboration with faculty.

# **RESEARCH STAFF:**

Perhaps the most invaluable members of the project team were research coordinator **Dave Ron** and research assistant **Shelina Gordon**. Research staff supported the project in multiple ways, including scheduling and attending monthly project meetings; preparing meeting agendas and minutes; communicating with the research team, workshop participants, caterers, and entertainers; helping to organize regional meetings and the convergence workshop; preparing literature reviews; providing feedback on the documentary film; developing various knowledge sharing and mobilizing activities (project website; toxic legacies timeline; mapping portal); and developing promotional material for the regional meetings and the convergence workshop. Hardworking, organized, dedicated, insightful, and creative are perhaps the main adjectives that come to mind when I recall the contributions that Dave and Shelina made to the meetings, the workshop, and the project, in general. Without their support, this project would not be what it is. Consequently, I would like to express my gratitude to them for helping the team navigate through some of the challenges it faced in the months leading up to the workshop.

### **FACULTY:**

The faculty members who collaborated with me on proect and workshop activities include **Swarna Weerasinghe**, **Sheri Price**, **Mikiko Terashima**, and **Cynthia Alexander**. I am grateful to faculty for their contributions to the project since 2012, when the project commenced. These contributions include providing guidance on the workshop, future research activities, and the project in general; assisting with grant applications; facilitating discussions at regional meetings and the convergence workshop; and contributing to the development of knowledge sharing and mobilizing activities and resources. Faculty members have expertise in environmental health, medical anthropology, biostatistics, nursing, geospatial analysis, epidemiology, political science, sociology and equity studies, and sociology of health and illness.

**Dr. Ingrid Waldron, School of Nursing, Dalhousie University:** Ingrid is a sociologist whose research and teaching focus on the sociology of race and ethnicity, the sociology of health and mental health, medical sociology, the social determinants of health, and health inequalities. Over the past 16 years, her research has focused on the health and mental health issues affecting African Nova Scotian, African Canadian, Mi'kmaw, immigrant, and other racially and culturally diverse communities in Canada. She has been funded by several grants as a Principal Investigator, including Canadian Institutes for Health Research (CIHR), Social Sciences & Humanities Research Council (SSHRC), Nova Scotia Health Research Foundation (NSHRF), and the Atlantic Metropolis Centre. Her recent research projects focus on environmental racism and other social determinants of health in African Nova Scotian and Mi'kmaw communities. Her findings have been published in peer reviewed publications and edited book collections that focus on Black political thought, women's health, public health, community psychology, cardiovascular nursing, occupational therapy, and women's studies. Her methodological expertise is in critical anti-oppression

approaches, including anti-colonial, antiracism, African-centred, and Indigenous knowledge theories.

**Dr. Swarna Weerasinghe,** *Department of Community Health & Epidemiology, Dalhousie University:* Swarna is biostatistician and a medical anthropologist whose research interests are in the area of social and physical environment of health with a special focus on environmental health of ethnic communities. She has written four book chapters and has published several peer reviewed publications on ethnicity and equity in health. She has extensive methodological and analytical expertise in modelling environmental data in both time and spatial domain. Her recent research includes development and application of methods to model complex air pollution data and health effects using time and spatial variation of health using mapping and modeling potential health impacts and small area estimation. She has conducted research in these areas for over 15 years and has been funded by several grants, including CIHR and SSHRC. She established Atlantic Metropolis Centre's Health Domain, which was funded by SSHRC and examined the health of immigrants in Atlantic Canada.

**Dr. Sheri Price, School of Nursing, Dalhousie University:** Sheri has focused her research predominantly in the areas of women's and community health, health services, and nursing work environments. Her methodological expertise is in interpretive (narrative) and critical (post-structural) approaches. She recently completed a CHSRF-funded post-doctoral fellowship in health services and policy research at the University of Ottawa. As an affiliate scientist at the IWK Health Centre, she has been involved in several community and primary health research projects. She has been actively involved in community health both as a community health nurse and as a board member for several community organizations, including those specific to diversity. Her research expertise includes innovative knowledge dissemination strategies, funded through the NSHRF and CIHR.

**Dr. Mikiko Tarashima, Environmental Science Program, Dalhousie University:** Mikiko is a CIHR Postdoctoral Research Fellow, currently working on socio-spatial inequalities in health and their relationship with spatial distribution of health services. She brings her expertise in geospatial analysis and epidemiology and will provide technical support for the geospatial and statistical analyses component of future studies conducted through ENRICH. She has also published papers on social inequalities in health across communities in Nova Scotia using community-level socioeconomic and social deprivation indices she constructed and are now adopted by local governments. Mikiko co-authored a study comparing chronic disease incidences between African Nova Scotian communities and other communities of similar socioeconomic status in the province.

**Dr. Cynthia Alexander,** *Department of Politics, Acadia University:* Cynthia's research and teaching interests focus on identity politics in Canada, First Nations peoples, Inuit cultural identity, Inuit traditional knowledge and western science, African Nova Scotian politics and public policy, Canadian politics and government, intersectionality of oppressions in Canada, gender, race and geography in Canada, and health policy.

# **MEETING & WORKSHOP ORGANIZERS:**

**Dawn Harwood-Jones**, lead meeting and workshop organizer and owner of Pink Dog Productions, was responsible for supervising the activities of regional meeting and workshop organizers **Catherine Hartling** (Sunnyville Meeting), **Miranda Cain** (North Preston Meeting), **Sonya Isaac Surette** (Yarmouth Meeting), **Yvonne Mosely** (Membertou Meeting), and **Lynn Jones** (Halifax Meeting & Workshop).

If it were not for the regional organizers, engaging residents in the Mi'kmaw and African Nova Scotian communities would have been much more challenging than it was. The organizers were responsible for providing guidance about key meeting and workshop participants and how they should be invited; conducting outreach to and engaging residents; ensuring that those who participate in the meetings and workshop come informed about the purpose, objectives, activities, and anticipated outcomes of the meetings and workshop; identifying and hiring meeting and workshop hostesses/hosts, keynote speakers, and entertainers; identifying and booking the workshop and meeting venues; and arranging for catering services.

## **ADVISORY COMMITTEE:**

The Advisory Committee is comprised of **community members**, **agency professionals**, and **faculty/researchers** across Nova Scotia involved in work on anti-racism, equity, environmental justice, and health. Advisory Committee members contributed to the project in several ways, including providing guidance around workshop objectives and priorities; assisting faculty in building relationships with community members; and providing resources at the workshop. In addition to the individuals listed below, Advisory Committee members who made valuable contributions to the project include **Wilber Menendez Sanchez**, **Jonathan Beadle**, **Denise Allen**, and **Tuma Young**.

Lynn Jones, Community Member: A special "shout-out" must go to Lynn Jones, who made an invaluable contribution to the ENRICH Project, taking on multiple roles as an Advisory Committee member, workshop organizer, workshop hostess, and workshop facilitator. If that wasn't enough, she also took on the role of driver, volunteering to drive members of the project team to regional meetings in Yarmouth and Membertou. Lynn grew up in Truro where from a young age she struggled against explicit racial segregation. As a university student, she was active against the Vietnam War and worked in solidarity with struggles for self-determination elsewhere in the world. In addition, she fought for programs that gave Black and Indigenous students access to post-secondary education. Later she became active in her union, the Public Service Alliance of Canada, and went on to become the first woman of colour to be Vice-President of the Canadian Labour Congress.

**Louise Hanavan & Aimee Carson,** *Ecology Action Center*: Since 1971, the EAC has been working at the local, regional, national and more recently, international level to build a healthier and more sustainable world. While all of their work is connected to Nova Scotia, they draw inspiration from many places. They work closely with communities as well as

social and natural scientists and make strong use of science in communicating our message. The Centre's earliest projects included recycling, composting, and energy conservation, which are now widely recognized environmental issues. Their current areas of focus include Built Environment, Marine Issues, Coastal Issues, Wilderness, Food, Transportation, and Energy Issues.

**Gwen Coleman**, *GPI Atlantic*: GPI Atlantic is an independent, non-profit research and education organization committed to the development of the Germaine Progress Index (GPI) – a new measure of sustainability, wellbeing and quality of life. GPI Atlantic has produced more than 80 research reports on topics within the six main categories that make up the Genuine Progress Index – living standards, population health, time use, community vitality, education and environmental quality. The organization has produced ground-breaking research on the real costs and benefits of the province's energy consumption, transportation system, solid waste disposal, and air quality.

Allison Petten, *Environmental Health Association of Nova Scotia*: The Environmental Health Association of Nova Scotia (EHANS) is a non-profit, community based organization founded in 1985 and run by volunteers. Formerly known as the Nova Scotia Allergy and Environmental Health Association, EHANS operates throughout Nova Scotia. Through internet resources, EHANS serves a broad constituency across Canada, the US and beyond. EHANS provides information and support to people already ill from environmental causes. EHANS also promotes healthier alternatives to prevent more people from becoming ill from environmental causes.

Ann Marrian, Canadian Race Relations Foundation: The Canadian Race Relations Foundation is Canada's leading agency dedicated to the elimination of racism and the promotion of harmonious race relations in the country. Created as part of the historic Japanese Canadian Redress Agreement, the Foundation's governing legislation, the Canadian Race Relations Foundation Act, was given Royal Assent on February 1, 1991. The Foundation's mission is to advance understanding of the past and current causes and manifestations of racism and to recommend approaches to the elimination of racism and the strengthening of Canadian identity.

# **DOCUMENTARY FILMMAKERS**

Dawn Harwood-Jones, Co-owner & Filmmaker, Pink Dog Productions: Dawn Harwood-Jones was hired to produce a documentary film based on interviews and other footage from the regional meetings and convergence workshop. Pink Dog is a Halifax based video production company specializing in "make a difference" videos for not-for-profit and arts organizations in Halifax and beyond, as well as federal and provincial government departments and the corporate business community in Halifax. Their high quality, cutting edge videos promote fund-raising, awareness, and education and are used as a powerful tool for conventions, presentations, staff meetings and public displays.

**Sobaz Benjamin**, *Owner & Filmmaker*, *In My Own Voice* (*IMOVe*): Sobaz Benjamin collaborated with Dawn in filming interviews and footage for the documentary film. IMOVe is an innovative program geared solely to engage today's youth at risk, offering creative, constructive, and crucial outlets for their boundless energies and their youthful exuberance.

# **ENRICH: THE EVOLUTION**

## THE GENESIS

In the spring of 2012, I responded to an email sent to me by Dave Ron who wanted to meet with me about taking on a new project on environmental racism in Mi'kmaw and African Nova Scotian communities. Through his work with the Nova Scotia Public Interest Group (NSPIRG), Dave had been involved in the Save Lincolnville Campaign, a community-led initiative for the removal of the landfill located within a kilometer of the community of Lincolnville. This campaign was jump-started by the Concerned Citizens of Lincolnville and was supported by a broad-based coalition of community groups and individuals, including NSPIRG. Consequently, it is important to mention that ENRICH was borne out of the work that NSPIRG and other organizations had been engaged in for some time. After meeting with Dave and agreeing to take on the project, I arranged a meeting between myself, Dave, and the Nova Scotia Health Research Foundation (NSHRF) a few weeks later to discuss the project and the possibility of securing funding to conduct research.

During this meeting, NSHRF expressed an interest in funding the project through a 2012 Team Development Award, which was awarded a few weeks later. The purpose of this Award is to fund activities related to converging and building a team in preparation for larger national grant submissions and a future research study. I subsequently began the task of building a team over the spring, summer and fall of that year. The objective was to bring together faculty/researchers in diverse disciplines, as well as an Advisory Committee comprised of community members, environmental agencies, health agencies, and community-based agencies with diverse backgrounds, skills and expertise. The main role of the Advisory Committee would be to provide guidance around community engagement, past and current advocacy work, and community-based research.

# ENGAGING COMMUNITIES & THE CASE OF PICTOU LANDING FIRST NATION: PITFALLS, STUMBLES & COMING OUT ON THE OTHER SIDE

In early summer of 2012, I began building a team comprised of faculty, community members, and health agencies. In the fall of 2012, I began holding monthly meetings with the project team to discuss community engagement, future research, and hosting a "world café" style workshop in Halifax to discuss the health effects and socio-economic outcomes associated with toxic industries and waste dumps in Mi'kmaw and African Nova Scotian communities. After several meetings the project team decided to hold a series of six workshops (including one in Halifax) in different regions across the province, agreeing that one workshop would simply not do justice to the broad range of environmental issues and

community mobilizing efforts that have been taking place across the province over the past several decades. In addition, holding workshops in multiple regions would more effectively incite and build collaborative relationships and partnerships with residents in these regions in ways that would enable faculty to work with communities rather than on behalf of them — a central principle of community-based, participatory action research (PAR). Although the project team recognized that in selecting six regions, it would inevitably (and naturally) exclude other regions, a decision was made to focus on regions where residents had long been mobilizing around environmental racism and where members of the project team had already developed significant relationships and partnerships with key community leaders, Elders, and agencies. These regions included Mi'kmaw communities in Yarmouth and Pictou Landing First Nation, African Nova Scotian communities in Lincolnville and North Preston, and Mi'kmaw and African Nova Scotian communities in the HRM and surrounding regions.

After submitting a grant application for a SSHRC Connections Grant in February 2013 to fund workshops in the fall of 2013, as well as to develop a number of knowledge sharing resources related to the workshops (including a workshop documentary film), the project team learned that we had been awarded the Connections Grant in June 2013. In addition to hiring a lead workshop organizer to oversee workshop planning activities, hiring community-based workshop organizers who were from and/or resided in each of these communities was seen as an essential aspect of engaging community members, leaders, and Elders in each region where the workshops were going to be held. As individuals who had a vested interest in and an intimate understanding of how toxic industries and waste dumps have affected the lives of community members, they brought invaluable insight to community engagement and workshop planning activities.

### THE CASE OF PICTOU LANDING FIRST NATION

Community engagement has not been without its challenges, however, particularly exemplified by the difficulties the project team experienced engaging Mi'kmaw residents in Pictou Landing First Nation who have long been dealing with broken promises made by the province that it would clean up Boat Harbour. Since 1967, wastewater has been flowing into Boat Harbour, a quiet estuary near Pictou Landing. Attempts by the project team to engage community members were challenging. As I and the rest of the project team continued to brainstorm around how to effectively engage residents, Elders, community leaders, and agencies in this community on the advice of Advisory Committee members and other individuals in the Mi'kmaw community who wanted to help, I came to the realization that engaging Pictou Landing First Nation was not going to be possible at that time.

In the early fall of 2013, I finally made the decision as the project leader to move forward without Pictou Landing First Nation after receiving communication from a key leader in the region that they were not interested in participating in the project. According to this leader, the number of requests that residents and leaders in Pictou Landing First Nation had received over the past several years to participate in surveys and other research projects had left the community feeling over-researched and burnt out. Although the project team

has not given up on engaging this community in the project in the future, it decided to move forward with Membertou. The Elders in Membertou were ready and willing to engage with the project team and for that, I will always be grateful.

The project team learned several lessons from the Pictou Landing First Nation "situation". First, it highlighted how important it is to build relationships and trust with residents and community leaders over the long-term, particularly in racialized communities that have been burnt by research. Researchers that fail to forge authentic relationships with residents and leaders in these communities should not expect to gain entry into these communities unless they have nurtured reciprocal, collaborative, and trusting relationships with community members. This point was brought home to the project team when we realized how important it was to hire community-based meeting and workshop organizers who were not only from and/or resided in the regions, but who, as a result, had developed organic and authentic relationships with residents. Second, the challenges we experienced engaging community members and leaders in Pictou Landing First Nation underscored how important it is to be sensitive to the timelines, priorities, and cultural realities in each community. In other words, it is important for researchers to "take the temperature" of the community they plan to engage by finding out about proper protocol that must be followed to engage the community and the current social and political climate in the community.

## **METHODOLOGY FOR REGIONAL MEETINGS & CONVERGENCE WORKSHOP**

As the planning for the regional workshops got underway in the summer of 2013, it became clear to the project team that holding regional meetings rather than regional workshops would better reflect the smaller and more intimate nature of these events. This would enable the project team and residents to develop relationships in a more organic way without the distraction of keynote speeches and workshop activities and exercises. Consequently, the project team decided that the regional events should take the form of a meeting and that these should be followed by a final convergence workshop.

Each regional meeting took place over two to three hours on a Saturday from September to November 2013 and involved members of the project team, community-based organizers, Elders, residents, and agency professionals. The first meeting was held in Sunnyville on September 28, 2013 and was followed by meetings in North Preston on October 5, Yarmouth on October 19, and Membertou on November 23. These facilitated meetings, which took participants through a series of prepared questions, engaged participants in discussions on their priorities and concerns about the health effects and socio-economic outcomes associated with toxic industries and waste dumps in their communities, past, current and future advocacy efforts, as well as how a future research study on these issues could support these efforts. Discussions were documented using video and a digital recorder. In addition to developing a workshop report, the objective was to film interviews with key leaders and community members in each region for a documentary film that would be screened at the final convergence workshop in Halifax. Pink Dog Productions was charged with filming interviews and footage from the regional meetings and convergence workshop.

Preparations for the final convergence workshop in Halifax on January 11, 2014 got underway in the fall of 2013 and involved developing promotional material; identifying and hiring workshop entertainers, keynote speakers, and caterers; and engaging community members. The project team decided that the Halifax event should comprise of two separate sessions: a meeting held in the morning for residents in the HRM and surrounding regions, followed by a convergence workshop in the afternoon that converged residents from all of the regions. While the morning meeting focused on issues and priorities for residents in the HRM and surrounding regions (reflecting the approach used for the other regional meetings that were held in the fall of 2013), the afternoon convergence workshop brought together residents in all regions to engage in a dialogue about effective approaches for mobilizing around environmental racism through research and innovative and diverse knowledge mobilizing activities. It also sought suggestions about the best approaches for developing a novel approach to community-based research. Two facilitated audio-recorded break-out sessions engaged participants in these discussions. The first session focused on Past, Current and Future Priorities and Advocacy Efforts and the second session focused on Defining the Way Forward (please see the Agenda in Appendix #2 on page 65).

In addition, a rough cut of the documentary film was screened at the workshop. This documentary includes footage and interviews filmed at the regional meetings. The final cut of the documentary film, which will also include footage and interviews filmed at the convergence workshop, will be released in the spring of 2014 and shared with residents and the general public. Plans are currently underway to identify ways to ensure broad accessibility of the documentary film.

# **DISCOVERIES, HIGHLIGHTS & LASTING IMPRESSIONS**

One of the main challenges that arose during the planning process for the regional meetings and convergence workshop was balancing the demands of academia with the priorities and concerns of community in ways that maintained the integrity of the project as a community-based one. For example, the often rigid deadlines in academia often require faculty to complete certain activities within time constraints that do not take into account community members' own timelines and cultural realities. While projects carried out in the true spirit of a community-based approach require that the needs and priorities of community members must come first, academic institutions have yet to fully acknowledge and validate community-based research, leaving faculty "between a rock and a hard place" when it comes to satisfying the priorities and demands of community and those of academia. The reality is that until community-based researchers are accorded the same type of respect and status that other kinds of researchers enjoy, they will continue to deal with the tensions that come with conducting community-based research within academic environments that are not "set up" for community-based research. Therefore, while it is important for researchers to be sensitive to the priorities and needs of community members, it is equally as important for community members to understand the many constraints and challenges experienced by faculty/researchers who conduct community-based projects within academic settings.

Despite these challenges, several things stood out for me and the rest of the project team in organizing and holding regional meetings. One of these was how open and welcoming community members were to the project team. The passion, as well as the frustrations that community members shared about dealing with environmental racism in their communities were palpable and made us even more committed to finding ways to support them in their advocacy efforts. For example, I was struck by the relentless commitment of participants at the **Sunnyville meeting on September 28**, **2013**, who have been advocating around these issues for decades. Despite their efforts, government has been largely unresponsive to their requests to have the landfill site re-directed to another area or to involve residents in decision-making processes related to the siting of landfills near to their community. A visit to the landfill site by members of the project team before the meeting set the context for the ongoing struggles residents continue to face to have this landfill site re-directed to another area. Interestingly, the ominously serene beauty of the area upon which the site is situated masked the dangers lurking beneath the surface — dangers that posed potential risks to the health and well-being of residents in the form of contaminated drinking water and toxic soil.

My heart raced as participants at the **North Preston meeting on October 5th**, **2013** expressed outrage about how they believe toxic waste dumps have affected the health of residents, as well as how a proposed wind turbine installation project could pose potential risks to the community. Likening environmental racism to "another Africville" and "racial genocide", community members expressed the urgency of these issues and how important it was for residents to become more proactive in mobilizing around environmental racism in the region. The "call to action" tone of the meeting left me encouraged that residents were ready to work collaboratively with the project team, even as they implored us to "be serious" and to not simply churn out another research study that resulted in little, if any, change.

I was encouraged by the quiet passion of participants at the **Yarmouth meeting on October 19th, 2013** who shared their concerns about how contaminated water and toxic soil may be affecting the health and well-being of their children and future generations. As Sonya Isaac Surette (the organizer for the Yarmouth meeting) took members of the team on a thorny trek through a waste dump site replete with abandoned car parts after the Yarmouth meeting, I was reminded of Lincolnville and how the serene beauty of the landfill site there masked real and potential dangers. While this junkyard in Yarmouth would have seemed harmless had we visited it before the Sunnyville and Yarmouth meetings, the concerns raised at both meetings armed me with a heightened awareness of the many risks it posed to residents. The ominous feeling that swept over me in Lincolnville, swept over me again here in Yarmouth as members of the team made their way through the muddy, stony pathway alongside the junkyard.

I was humbled by the welcoming nature and warmth of participants at the **Membertou meeting on November 23rd, 2013**, one of whom opened her home to us to host a feast and pipe smoking ceremony. I am also grateful to the Elders who participated in the Membertou meeting who demonstrated their trust in the team and the project by allowing us to meet with them on such short notice after plans to organize a meeting in Pictou Landing First Nation fell through a few months earlier. Although "Elder of Elders" Albert Marshall at

times expressed cautious skepticism that our project would bring about any real change, the generosity he showed in sharing his concerns and fears about the many "ills" affecting Mi'kmaw peoples (loss of language, the need to provide culturally and linguistically relevant education to youth) was an indication to me that he, along with the other Elders in the room, were entrusting us with a certain level of responsibility that had implications beyond toxic industries and waste dumps.

I was enthused by the insightful contributions from Mi'kmaw, African Nova Scotian, and other participants at the **HRM and Surrounding Regions Meeting and Convergence Workshop on January 11th, 2014,** who focused more on the issues that both communities shared, rather than on the issues that have long divided them. Witnessing how the event provided both of these communities with a rare opportunity to come together in one space to give voice to their shared concerns about environmental racism and health gave me hope that ENRICH could be a catalyst in resolving some of the tensions that have long existed between both communities – tensions that are due to real or perceived jealousies and competition between both communities.

Although I have always been hesitant to label myself as a community-based researcher in the strict sense of the term (although my research has always focused on racialized communities), this project has impressed upon the project team the extent to which community-based research can have a real and significant impact on the lives of community members if conducted with integrity, authenticity, empathy, sensitivity, and with the needs and priorities of community members at the forefront. As many researchers working with racialized communities come to realize, gaining the trust and confidence of community members is often hard-fought, hard-won and, at times, easily lost and never to be found again. Tales of being burnt, mistreated, exploited and, ultimately, abandoned by researchers abound as community members are asked to recall their experiences participating in research studies that promised to transform their communities for the better. As the project team marches on under the weight of those expectations, we remain committed to ensuring that the integrity of the project and the trust given to us by community members are not compromised by the many competing demands and priorities that will, undoubtedly, arise as the project moves forward, unravels, and evolves.

# SETTING THE STAGE: BACKGROUND & CONTEXT

The ENRICH Project is investigating both the health effects and socio-economic outcomes associated with toxic industries and waste dumps proximate to Mi'kmaw and African Nova Scotian communities. Existing literature shows that proximity to toxic industries and waste dumps poses potential risks to the health of populations, as well as to the financial/economic, social, and human well-being and functioning of residents, organizations, and institutions (Wlodarczyk, 2009).

# **HEALTH EFFECTS**

There is a limited Canadian-based research that focuses on the health effects associated with environmental injustice. Environmental health equity research findings show differential impacts of pollution and environmental degradation on health based on race and income (Maantay, 2002). The indirect effect of environmental changes on cultural communities is due to waterborne, food-borne and vector-borne diseases. These health outcomes are associated with the displacement of people and their livelihoods in hazardous areas (Harper et.al, 2012). Environmental health equity across racial dimensions is assessed in the literature by showing that racial minority communities are spatially clustered around areas with greater toxicity. This results in significantly greater health risks for these communities relative to other communities that live in less exposed areas. For example, US -based research on environmental health disparities found that environmental pollutants were clustered in vulnerable communities (Abel & White, 2011).

Currently, Aboriginal and other vulnerable communities experience disproportional effects of climate change, water contamination, waste disposition, toxins and pollution from the nearby industries. Sharp (2008), Mascarenhas (2007) and Teelucksingh (2007) note that these communities are exposed to a greater than average amount of toxins since they are more likely to reside near and be employed by mining and forestry industries. Mascarenhas (2007) notes that Aboriginal communities are often located in close proximity to landfills because of the government's removal of environmental protection requirements. Consequently, these communities face significant environmental problems due to pollution from traffic and nearby industrial waste disposing. Environmental injustice has been a longstanding issue in many of these communities in Nova Scotia. Dumps and landfills are often located in African Nova Scotian and Aboriginal communities. Many argue that the situating of hazardous waste, landfills and dumps is yet another form of racism that has been directed at racialized and low-income communities (Fraser, 2013). Although there is no data on the health effects of the first dump in the Lincolnville study site, many residents believe that high rates of cancer in the community can be linked directly to the dump (Bain Lindsay, 2006).

According to Bharadwaj et.al (2006), many Aboriginal communities dispose of their solid waste on their own lands due to lack of funding and infrastructure, as well their residence in remote regions with improper household disposal systems. Since many of the solid waste landfills have become potentially hazardous, drinking well water is often contaminated, leading to the transmission of disease (Bharadwaj et al., 2006). According to Sharp (2008), Furgal (2006), and Mascarenhas (2007), Aboriginal communities depend heavily on natural food sources which are affected by improper waste disposal systems and pollution. All of these factors not only threaten the health and well-being of Aboriginal and other racialized communities, they may also lead to their possible extinction (Trainor, 2007).

# **SOCIO-ECONOMIC OUTCOMES**

Aboriginal (including Mi'kmaw) and African Nova Scotian communities in Nova Scotia experience some of the lowest income levels, with unemployment, underemployment, and poverty the most pressing issues faced by both communities. Fifty percent of Aboriginals living on reserve relied on income assistance or another form of government money. The average income for Aboriginals in Nova Scotia was just over half of that of the provincial average in 2005. The unemployment rate for this community was 15.5% in 2006 (compared to a provincial unemployment rate of 9.1%), down from 21.9 in 2001 and 24.6% for those living on reserve, down from 30.2%. (Statistics Canada, 2008). Compared to White Nova Scotians, African Nova Scotians experienced higher rates of unemployment, educational underachievement, illiteracy, incarceration, and poor housing in 2003. African Nova Scotians with a university degree were earning on average \$12,000 less than other Nova Scotian graduates. In 2000, 39.7% of Black women in Nova Scotia were living in low

The ENRICH Project is investigating both the health effects and socio-economic outcomes associated with toxic industries and waste dumps proximate to Mi'kmaw and African Nova Scotian communities.

income which was one of the highest rates of poverty in Canada (Saulnier, 2009).

Employment levels and household income are closely correlated with environmental racism. Inversely, increases in neighborhood and household income levels "are more strongly associated with declining hazard levels in Black neighborhoods and households than in White

neighborhoods and households" (Downey & Hawkins 2008). In 2006, the median income for individuals in Preston was \$19,576 a year, compared with the median of \$24,030 for Nova Scotia. Families in Preston had a median income of \$45,927, compared with the median of \$55,412 for Nova Scotia. In 2011, the employment rate for Preston residents aged 15 and over was 50.4%, and the unemployment rate for Preston was 12.3%.2. In Nova Scotia, the employment rate for residents aged 15 and over was 56.8%, and the unemployment rate was 10%. (Statistics Canada, 2011)

At the 1991 First National People of Color Environmental Leadership Summit, participants established that environmental injustice generally lowers property values (Boer, et al., 1997; Bullard, 1993; Mitchell, Thomas and Cutter, 1999). Boer, et al. (1997) argue that as hazardous waste facility placement drives down local property values, housing becomes increasingly occupied by households of lower socioeconomic status. Providing conclusive evidence, however, of depreciating property value being linked to the siting of toxic facilities has been described as a "chicken or egg polemic"; while toxins are disproportionately concentrated in low-income communities with limited access to resources (Buzzelli, 2008), some studies have hypothesized that hazardous industries suppress land values, making property more affordable to those of lower status (Been, 1993).

Numerous studies have documented evidence suggesting environmental risk impacts outmigration in counties and neighborhoods (Hunter, 1998). Environmental quality is a critical factor explaining short-run inter-regional migration, across one to two-year periods (Hsieh and Ben-Chieh, 1983). Moreover, selective migration is a phenomenon exacerbating environmental inequalities; where market forces lead to lowered property values, populations with a higher socio-economic status move out while lower income populations remain (Hunter et al., 2003). The ability to move out of an impacted community has as much to do with socio-economic determinants as with racial determinants. Crowder & Downey (2010) observe that the impact of localized industry pollution on out--migration is more apparent among White populations than Black populations. They further argue that the fact that Black householders are less likely than White householders to leave environmentally hazardous neighbourhoods likely contributes modestly to their relatively high and persistent level of exposure to environmental hazards. In Preston, 11% of the population moved within the last five years; 9.6% moved within the municipality, 0% moved within the Province, 1.5% moved within Canada, and 0% moved outside of Canada. A lower percentage of residents moved in the last five years than in Nova Scotia (33.2%)(Statistics Canada, 2011).

## **COMMUNITY PROFILES**

### **Yarmouth**

Community groups rallied when toxic 'blue-green' algae (cyanobacteria) blooms occurred once again in the Wentworth / Carleton River Watershed, near Yarmouth, Nova Scotia. A March 2009 Nova Scotia Environment study of nine lakes in the or eliminated. affected watershed included the recommendation that large suspect contributors of nutrients to the lakes (including mink farms and a mink food processing facility) should be further investigated and, where appropriate and possible, discharges reduced. The intensity of mink farming has soared in the last few years. In fact, there were 1.7 million mink processed in Nova Scotia last year, which consumes seven tractor trailer loads of feed every day in the province. This has become a big business that has the potential to do significant environmental damage (East Coast Environmental Law, 2013).

### Membertou

The community of Membertou is situated three kilometers from the heart of the city of Sydney, Nova Scotia. The Sydney Tar Ponds are a hazardous waste site on Cape Breton Island in Nova Scotia, Canada. Over the last century, runoff from coke ovens associated with Sydney Steel Corporation's now decommissioned steel mill filled the estuary with a variety of coal-based contaminants and sludge. In 1982, scientists from the Department of Fisheries and Oceans discovered polycyclic aromatic hydrocarbons (PAHs), a family of chemicals produced by incomplete combustion of organic material in lobster caught in Sydney Harbour near Muggah Creek. After extensive public consultations, as well as a technical study, a contract was awarded in October 2009 to begin cleanup operations. The residents continued to worry officials would incinerate some of the material, though federal and provincial officials claim the solidification/ stabilization cement method they had chosen

would stabilize the 100-hectare site without producing any adverse health or environmental effects (Cape Breton Post, 2003).

## Lincolnville

Since 1974, the African Nova Scotian community of Lincolnville has been fighting against the non-consensual situating of landfills next to their community. A first-generation landfill was in operation for the last twenty-five years, situated less than one kilometre from Lincolnville. According to regional environmental organizations, hazardous items such as transformers and refuse from offshore oil spills were deposited at the landfill. In January of 2006, the Municipality of Guysborough opened a second-generation landfill at the site of the old dump. This facility is equipped to handle waste from 17 different municipalities in Nova Scotia. In accordance with the Province's waste management strategy as of 2006, all municipalities are required to dispose of waste in second-generation landfills, which incorporate special liners designed to prevent runoff into the surrounding environment. The community alleges that they were improperly consulted on this development and that the Municipality of Guysborough excluded them from the decision-making process. In its first month of opening, 55,780 tonnes of solid waste was received at this new landfill.

# **North Preston**

In February 2012, the Halifax Regional Water Commission (HRWC) received approval under the Nova Scotia Community Feed-in Tariff Program (ComFIT) to develop a 4.6 MW large-wind project located in North Preston. Regulated by the province's Utility and Review Board, the Commission provides municipal, waste, and storm water services to the residents of the Halifax Regional Municipality. The HRWC also has received ComFIT approval for an 11.5 MW large-wind project located in Lake Major, near Preston to erect five turbines that would each generate 2.3 megawatts to be sold to Nova Scotia Power. If the project goes forward, the turbines would be located 2.5 kilometres east of North Preston and 2 kilometres north of East Preston. The project construction is set to commence in or after 2015. Residents of North Preston have said that they were not properly consulted in the siting and proposed development of this wind project. Although community consultations were set to take place in September 2013, no consultations have taken place as of January 2014.

# Halifax Regional Municipality (HRM) & Surrounding Areas

The siting of the Nova Scotia Power plant in the Mi'kmaw community of Tuff's Cove on the Halifax Harbour (which was a traditional Mi'kmaw community that was destroyed with the Halifax Explosion), has long been a concern for Mi'kmaw residents. In addition, Mi'kmaw community members are concerned about the failure by government to respond to the community's concerns about the government's decision to use Hammonds Plains (a subcommunity of Indian Brook) as a mercury dump. Also of concern is the environmentally hazardous methods used by Nova Scotia Sand and Gravel to dig up and clean sand in Indian Brook by digging down to the level near to where the community's water table flows, resulting in contaminated water.

For African Nova Scotian community members, Africville remains a sore point. As early as 1912, the city of Halifax had determined to use Africville land for industrial development. By 1965 they had embarked on an urban renewal campaign, which forcibly displaced the residents of Africville in order to make room for industrial expansion. The destruction of the entire community of Africville serves as a classic example of the priorities of business in its quest for profits at all cost. Alone and for over 150 years the community of Africville fought environmental racism. City officials permitted the following to be established within walking distance of Africville homes and play areas: three systems of railway tracks; an open city dump; disposal pits for Halifax toxic waste; a hospital for infectious diseases; a stone and coal crushing plant; a toxic waste dump; a bone-meal plant; a cotton factory; a rolling mill; a nail factory; a slaughterhouse; sewage disposal units; a prison; and a port for handling coal (Allen, 2013).

# KEY FINDINGS FROM REGIONAL MEETINGS

**Sunnyville Meeting** 

Date: September 28, 2013 Venue: Sunnyville Hall

# Community Concerns & Priorities Related to Toxic Industries & Waste Dumps

The meeting that was held in Sunnyville on September 28, 2013 was organized by **Catherine Hartling**. It focused on the concerns and priorities of residents in Sunnyville, Lincolnville, and Upper Big Tracadie. It began with a keynote address by host **James Desmond**, a long-time community activist who has been leading the fight against environmental racism in his region for decades. Entertainment was provided by singer, musician, and activist **Lucky Campbell**. Participants at the meeting shared the following concerns about how toxic industries and waste dumps near to their community have impacted the health and the socio-economic well-being of their community:

- High rates of certain illnesses in the community, including cancer (prostate, stomach, lung, and skin cancers) and diabetes;
- Autopsies that found cancer in dogs;
- Water contamination due to leaking from the first generation landfill:
- The opening of a second-generation landfill in 2006 at the site of the old dump;
- Toxins in the soil;
- An increase in traffic resulting from big tractor trailers and trucks hauling garbage to the landfill site from different areas around Cape Breton and Pictou County;
- An increase in bears, racoons, skunks, and insects due to garbage coming in from over
   14 municipalities across Nova Scotia on a daily basis;
- Poor air quality;
- A dwindling population due to the out-migration of residents (particularly young people) and an ageing population;

- A faltering economic base due to a dwindling population, a small and dwindling workforce, and an unwillingness to invest in business;
- Hesitance to build homes in the region;
- · Depreciating property values;
- Challenges fostering unity among residents in Lincolnville, Upper Big Tracadie and Sunnyville, as well as mobilizing around the issues due to a dwindling population and differing views about how the issues should be handled;
- Lack of support from and responsiveness by Community Liaisons responsible for waste management; and
- Lack of response from and follow-up by the Council to the presentation in April 2013 by the Lincolnville Environmental Group Society.

### SHORT-TERM & LONG-TERM OBJECTIVES

Participants at the meeting identified the following ways in which the ENRICH Project could begin to support their advocacy efforts in the short-term and long term. While short-term objectives can be achieved in the months following the Convergence Workshop, long-term objectives are those that can only be achieved with the support of research funding.

# Short-Term Objectives:

- Submit the workshop report to the Municipality of Guysborough County and the Province of Nova Scotia;
- Engage and garner support from the Nova Scotia Department of Health & Wellness;
- Put pressure on the Community Liaisons responsible for waste management to support residents in their advocacy efforts;
- Support the Lincolnville Environmental Group Society in receiving a response by the Council to the Society's presentation in April 2013;
- Encourage the councillor to listen to the community's concerns about how the landfill is affecting the health and socio-economic well-being of residents;
- Determine the Municipality's current and future plans for ensuring a safe and healthy environment for residents; and
- Help foster unity between residents in Lincolnville, Sunnyville, Upper Big Tracadie
  and residents in the other regions that are the focus of this project by providing
  meaningful opportunities to bring together these residents to share stories of
  struggles, learn from each other, identify solutions to shared concerns, and devise a
  collaborative action plan for addressing and resolving these concerns.

# Long-Term Objectives (Future Research Study):

- · Collect health statistics on rates of cancer and other illnesses in the community;
- Support residents in launching a class action lawsuit against the Municipality and in pursuing compensation;
- Assist residents in getting water testing done independently;
- · Assist residents in getting soil testing done independently;
- Identify independent monitors who can confirm what is being dumped into the landfill

site:

- Encourage the Municipality of Guysborough County, the Department of Natural Resources, the Government of Nova Scotia, and Liaison Representatives to take ownership of and be accountable for the impact that the landfill site has had on the health and socio-economic well-being of the community;
- Encourage the Office of African Nova Scotian Affairs to put pressure on the Municipality to deal with the social and health implications of landfills in the community; and
- Put pressure on the Municipality to re-direct the waste that is being sent to landfill to another area where the government could deal with it more effectively.

# **KEY INDIVIDUALS & AGENCIES**

Meeting participants identified the following key individuals and agencies that should be engaged in the ENRICH Project and in their advocacy efforts:

- Paul Currie, Senior Project Manager, Nova Scotia Power
- Jim Boudreau, MLA, Guysborough Sheet Harbour
- Municipality of the District of Guysborough
- Liaison Representatives
- Nova Scotia Department of Health & Wellness
- Nova Scotia Environment
- Department of Natural Resources
- Environment Canada
- Department of Education
- African United Baptist Church
- Office of African Nova Scotian Affairs
- Ecology Action Center

### **North Preston Meeting**

Date: October 5, 2013

**Venue: North Preston Community Centre** 

# Community Concerns & Priorities Related to Toxic Industries & Waste Dumps

The meeting that was held in North Preston on October 5, 2013 and organized by **Miranda Cain** began with a keynote address by **Denise Allen**. It focused on the concerns and priorities of residents in North Preston, East Preston, Central Nova Scotia, Cherry Brook, and Lake Loon. Denise, a long-time community activist who was born in Africville, has been leading the fight against environmental racism for several years. **Dolly Williams**, also a long -time activist around these issues, hosted the meeting. Singer **Cindi Cain** provided the entertainment. Participants at the meeting shared the following concerns about how toxic industries and waste dumps have impacted their everyday lives, health, and the socioeconomic well-being of their community:

- High rates of certain illnesses in the community, including cancer, diabetes, heart disease, asthma and skin problems;
- Water contamination, including arsenic in the wells;
- Toxic waste dump near to the North Preston Community Center;
- Toxic waste from the North Preston dump running into the East Lake;
- Installation of wind turbines in the community;
- Failure by the Nova Scotia Department of Energy to consult the community about the proposed plan to install wind turbines (\*) in North Preston in the next few years;
- Exposure of children to water contamination and air pollution;
- The loss of a strong sense of community in North Preston due to urban expansion;
- Need for residents to come together and mobilize around toxic waste dumps in their community;
- Importance of developing a plan of action to mobilize around the installation of wind turbines in the community; and
- Lack of transparency by the government about policies related to toxic waste in the community and the policing of environment waste in the watershed.

\*Wind turbines are large machines that convert the kinetic energy or, movement, of wind into mechanical energy which in turn will be used to produce electricity. They produce noise and some pollution when they are being manufactured and may cause sleep problems, night terrors, learning disabilities in children, and concentration and memory problems (Technology Student, 2013).

# SHORT-TERM & LONG-TERM OBJECTIVES

Participants at the meeting identified the following ways in which the ENRICH Project could begin to support their advocacy efforts in the short-term and long term.

# Short-Term Objectives:

- Arrange a follow-up meeting with the ENRICH Project Team and the North Preston Ratepayer's Association to determine a plan of action to deal with the wind turbines installation project and other environmental concerns;
- Identify the agency or individual responsible for implementing the wind turbines project in North Preston;
- Identify the agency or individual responsible for policing environmental waste in the watershed;
- Arrange a meeting that brings together residents and policy makers to discuss residents' concerns about the installation of wind turbines and toxic waste dumps;
- Assist residents in developing an action plan for putting a halt to the installation of wind turbines in North Preston;
- Support residents around efforts to police environmental waste in the watershed in North Preston;
- Mobilize residents around the removal of the dump site near to the North Preston Community Center;
- Investigate governmental policies for policing the environmental waste in the

watershed; and

• Engage North Preston youth in environmental justice issues.

# Long-Term Objectives (Future Research Study):

- Collect health statistics on rates of cancers, heart disease, and other diseases in the community;
- Collect health statistics on the number of North Preston residents that have been misdiagnosed with various illnesses; and
- Support residents in getting the water tested.

# **KEY INDIVIDUALS & AGENCIES**

Meeting participants identified the following agency that should be engaged in the ENRICH Project and in their advocacy efforts:

• Wayne Desmond, President, North Preston Ratepayers Association.

The ENRICH Project Team identified the following individuals and agencies responsible for the wind turbine installation project in North Preston and other regions in Nova Scotia:

- Crystal Therien, Manager and Administrator, Community Feed-In Tariff Program (COMFIT), Nova Scotia Department of Energy;
- Sotian Winfields

### Yarmouth Meeting

**Date: October 19, 2013** 

Venue: Rodd Grand Yarmouth: Rodd Hotels & Resorts

# Community Concerns & Priorities Related to Toxic Industries & Waste Dumps

The meeting in Yarmouth, which was held on October 19, 2013 and was organized by **Sonya Isaac-Surette**, focused on the concerns and priorities of residents in Yarmouth, Acadia First Nation, and Western Nova Scotia. Participants at the meeting shared the following concerns about how toxic industries and waste dumps have impacted their everyday lives, health, and the socio-economic well-being of their community:

- High rates of certain illnesses in the community, including cancer, allergies, and asthma:
- Wind turbines in Pubnico that may be associated with high rates of cancer and that can be attributed to families vacating their homes and depreciating property values;
- Yarmouth Reserve was built on an old dump, resulting in contaminated soil and patchy, yellow grass;

- A junk yard that was used as a dumping ground for car parts has existed underneath the Reserve for over 60 years;
- Diesel fluid dumped into an area on the Yarmouth Reserve;
- Arsenic in the water at the Gold River Reserve;
- Exposure of children to toxic land (particularly children who play in and eat the dirt);
- Vegetables growing in toxic soil;
- Need to conduct water testing in different locations;
- Need to conduct soil testing in different locations in order to assess different levels of toxins in each location;
- Black mould growing around windows and other areas in homes:
- Noise from airplanes flying low during air shows that come to the region; and
- Close proximity of the fishing building to the youth center and playground, exposing children to waste, such as fishing bait and oil.

\*Acadia First Nation has five reserves along southwestern Nova Scotia which are all part of the Acadia Band. These include Yarmouth Reserve, Pawnhook, Wild Cat, Medway and Gold River.

# SHORT-TERM & LONG-TERM OBJECTIVES

Participants at the meeting identified the following ways in which the ENRICH Project could begin to support their advocacy efforts in the short-term and long term.

# Short-Term Objectives:

- Consult with Chief Deborah Robinson of Acadia First Nation about lobbying for funding from the Department of Indian Affairs and different officials in the province to deal with toxic waste dumps;
- Bring together Mi'kmaw and African Nova Scotian residents from all of the regions to mobilize around the elimination of toxic industries and waste dumps proximate to their communities; and
- Submit workshop report to the Band Council for review.

# Long-Term Objectives (Future Research Study):

- Consult with residents living in different reserves to identify the specific concerns they
  have about toxic waste dumps in their community;
- Mobilize residents to get water testing done in different locations;
- Mobilize residents to get soil testing done in different locations in order to assess different toxicity levels in each location;
- Create awareness among residents about the health effects of toxic waste dumps; and
- Submit research study results to the Band Council for review.

# **KEY INDIVIDUALS & AGENCIES**

Participants at the meeting identified the following key individuals and agencies that should be engaged in the ENRICH Project and in their advocacy efforts:

- Chief Deborah Robinson, Acadia First Nation
- Melanie Purdy, Community Enhancement Officer, Acadia First Nation
- Councillor Jeff Purdy, Band Councillor, Acadia First Nation
- Darlene Coulton, Band Councillor, Acadia First Nation
- Tom Pictou, Band Councillor, Acadia First Nation
- Kimberly Paul, Union of Nova Scotia Indians
- Atlantic Policy Congress of First Nations Chief
- Confederacy of Mainland Mi'kmaw

# **Membertou Meeting**

Date: November 23, 2013

Venue: Hampton Inn by Hilton, Sydney

# Community Concerns & Priorities Related to Toxic Industries & Waste Dumps

The meeting that was held in Membertou on November 23, 2013 was organized by **Yvonne Mosely**. This meeting focused on the concerns and priorities of residents in Membertou, Cape Breton, and Eskasoni. Participants at the meeting shared the following concerns about how toxic industries and waste dumps have impacted their everyday lives, health, and the socio-economic well-being of their community:

- High rates of certain illnesses and disabilities in the community, including cancer, diabetes, high blood pressure, asthma, and learning disabilities (e.g. autism);
- Chemicals in the water, resulting in toxins in food;
- Toxic waste in the sewer system, including diesel, paint, and paint thinner;
- Garbage from Yarmouth flowing into the Guysborough waste dump site;
- Contamination of the bay and fish due to pulp wood from the pulp industry;
- Power lines running through reserves;
- Failure of government to inform residents about the waste coming into their community;
- Lack of education in the community about waste management;
- Improper waste management by residents;
- Lack of response by policymakers and regulatory systems to residents' concerns about ecologically unsustainable actions taken by government; and
- Need to understand the health effects of toxic industries and toxic waste dumps using an indigenous and "wholistic" (i.e. holistic) approach that acknowledges the implications for physical, emotional, and spiritual health and well-being.

# SHORT-TERM & LONG-TERM OBJECTIVES

Participants at the meeting identified the following ways in which the ENRICH Project could support their advocacy efforts in the short-term and long term:

# Short-Term Objectives:

- Use media to create awareness in the general public about the spiritual, emotional, and physical health effects of toxic industries in Mi'kmaw communities;
- Bring together Mi'kmaw and African Nova Scotian residents in all of the regions to share concerns and struggles and to discuss mobilizing efforts;
- Identify an agency that residents can contact to have their concerns about waste dumps and other environmental concerns addressed;
- Engage youth (ages 16-30) in discussions about environmental issues;
- Educate residents (including children) about proper waste management approaches;
- Create a booklet that provides guidance around proper waste management approaches;
- Reflect the goals and objectives of the Mi'kmaw community in an authentic and accurate manner; and
- Incorporate the diverse knowledges of residents in other communities to enhance initiatives undertaken by the Mi'kmaw community to deal with environmental racism.

# Long-Term Objectives (Future Research Study):

- Consult with Mi'kmaw residents in the regions that are the focus of this project;
- Determine the cause and rates of autism in the community, including determining if its onset can be attributed to environmental toxins;
- Identify and address the issues, priorities, and objectives that Mi'kmaw and African Nova Scotian communities share as one group;
- Support education programs (elementary to adult programs) in order to create awareness about environmental racism and to mobilize future generations to be accountable for their actions;
- Support the Mi'kmaw community in reclaiming and remediating past mistakes that have contributed to environmental racism;
- Support policies and programs that address environmental racism in the community;
- Determine how residents learn and acquire knowledge about the effects of toxic industries and waste dumps;
- Encourage members of the "white community" to question how their actions impact the environment;
- Convey a message to the general population about the importance of coming together as one community to put an end to environmental racism;
- Create opportunities for co-learning that involve residents learning and living together in harmony and peace;
- Garner and use support from the general public to pressure the government to pay attention to and address environmental racism in Mi'kmaw and African Nova Scotian communities;

- Utilize the knowledge and wisdom of the Mi'kmaw community to ensure that future generations are not compromised in their ability to sustain themselves and the ecological integrity of Mi'kmaw communities; and
- Incorporate a "wholistic" (i.e. holistic) approach into the ENRICH Project that embraces the spirit of collaboration among peoples of diverse cultures, including Mi'kmaw peoples, African Nova Scotians, and other community members.

# **KEY INDIVIDUALS & AGENCIES**

Participants at the meeting identified the following key individuals and agencies that should be engaged in the project and in their advocacy efforts:

- Albert Marshall, Elder
- Jane Meader, Elder
- Kimberly Paul, Union of Nova Scotia Indians
- Lisa Young, Executive Director, Unama'ki Institute of Natural Resources (UINR) (Eskasoni)
- Jean C. Knockwood, Mi'kmaw Governance Researcher, Mi'kmaw Rights Initiative
- Leanne Simmons, Mi'kmaw Ethics Watch
- Collaborative Planning Initiative

Halifax Regional Municipality (HRM) & Surrounding Areas Meeting

**Date: January 11, 2014** 

Venue: Halifax Forum (Maritime Hall)

# Community Concerns & Priorities Related to Toxic Industries & Waste Dumps

The meeting on January 11, 2014 that brought together Mi'kmaw and African Nova Scotian community members in the HRM and surrounding areas to discuss their concerns and priorities was organized by hostess, facilitator, and ENRICH Advisory Committee member Lynn Jones. Discussions were facilitated by Alan Knockwood, Wanda Thomas, Cathy Murphy, David Maxwell, and Kwesi Firempong, as well as faculty members Sheri Price, Swarna Weerasinghe, Mikiko Terashima and Ingrid Waldron. Participants at the meeting shared the following concerns about how toxic industries and waste dumps have affected their everyday lives, health, and the socio-economic well-being of their communities:

- High rates of cancer and other illnesses in Mi'kmaw and African Nova Scotian communities;
- Failure of government to clean up arsenic in the water;

- The siting of the Nova Scotia Power plant in the Mi'kmaw community of Tuff's Cove on the Halifax Harbour (which was a traditional Mik'maw community that was destroyed with the Halifax Explosion), which is impacting the ecosystem of Halifax Harbour;
- A public dump near to the Millbrook First Nation community in Truro that is no longer used and is now covered up with trees;
- Failure of government to respond to residents' concerns about the government's decision to use Hammonds Plains (a sub-community of Indian Brook) as a mercury dump;
- The environmentally hazardous methods used by Nova Scotia Sand & Gravel to dig up and clean sand in Indian Brook. This method, which involves digging down to the level near to where the community's water table flows, has resulted in the water table flowing into their site. This has resulted in huge reservoirs of water the community can no longer use since the water supply comes from the water table;
- The siting of the landfill at Otter Lake, which is right next door to the African Nova Scotian community of Beechville;
- The waste dump in Goodwood, which is near to Beechville;
- The placement of African Nova Scotian and low-income people in Uniacke Square, an area where houses continue to deteriorate:
- Oil fumes from car mechanic businesses near to Creighton Street in the North End;
- Industrial pollution coming into Nova Scotia from Ohio and New York, which pollutes the lakes when it rains:
- Lack of a strong, unified voice for mobilizing and advocating around environmental racism in Mi'kmaw and African Nova Scotian communities;
- Lack of accountability by government for ensuring that communities are safe and healthy;
- Failure by government to consult with communities and involve them in decision-making processes related to the siting of toxic facilities and waste dumps;
- Failure of churches to support community members in dealing with environmental racism;
- The importance of thinking globally by moving beyond local concerns to a more critical analysis of how pollutants and contaminants emanating from the United States and other parts of Canada affect residents in Nova Scotia; and
- Using research to support capacity-building in Mi'kmaw and African Nova Scotian communities in the HRM and surrounding regions.

#### SHORT-TERM & LONG-TERM OBJECTIVES

Participants at the meeting identified the following ways in which the ENRICH Project could begin to support their advocacy efforts in the short-term and long term.

# Short-Term Objectives:

 Engage various agencies and organizations in advocacy and mobilizing efforts around environmental racism in the HRM, including HRM Councillors, Department of Community Services, Nova Scotia Department of Health and Wellness (Diversity

- Roundtable); churches in the African Nova Scotian community, and the African Nova Scotian Affairs Integration Office and
- Support community members in their efforts to receive a response from government about its decision to use Hammonds Plains (a sub-community of Indian Brook) as a mercury dump.

# Long-Term Objectives (Future Research Study):

- Support community efforts to hold government accountable for the siting of toxic industries and waste dumps in Mi'kmaw and African Nova Scotian communities in the HRM and surrounding regions;
- Help build capacity in Mi'kmaw and African Nova Scotian communities in the HRM and surrounding regions; and
- Support community mobilizing and advocacy efforts around the removal and/or redirecting of waste dumps, landfills, and other environmentally hazardous activities in Tuff's Cove, the Millbrook First Nation community in Truro, Hammonds Plains, Indian Brook, Otter Lake, Goodwood, and the North End.

# **KEY INDIVIDUALS & AGENCIES**

Participants at the meeting identified the following key individuals and agencies that should be engaged in the ENRICH Project and in their advocacy efforts:

- HRM Councillors
- Nova Scotia Department of Health and Wellness (Diversity Roundtable)
- Department of Community Services
- Mi'kmaw Native Friendship Center
- African Nova Scotian Affairs Integration Office
- Churches in the African Nova Scotian community

# Convergence Workshop Date: January 11, 2014

**Venue: Halifax Forum (Maritime Hall)** 

# Overview of Workshop Activities

The convergence workshop converged participants from all five regions to participate in a dialogue about effective approaches for mobilizing around environmental racism through research, knowledge sharing, advocacy, and mobilizing efforts. It also sought suggestions about the best approaches for developing a novel approach to community-based research that utilizes the unique skills and resources that community members, researchers, and other partners bring with them. In the following section, I outline the schedule of activities for the convergence workshop.

# **Opening Ceremony**

The workshop opened with a riveting performance by dancer **Josee Bourgeois** and drummer **Joe Sylliboy** from the Pride and Passions Dance Workshops, a unique workshop service that offers interactive dance instruction. This workshop also introduces many other forms of dance performance and performance arts.

# The Hostess with the Mostest: Presenting Lynn Jones

The opening ceremony was followed by an overview of the afternoon's activities by workshop hostess **Lynn Jones**. In addition to organizing the workshop, Lynn organized the meeting earlier in the day and sits on the Advisory Committee for the project.

# **Keynote Address**

Two passionate and insightful keynote addresses were delivered by Mi'kmaw community activist **Alan Knockwood** and African Nova Scotian community activist **Irvine Carvery**. Allan and Irvine offered an overview about how historical trauma and environmental racism have affected the health and well-being of their communities.

Alan Knockwood is a Mi'kmaw pipe carrier, Elder, and educator from Indian Brook. He has been a human rights activist and an international speaker on Aboriginal Rights and History for several years. He has worked at the Native Friendship Centre in Halifax and served on the board of directors for Caretakers of the Environment. He also served with the U.S. Navy as a Hospital Corpsman and currently works on behalf of veterans focusing on issues around increasing health care benefits and the need to improve the treatment of post-traumatic syndrome.

Irvine Carvery was born in Africville and enjoyed berry picking, swimming, fishing, and boats on the picturesque shores of Bedford Basin. But this all ended abruptly when his family along with many other Africville residents was forcibly removed and relocated by the city into public housing. Irvine has volunteered countless hours to community work, notably as President of the Africville Genealogy Society, the central organization seeking redress from the powers that be for the descendants of Africville.

# Bingo

The workshop continued with a Bingo Exercise facilitated by **Lynn Jones**. It proved to be an effective exercise for facilitating interaction between workshop participants.

# Presentation Overview on the ENRICH Project

The Bingo Exercise was followed by a brief presentation by project leader **Ingrid Waldron**, who provided an overview of how the project had evolved since the spring of 2012. This included a discussion on some of the main findings from the regional meetings, as well as follow-up activities planned.

#### **Break-Out Sessions**

Two concurrent break-out sessions followed: "Defining the Way Forward" and "Past, Current & Future Priorities & Advocacy". The session "Defining the Way Forward" focused on how community-based participatory research could support community members in future advocacy and mobilizing efforts around environmental racism. The session "Past, Current & Future Priorities & Advocacy" focused on effective advocacy and mobilizing activities community members can engage in to influence legislators and policymakers around these issues. In addition to the facilitators who facilitated discussions at the meeting earlier in the morning, discussions during the break-out sessions were facilitated by me and the other faculty on the team: Sheri Price, Swarna Weerasinghe, and Mikiko Terashima.

# **Documentary Film Screening**

After the afternoon break, a rough cut of the documentary film was screened. The film, which was produced by **Pink Dog Productions** in collaboration with **IMOVe**, includes interviews and other footage filmed at the regional meetings. The final cut of the documentary film, which will include footage and interviews from the HRM meeting and the Convergence Workshop, is set to be released in March 2014.

# Presentation on Mapping Portal & Toxic Legacies Timeline

The documentary film screening was followed by a presentation by research coordinator **Dave Ron**, who provided an overview of the Environmental Justice Mapping Portal and Toxic Legacies Timeline, both of which are currently being developed (**please see more information in the Knowledge Sharing & Mobilizing Activities section on page 59).** 

#### Closing Ceremony

The workshop came to a close with an emotional and incisive spoken word piece by **El Jones** entitled "Toxic Legacies", followed by a few final words from Ingrid Waldron. El Jones is the current HRM Poet Laureate and Artistic Director of Word Iz Bond Spoken Word Artist Collective, an organization committed to the promotion of spoken word poetry.

### **KEY FINDINGS FROM CONVERGENCE WORKSHOP:**

Two break-out sessions were facilitated during the convergence workshop: Defining the Way Forward" and "Past, Current & Future Priorities & Advocacy". Key points and suggestions made by workshop participants are outlined below.

# Break-Out Session: "Defining the Way Forward": Community-Based Advocacy Research

During this session, participants offered the following suggestions for developing an effective and sustainable community-based research model for the ENRICH Project that focuses on community capacity-building, advocacy, and community mobilizing:

# **Community Ownership**

- Ensure that the ENRICH project adopts principles from Ownership, Control, Access & Protection (OCAP), which outlines policies around access to and ownership of research data that has been collected in Mi'kmaw communities and
- Ensure that the community has ownership of the research.

# Relationship Building: Trust & Safety

- Ensure the safety of residents by building meaningful, trusting relationships between researchers and residents;
- Ensure that the stories community members share remain community-based, i.e. they stay true to how they were recounted and are not altered for the benefit of policymakers;
- · Recognize and respect the contributions of community members; and
- Listen to community members about their concerns around proposed developments or projects associated with environmental racism in their communities.

# **Transparency**

- Translate the concerns and priorities around environmental racism in Mi'kmaw and African Nova Scotian communities in ways that are relatable and meaningful to the residents directly affected, particularly those who lack awareness about how these issues affect them;
- Translate the concerns and priorities around environmental racism in Mi'kmaw and African Nova Scotian communities in ways that are relatable and meaningful to the broader community;
- Ensure transparency around the future research study by keeping community members informed about the research process, decision-making, and study results. For example, share this information with residents at town hall meetings, churches, and high schools;
- Translate academic language into plain language that the broader community understands. For example, avoid or translate the academic terminology (e.g. research, needs assessment) that often intimidates community members and use terms such as "community meeting" and "information gathering" instead;
- Involve community members in decisions about follow-up activities related to the research findings and how it will be used; and
- Highlight successes incrementally by gradually identifying how challenges were overcome and success achieved one step at a time.

# Research Design & Approach

- Build a research team that involves community members and researchers working collaboratively and in solidarity;
- Involve community members in decision-making processes about which stakeholders should be involved in the research study;
- Provide a historical overview of environmental racism in the Province by collecting existing recorded historical data from the municipal and provincial governments on the location of waste dumps in these communities;

- Capture, summarize, and document personal/qualitative stories that are supported by research;
- · Identify concrete research outcomes;
- Define the concept of "community", given that there are "communities within communities", such as communities formed around the family, the street, cultural background, and geographic area/region;
- Focus on shared issues of concern in Mi'kmaw, African Nova Scotian, and other communities;
- Position the project as a province-based community-based study that can be used to inform other community-based research approaches for addressing environmental racism in Canada, specifically in northern British Columbia and northern Alberta;
- Emphasize how historical and present-day systemic inequalities have lead to broader patterns of environmental racism that exist throughout the Province; and
- Develop an action plan that ensures that research goals are realized in ways that affect policy change in communities affected by environmental racism.

# Community Capacity-Building & Training

- Distinguish between two main types of "community": 1) physical community (land, trees etc.) and 2) human community;
- Acknowledge that strength lies in the ability of the "human community" to make changes in the physical community;
- Train community members about how to conduct research in their communities, including identifying community resources, developing research questions, writing grant proposals, collecting and analyzing data, and communicating to media;
- Develop research partnerships with community facilitators who are trusted members of the community and who would be willing to become "the face of the project";
- Utilize a participatory action research model that evolves out of the community, is community-led, and is defined wholly or partly by the community;
- Identify community leaders that can work collaboratively with the lead researcher;
- Engage youth of diverse ages in research by ensuring that they have a strong voice in decision-making and research processes;
- Give youth the tools to advocate around environmental racism in their communities;
- Teach community members the "language of research" in ways that enable them to have a common understanding and common language about the issues and to engage in dialogue with academics and policymakers around the issues;
- Provide opportunities for communities to learn from one another about the best practices that each community has used to address environmental racism;
- Highlight the success stories of community members, including examples of community resilience;
- Recognize that one study can't be everything to everybody by identifying specific
  aspects and tasks that engage different community members in different aspects of the
  study at different times based on their personal interests; and
- Incorporate community members' diverse experiences, opinions, perspectives, skills, expertise, and backgrounds into the research project.

# Research Funding

- Ensure that research funding is sought over the long-term to support research activities over the long-term and
- Hire a grant writer whose sole responsibility is to seek and secure funding from corporations, government, private donors, and philanthropists.

# **Knowledge Sharing & Communication**

- Recognize that marginalized communities often lack training on and access to newer technologies and emerging trends, particularly those communities that are dealing with environmental racism;
- Use approaches that record, hold, and communicate information in a primarily visual manner to target Mi'kmaw and African Nova Scotian communities - communities that have traditionally been visual learners;
- Tap into traditional ways of communicating within different communities, including agency resources, churches, community centers, and immigration agencies;
- Create a newsletter that unites and builds solidarity among communities across the Province around the struggles and progress made in each community;
- Use existing community newsletters from other agencies to share information about the research project and advocacy efforts;
- Put flyers about the research project and advocacy efforts in community members' mailboxes;
- Hold community events to share information about the research project and advocacy efforts;
- Use Twitter and the Facebook to unite the larger Nova Scotian community around environmental racism, particularly community members who are not members of the Mi'kmaw or African Nova Scotian communities;
- Publish photo essays of scenes of toxic dumps near to Mi'kmaw and African Nova Scotian communities;
- Disseminate research findings and information using creative approaches, such as skits, drama, music, art, and a mobile bus that travels to the communities;
- Share the documentary film with community members in broad, accessible, and transparent ways, including online platforms, libraries, junior high and high schools, the School Board, the Department of Education, and African Canadian Services Division;
- Share the documentary film with politicians; and
- Create classroom resources on environmental racism, such as lesson plans on environmental racism for African Canadian and Mi'kmaw studies.

# Break-Out Session: "Past, Current & Future Priorities & Advocacy"

During this session participants shared the following priorities and suggestions for how the ENRICH Project could support advocacy and mobilizing efforts around environmental racism in Mi'kmaw and African Nova Scotian communities:

# Community Leadership & Mobilizing

- Recognize that unity can't be created between all of the diverse Mi'kmaw and African Nova Scotian communities in the Province. Rather, unity can only happen organically when community members begin communicating with one another;
- Create a network across regions where residents (including youth) can come together, draw support from one another, and unite in the fight against environmental racism;
- Identify community members who can mobilize other community members to take action around environmental racism;
- Acknowledge and validate the self-governing structures in Mi'kmaw communities;
- Develop effective partnerships between diverse Mi'kmaw communities that have different councils, chiefs, and organizations, as well as different priorities and needs around environmental racism; and
- Encourage environmental groups to play a bigger and more effective role advocating around environmental racism and building solidarity with diverse communities across Nova Scotia.

#### Media

• Develop media campaigns (e.g. press releases) that create awareness in the general public about environmental racism.

# Government Accountability

- Ensure that the politicians that were voted in as decision makers affect change in their communities:
- Assist policymakers in identifying other locations to place toxic industries and waste dumps;
- Identify how policymakers plan to use government funds, human resources, and educational resources to re-direct or eliminate toxic industries, waste dumps, and other environmental hazards near to Mi'kmaw and African Nova Scotian communities;
- Ensure that government policies address environmental racism in multiple ways, including through compensation, removal or remediation;
- Ensure that government policies recognize treaty rights in dealing with environmental issues or environmental racism in Mi'kmaw and First Nations communities, in general;
- Identify key policymakers who could support community members in mobilizing around toxic industries, waste dumps, and other environmental hazards;
- Develop a master list with the names and contact information of government officials (e.g. councillors) that can be shared with Mi'kmaw and African Nova Scotian community members. This master list should be sent by email to churches, community centers, and Mi'kmaw and African Nova Scotian agencies;
- Support community members in signing petitions and participating in letter writing campaigns;
- Ensure that an environmental justice framework is incorporated into municipal, provincial, and federal policies;
- Document and use evidence-based data from the ENRICH project to put pressure on the government to acknowledge and address these issues. This evidence should



#### PROPOSED "PUBLIC THEATER" EVENT

A workshop participant suggested that the following "public theater" event should be organized to create awareness about environmental racism in the wider community, to inspire and mobilize community members around the issues, and to pressure the government to take responsibility for their actions:

Develop a coalition of a representative group of people from the African Nova Scotian and Mi'kmaw communities, as well as allies, who could organize a "public theater" event, i.e. a filmed mobilizing event that focuses on the government's lack of accountability for the siting of landfills and waste dumps in Mi'kmaw and African Nova Scotian communities. This would involve identifying all of the government agencies that allege their responsibility and accountability for environmental racism. This could be followed by a demonstration or walking tour of different agencies and organizations by 20 individuals from each community. The event could conclude with a press conference in which the documentary film is screened, followed by a community meeting that provides community members with a space to debrief about the effectiveness of the event, its implications, and the action items/outcomes arising out of the event.

include human stories about environmental racism in Mi'kmaw and African Nova Scotian communities, as well as epidemiological data on morbidity, death rates, and level of contaminants in the body; and

 Engage various agencies and organizations in advocacy and mobilizing efforts around environmental racism in the HRM, including HRM Councillors, the Department of Community Services, the Nova Scotia Department of Health and Wellness (Diversity Roundtable), churches in the African Nova Scotian community, and the African Nova Scotian Affairs Integration Office.

# **SHORT-TERM & LONG-TERM OBJECTIVES**

Participants at the convergence workshop identified the following ways in which the ENRICH Project could begin to support their advocacy efforts in the short-term and long term.

# Short-Term Objectives:

Involve community members in decisions about follow-up activities related to the

- workshop findings and how it will be used;
- Engage Mi'kmaw and African Nova Scotian youth in the project;
- Develop a master list with the names and contact information of government officials (e.g. councillors) that can be shared with Mi'kmaw and African Nova Scotian community members. This master list should be sent by email to churches, community centers, and Mi'kmaw and African Nova Scotian agencies;
- Engage various individuals, agencies, and organizations in advocacy and mobilizing
  efforts around environmental racism in the HRM, including churches in the African Nova
  Scotian community, community centers, immigration agencies, HRM Councillors,
  African Nova Scotian Affairs Integration Office, Department of Community Services,
  and the Nova Scotia Department of Health and Wellness (Diversity Roundtable).
- Ensure that the ENRICH project adopts principles from Ownership, Control, Access and Protection (OCAP), which outlines policies around access to and ownership of research data that has been collected in Mi'kmaw communities;
- Develop research partnerships with community leaders/facilitators who are trusted community members who would be interested in becoming the "face of the project";
- Create a newsletter that unites and builds solidarity among communities across the Province around the struggles and progress made in each community;
- Use existing community newsletters from other agencies or organizations to share information about the research project and advocacy efforts;
- Create a network across regions where residents (including youth) can come together, draw support from one another, and unite in the fight against environmental racism;
- Put flyers about the ENRICH project in community members' mailboxes;
- Share the documentary film with community members in broad, accessible, and transparent ways, including online platforms, libraries, junior high and high schools, the School Board, the Department of Education (including the African Canadian Services Division), and environmental agencies;
- Share the documentary film with politicians;
- Use Twitter and the Facebook to unite the larger Nova Scotian community around environmental racism, particularly community members who are not members of the Mi'kmaw or African Nova Scotian communities;
- Use media to create awareness in the general public about environmental racism; and
- Collect existing recorded historical data from the municipal and provincial governments on the location of waste dumps in these communities.

# Long-Term Objectives (Future Research Study):

- Train community members about how to conduct research in their communities, including identifying community resources, developing research questions, writing grant proposals, collecting and analyzing data, and communicating to media;
- Utilize a participatory action research model that evolves out of the community, is community-led, and is defined wholly or partly by the community;
- Build a collaborative research team that involves community members and researchers working together;
- Develop an action plan that ensures that research goals are realized in ways that affect policy change in communities affected by environmental racism;

- Identify how policymakers plan to use government funds, human resources, and educational resources to re-direct or eliminate toxic industries, waste dumps, and other environmental hazards in Mi'kmaw and African Nova Scotian communities; and
- Ensure that government policies address environmental racism in multiple ways, including through compensation, removal, or remediation.

# **KEY INDIVIDUALS & AGENCIES**

Workshop participants identified the following key individuals and agencies that should be engaged in the ENRICH Project and in their advocacy efforts:

- HRM Councillors
- Department of Community Services
- Nova Scotia Department of Health and Wellness (Diversity Roundtable)
- Department of Education (including African Canadian Services Division)
- African Nova Scotian Affairs Integration Office
- Libraries in the HRM
- Junior high schools in the HRM
- High schools in the HRM
- Nova Scotia School Boards

# SUMMARY OF KEY SHORT-TERM OBJECTIVES FOR WORKSHOP FOLLOW-UP ACTIVITIES

ENRICH is currently collaborating with residents to engage in a number of follow-up activities to achieve several short-term objectives in the months following the Halifax Convergence Workshop. These short-term objectives, which are outlined below, will support new and ongoing advocacy efforts around environmental racism in their regions. These objectives will be carried out by members of the ENRICH project team and student/ youth volunteers.

# Sharing & Communicating Workshop Findings & Project Resources

 Submit the Meeting & Workshop Report to the following key federal, provincial, and municipal government departments and agencies:

**Environment Canada** 

Nova Scotia Department of Health & Wellness (Diversity Roundtable)

Nova Scotia Environment

Nova Scotia Department of Energy

Nova Scotia Power

Nova Scotia Department of Education (including African Canadian Services Division)

Nova Scotia Department of Community Services

Nova Scotia School Boards

Nova Scotia Provincial Library

HRM Environment & Sustainability Committee

**HRM Councillors** 

Office of Aboriginal Affairs
Office of African Nova Scotian Affairs
African Nova Scotian Affairs Integration Office.

• Submit the Meeting & Workshop Report to the following key individuals, agencies, and organizations:

Albert Marshall, Elder

James Desmond, Community Activist

Kimberly Paul, Union of Nova Scotia Indians

Chief Deborah Robinson, Acadia First Nation

Melanie Purdy, Community Enhancement Officer, Acadia First Nation

Councillor Jeff Purdy, Band Councillor, Acadia First Nation

Darlene Coulton, Band Councillor, Acadia First Nation

Tom Pictou, Band Councillor, Acadia First Nation

Atlantic Policy Congress of First Nations Chief

Confederacy of Mainland Mi'kmaw

Kimberly Paul, Union of Nova Scotia Indians

Lisa Young, Executive Director, UINR (Eskasoni)

Jean C. Knockwood, Mi'kmaw Governance Researcher, Mi'kmaw Rights Initiative

Mi'kmaw Native Friendship Center

Mi'kmaw Ethics Watch

Collaborative Planning Initiative

Wayne Desmond, President, North Preston Ratepayers Association

East Preston Ratepayers Association

Health Association of African Canadians

African United Baptist Church

Churches in the African Nova Scotian community

**Ecology Action Center** 

Canadian Race Relations Foundation

Junior high schools in the HRM and province

High schools in the HRM and province

 Develop a master list with the names and contact information for government officials (e.g. Councillors) that can be shared with Mi'kmaw and African Nova Scotian community members. This master list should be sent by email to churches, community centers, and Mi'kmaw and African Nova Scotian agencies;

**N.B.:** This list has already been developed and will be shared with community members in the coming months.

- Share the documentary film with community members, government/politicians, community-based agencies and other organizations in broad, accessible, and transparent ways, including online platforms, libraries, junior high and high schools, the School Board, the Department of Education (including the African Canadian Services Division), and environmental agencies;
- Share Environmental Justice Mapping Portal with community members, government/

- politicians, community-based agencies, and other organizations;
- Create and disseminate project newsletter that unites and builds solidarity among communities across the province around the struggles and progress made in each community;
- Use existing community newsletters from other organizations/agencies to share information about the research project and advocacy efforts;
- Create an information document on the ENRICH website that provides guidance around proper waste management approaches;
- Use social media (Twitter and the Facebook) to unite the larger Nova Scotian community around environmental racism, particularly community members who are not members of the Mi'kmaw or African Nova Scotian communities;
  - **N.B.:** Twitter and Facebook have already been set up for the project through the project website. Facebook is currently being used to share information about the project.
- Put flyers about the ENRICH project and advocacy efforts in community members' mailboxes:
- Use traditional media to create awareness in the general public about the spiritual, emotional, and physical health effects and socio-economic outcomes associated with toxic industries and waste dumps in Mi'kmaw and African Nova Scotian communities.
  - **N.B.:** The project has already received considerable media attention, including print, television, radio, and online blogs. Please see more information in the section on Knowledge Sharing & Mobilizing Activities later in this report.

# **Building Research Capacity**

- Submit research grant applications to fund future research studies;
  - **N.B.:** Faculty have already submitted grant applications to CIHR and SSHRC in the fall of 2013.
  - **N.B.:** Grant applications will be submitted in 2014 to the Nova Scotia Health Research Foundation (NSHRF), CIHR, SSHRC, and other funding agencies.
- Collect existing recorded historical data on the location of waste dumps in Mi'kmaw and African Nova Scotian communities from the municipal and provincial governments;
- Review government policies on environmental waste, toxic dumps, and toxic industries in the identified communities:
- Collect spatial data;
- Develop community health survey templates;
- Research information for community health surveys;
- Develop research partnerships with community leaders/facilitators who are trusted community members who would be interested in becoming "the face of the project"; and
- Ensure that the ENRICH studies adopt principles from Ownership, Control, Access and

Protection (OCAP), which outlines policies around access to and ownership of research data that has been collected in Mi'kmaw communities.

# Supporting Residents' Community Engagement & Mobilizing Efforts

- Organize a meeting with key leaders from each of the five regions to help forge
  collaborative relationships amongst these leaders and to create a sense of unity and
  cohesion among residents. The main purpose of this meeting will be to bring together
  leaders to share stories of struggles, learn from one another, identify solutions to
  shared concerns, and devise a collaborative action plan for addressing environmental
  racism in their communities:
- Engage youth agencies in the province in ENRICH Project activities;
- Engage Mi'kmaw, African Nova Scotian, and other youth in ENRICH Project activities:

**N.B.:** ENRICH recently received funding from the Cobequid Community Health Board to fund a youth arts-based project, which will be carried out by Mi'kmaw and African Nova Sotian youth in the province.

**N.B.:** The ENRICH Project has engaged community and environmental planning students in the "Sustainable Community Development" course at the Nova Scotia Community College to develop some features of the Environmental Justice Mapping Portal.

**N.B.:** The ENRICH Project has recruited students from Earth Sciences, Law, Environment and Sustainability, International Development Studies and the Health Geography departments/programs at Dalhousie and University of Toronto to volunteer on the project.

- Support Lincolnville Environmental Group Society in receiving a response by the Council to the Society's presentation in April 2013;
- Identify and consult with key individuals and agencies responsible for toxic industries and waste dumps in the identified communities;
- Engage various individuals, agencies, and organizations in advocacy and mobilizing
  efforts around environmental racism in the HRM, including Office of Aboriginal Affairs,
  churches in the African Nova Scotian community, community centers, immigration
  agencies, HRM Councillors, African Nova Scotian Affairs Integration Office, Department
  of Community Services, and the Nova Scotia Department of Health and Wellness
  (Diversity Roundtable);
- Consult with agencies and individuals that could support residents in their mobilizing and advocacy efforts around the elimination, removal, and re-directing of toxic industries and waste dumps in their communities;
- Arrange meetings between residents, policymakers and the ENRICH Project team (if
  financially feasible) to discuss residents' concerns about the health effects and socioeconomic outcomes associated with toxic industries and waste dumps near to their
  communities;
- Arrange a follow-up meeting with North Preston community members and the North Preston Ratepayers Association at the monthly Ratepayer's Association meeting; and

**N.B.:** Ingrid Waldron arranged a follow-up meeting on November 25, 2013 at the North Preston Ratepayer's Association meeting (to be held at the North Preston Recreation Center), however, this meeting was subsequently cancelled by the Ratepayer's Association to make way for a church meeting that was scheduled at that time.

• Identify the individual or agency responsible for the wind turbines project in North Preston:

**N.B.:** Ingrid Waldron spoke with Crystal Therien, Manager and Administrator for the Community Feed-In Tariff Program (COMFIT) at the Nova Scotia Department of Energy, on October 17, 2013 to discuss plans for the installation of wind turbines in North Preston.

Ms. Therien indicated that North Preston residents have not yet been consulted about the installation project because the project is in its preliminary stages. She mentioned that there have always been plans to consult with the community if and before the project goes forward. She also revealed that since there have been a few hurdles with the wind turbines project in North Preston, it may not move forward. If it does move forward, however, this will not happen before 2015.

# RESEARCH

# **KEY RESEARCH PRIORITIES**

Meeting and workshop participants identified the following key priorities for a future research study on environmental racism in the identified regions:

# Community-Based Participatory Action Research Methodology

- Identify and address the issues, priorities, and objectives that Mi'kmaw and African Nova Scotian communities share as one community rather than focusing on how multiple issues affect individual communities/cultures;
- Consult with residents living in different reserves to identify the specific concerns they have about toxic waste dumps in their community;
- Train community members about how to conduct research in their communities, including identifying community resources, developing research questions, writing grant proposals, collecting and analyzing data, and communicating to media;
- Utilize a participatory research model that evolves out of the community, is communityled, and is defined wholly or partly by the community;
- Build a collaborative research team that involves community members and researchers working together (including youth); and
- Help build capacity in Mi'kmaw and African Nova Scotian communities.

#### Health Data Collection

- Collect health statistics on rates and causes of cancer, heart disease, autism, and other illnesses in Mi'kmaw and African Nova Scotian communities in order to determine if their onset can be attributed to residence near to landfills and waste dumps and
- Determine the number of residents that have been misdiagnosed with various illnesses.

# Advocacy & Mobilizing

- Support residents' efforts to hold government accountable for the siting of toxic industries and waste dumps in Mi'kmaw and African Nova Scotian communities;
- Support residents in their efforts to have the municipal and provincial governments be accountable for the health effects and socio-economic outcomes associated with landfills, waste dumps, and other environmentally hazardous activities:
- Support residents in reclaiming and remediating past mistakes that have contributed to environmental racism;
- Identify independent monitors who can confirm what is being dumped into landfill sites;
- Support residents in getting water testing done independently;
- Support residents in getting soil testing done independently;
- Support community mobilizing and advocacy efforts around the removal, elimination, and re-directing of waste dumps, landfills, and other environmentally hazardous activities in their communities; and
- Support Lincolnville residents in launching a class action lawsuit against the Municipality and in pursuing compensation.

# Policy Impact

- Support residents in developing an action plan that ensures that research goals are realized in ways that affect policy change in communities affected by environmental racism;
- Support policies and programs that address environmental racism; and
- Ensure that government policies address environmental racism in multiple ways, including through compensation, removal or remediation.

Discussions at the regional meetings and convergence workshop elicited several key research objectives and research questions for a future research study on the issues, which are listed below. These objectives and questions were included in grant applications that were submitted to CIHR and SSHRC in the fall of 2013.

#### **KEY RESEARCH OBJECTIVES**

The key research objectives include the following:

- To map air pollution levels of commonly known waste disposal pollutants data using geographic information system (GIS) techniques for the selected communities;
- To document and analyze personal stories/qualitative accounts of the health experiences of Mi'kmaw and African Nova Scotian communities residing near to toxic industries and waste disposal sites;

- To explore health risk profiles of Mi'kmaw and African Nova Scotian communities residing near to toxic industries and waste disposal sites using medical service insurance databases:
- To examine the impact that residence near to toxic industries and waste disposal sites
  has on local employment opportunities, land value, standard of living, local services and
  utilities, and demographic trends in the regions using secondary data;
- To map socio-economic data obtained from census and statistics data using GIS techniques for the selected communities; and
- To inform future best regulatory practices for topics including environmental protections, regulation and legislations, environmental health assessments, democratic decisionmaking, and community consultation.

# **KEY RESEARCH QUESTIONS**

The key research questions include the following:

- What are the health risks associated with exposure to air and ground level contaminants for Mi'kmaw and African Nova Scotian communities in close proximity to toxic industries and waste disposal sites?;
- What are the relevant social (race, culture, etc.), demographic, and economic conditions (income, labour, employment) of these communities compared with other communities?;
- What is the state of environmental protections, evaluation, regulation, and legislation that ensures that equity and justice are instituted and practiced in these communities?;
   and
- How can study results be used to inform community consultations and democratic decision-making with Mi'kmaw and African Nova Scotian communities around the health and socio-economic implications of toxic industries and toxic waste disposal sites?

# **KNOWLEDGE SHARING & MOBILIZING ACTIVITIES**

Knowledge from the regional meetings and convergence workshop will be shared and communicated through a variety of avenues, formats, platforms, and resources in order to target diverse stakeholders and institutions. These stakeholders include community members, government/policymakers, other decision makers, health agencies and departments, environmental agencies, community agencies, universities, faculty/ researchers, students, and media. Community members and faculty will co-own the knowledge and resources that result from the meetings, workshop, and future research studies. Current and future knowledge sharing activities and resources include the following:

- Report on the Regional Meetings & Convergence Workshop
- Documentary Film Based on the Regional Meetings & Convergence Workshop

- Environmental Justice Mapping Portal (\*)
- Toxic Legacies Timeline (\*)
- Media (\*)
- Youth Video Contest & Arts-Based Project (\*)
- Project Website
- Project Facebook Page
- Twitter
- Project Newsletter
- Online Broadcasters & Blogs
- Email Listserv
- Photo Essays
- Flyers
- Classroom Resources
- Community Meetings
- Workshops
- Future Research Study Report

\*Environmental Justice Mapping Portal is an interactive and evolving map-based website that aims to show how noxious facilities and LULU's (locally unwanted land uses, such as landfills, incinerators, sewage treatment plants, refineries, oil/gas extraction) have been intentionally situated in and around communities inhabited mainly by Mi'kmaw and African Nova Scotian communities, as well as the working poor. It will feature an inventory of health, socio-economic, and geographic data on environmental racism in Nova Scotia and a multi-media online forum.

Community and Environmental Planning students enrolled in the COEP 4000 Sustainable Community Development course at the Nova Scotia Community College's Centre of Geographic Sciences (COGS) are currently assisting with the development of the Mapping Portal Project. The students are focusing on website development and in particular, developing a portion of a website with a geographic tool that is useful for understanding how environmental racism is at odds with sustainable development. This project will also allow COGS to build capacity in understanding and working with neo-geographers and their toolsets. At this time, for this particular course, the focus will be on web site integration of a mapping tool that has been designed and configured to allow community members to contribute to the map. Issues related to the development of a full web portal, spatial data issues and how it is to be configured, assembled and analyzed, and editorial policy for contributors to the map are all beyond the scope of this project this year at COGS. By applying their web design and mapping skills to explore ethical issues of justice/racism, the learners will contribute to the development of a map that not only provides information to the map reader but also allows the map reader to contribute. This allows community members to have a more tactile mapping experience that permits them to share their personal stories and information, including audio-visual media if so desired.

\*Toxic Legacies Timeline is a visualization document that provides a scan of the past 100 years (i.e. beginning at early 20th century industrialization) tracing key developments related to environmental equity of the initial communities identified for regional workshops of the ENRICH Project. These communities are North Preston, Halifax, Membertou First Nation, Acadia First Nation, and Lincolnville. The timeline is colour-coded with four categories to illustrate the historical context of, and causal relationship between people, planet, policy, and planning. The category of people describes migratory behaviours documented, shifts in major socio-economic indicators (e.g. employment), and community campaign initiatives related to toxic industry proximate to the communities of concern. The category of planet refers to documented ecological degradation, as well as detrimental impacts on wildlife and natural resources relevant to toxic industries proximate to the communities of concern. The category of policy refers to key regulatory, legislative and procedural documents or events relevant to toxic industries proximate to the communities of concern. The category of planning pertains to the historical emergence of land use planning, zoning, and development decisions, as well as documented discharge of noxious substances, relevant to toxic industries proximate to the communities of concern. Due to the limited availability of data for the regions under consideration, and concerns around scale or accuracy of the documentation acquired, communities can initially be featured as part of a more generic timeline for all of Nova Scotia.

\*Media: The ENRICH Project, meetings and workshop have garnered considerable media attention over the past year. The research team will continue to engage traditional and social media in project activities and outcomes. Please see more information on media interviews below or on the ENRICH website here: http://www.enrichproject.org/press/

# **Television**

Television interview on CTV 6 PM Sunday Evening News on October 6, 2013

Television interview on Doc Talks (Eastlink TV) on December 9, 2013

Television interview on *Global Morning News* on January 10, 2014: <a href="http://globalnews.ca/video/1073869/tackling-environmental-racism-in-nova-scotia">http://globalnews.ca/video/1073869/tackling-environmental-racism-in-nova-scotia</a>

# <u>Radio</u>

Radio interview on *CBC Information Morning* on January 10, 2014: <a href="http://www.cbc.ca/informationmorningns/">http://www.cbc.ca/informationmorningns/</a>

# **Newspapers**

Newspaper article written by Ian Fairclough for the *Chronicle Herald* on October 3, 2013: <a href="http://thechronicleherald.ca/novascotia/1158234-environmental-racism-focus-of-project">http://thechronicleherald.ca/novascotia/1158234-environmental-racism-focus-of-project</a>

Newspaper article written by Michael Lightstone for the Chronicle Herald on January

1<sup>st</sup>, 2014: <a href="http://thechronicleherald.ca/novascotia/1176872-health-top-issue-in-dal-researchers-environmental-racism-study">http://thechronicleherald.ca/novascotia/1176872-health-top-issue-in-dal-researchers-environmental-racism-study</a>

Newspaper article written by Michael Lightstone for the *Chronicle Herald* on January 11, 2014: http://thechronicleherald.ca/novascotia/1179116-environmental-racism-links-ns-blacks- natives-to-minorities-around-world

Article written by Alec Cumming for the *Halifax Commoner* on January 16, 2014:http://halifaxcommoner.kingsjournalism.com/?p=1737

# **Magazines**

Magazine article written by Sam Fraser for *Between the Issues* (Ecology Action Center) in July 2013: <a href="http://www.ecologyaction.ca/files/images/file/BTI/EAC\_BTI-July-2013.pdf">http://www.ecologyaction.ca/files/images/file/BTI/EAC\_BTI-July-2013.pdf</a>

# Online Broadcasters

Article written by Natascia Lypny for *Media Co-op* on November 13, 2013: <a href="http://halifax.mediacoop.ca/fr/story/toxic-legacies/19765">http://halifax.mediacoop.ca/fr/story/toxic-legacies/19765</a>

Audio Interview for *Accessible Media* on Friday, January 10, 2014: <a href="http://www.ami.ca/Pages/search">http://www.ami.ca/Pages/search</a> results.aspx?k=Ingrid%20Waldron

Article written by Hilary Beaumont for *Media Co-op* on January 13, 2014: <a href="http://halifax.mediacoop.ca/story/environmental-racism-still-prevalent-ns-communitie/20807">http://halifax.mediacoop.ca/story/environmental-racism-still-prevalent-ns-communitie/20807</a>

\*Youth Video Contest & Arts-Based Project: is a contest for Mi'kmaw and African Nova Scotian youth to propose, via video submissions, an arts-based project idea that addresses the effects of local industries on environmental health in their communities. The winner will receive financial support for further developing their ideas. The project objective is to engage youth at the grassroots level and use the research project as a training ground for youth to engage other youth in environmental justice issues.

# **ENRICH Project Website**

http://www.enrichproject.org/

#### **ENRICH Project Facebook Page**

https://www.facebook.com/pages/Environmental-Noxiousness-and-Racial-Inequities-Enrich - Project/417745134992417

# **FINAL WORDS**

As the meeting and workshop stage of the ENRICH Project comes to a close, it is important to emphasize that they represent only one stage of a multi-stage and multi-layered project that has never followed a linear path. As the project team moves forward (or sideways) to the next stage of the project, it is important to reflect back on the many milestones, challenges, and successes the project has achieved and experienced over the past year

The ENRICH Project exemplifies the multiple, creative, innovative, and timely ways in which research data and knowledge can be shared with community members, policymakers, agency professionals, students, faculty/ researchers, and media. Since its inception, the project has engaged with both traditional and cutting-edge approaches to sharing and mobilizing knowledge. This involves utilizing a variety of avenues, formats, platforms, and resources, including a documentary film, a mapping portal, Twitter, Facebook, online broadcasters, a project website, an email listsery, traditional media (television, newspapers, radio, magazines), community meetings, a convergence workshop, and a workshop report.

and a half. These milestones, challenges, and successes can be discussed in relation to three main activities: 1) community engagement; 2) documenting the personal stories of residents; and 3) using an innovative multi-pronged approach to knowledge sharing and mobilizing.

First, while the team has been successful in engaging a diverse group of Advisory Committee members, it continues to face some challenges engaging Mi'kmaw and African Nova Scotian residents in the identified regions. Consequently, considerably more work needs to be done building collaborative relationships and partnerships with Mi'kmaw and African Nova Scotian residents involved in grassroots mobilizing efforts around environmental racism and other injustices in these

regions. The team recognizes that engaging racialized communities requires a shift in thinking about how power, privilege, and equity are implicated in relationship-building, partnerships, and research with marginalized communities, in general. For example, considerations about how researchers can *work with* rather than *for or on behalf of* communities must be premised on an authentic desire to engage in partnerships that involve equitable power sharing with respect to how research data and knowledge are owned, collected, analyzed, and shared. Therefore, building organic, trusting, collaborative, and reciprocal relationships with community members must be a priority when collaborating with racialized and other marginalized communities. This involves recognizing and

respecting community members as experts in their own lives, fully involving them at every stage of the research process, valuing the contributions they make to all project activities and decision-making processes, and ensuring that they are full participants in the cocreation and sharing of knowledge. It is important to point out that community members will have little interest in collaborating with researchers if they are not invested in the research. For many community members, that investment requires that they have ownership of research knowledge, tools, and methods. Consequently, it is crucial that researchers using community-based participatory action research approaches ensure that co-ownership is a central aspect of the research project.

Second, the team has had its greatest success in bringing together those community members who have been passionate about sharing their stories and personal anecdotes about how residence near to toxic landfills and waste dumps has affected their health and socio-economic well-being. The intimate nature of the regional meetings and the final convergence workshop provided the project team with invaluable insights into residents' concerns, priorities, struggles, and hopes for the future. These insights will help guide future research studies on environmental racism that the team hopes to conduct, as well as support ongoing and new mobilizing and advocacy efforts around the removal or redirecting of toxic industries and waste dumps near to these communities.

Finally, the ENRICH Project exemplifies the multiple, creative, innovative, and timely ways in which research data and knowledge can be shared with community members, policymakers, agency professionals, students, faculty/researchers, and media. Since its inception, the project has engaged with both traditional and cutting-edge approaches to sharing and mobilizing knowledge. This involves utilizing a variety of avenues, formats, platforms, and resources, including a documentary film, a mapping portal, Twitter, Facebook, online broadcasters, a project website, an email listserv, traditional media (television, newspapers, radio, magazines), community meetings, a convergence workshop, and a workshop report. Future activities will include a youth video contest for an arts-based project, photo essays, a project newsletter, and classroom resources.

I am proud to be involved in the ENRICH Project because I believe it stands at the crossroads between the traditionalist principles and values upon which community-based research must be premised and the innovative, inventive, creative, original, and new ways of conceptualizing how community-based participatory action research and research in general, can be conducted. Consequently, ENRICH is illustrative of a novel community-based research model in which new technologies and media can co-exist with the core principles of community involvement, community ownership, collaboration, reciprocation, and community capacity-building – all of which will never go out of style.

In closing, I would like to say "thank you" to the community members the project team met in Membertou, Lincolnville, Yarmouth, North Preston, and Halifax. I look back on those meetings with great fondness. The opportunity (and privilege) the project team was given to travel to these regions to meet and build relationships with residents has been the most rewarding aspect of the project. It impressed upon us how crucial it is to conduct research

that is grounded in and evolves out of the priorities, concerns, and needs of community members first and foremost. Moreover, we came to a greater appreciation for how important it is to create spaces and opportunities for divergent voices to resonate throughout the project. In moving forward, the team hopes to remain open, flexible, and accommodating to new ways of thinking about how ENRICH can not only stay true to the core principles of community-based participatory action research, but also "keep its ears to the ground" by engaging with non-traditional approaches to community engagement, research, and knowledge sharing and mobilizing.

# **APPENDICES**

# APPENDIX # 1: GLOSSARY

**Environmental Racism**: the inequitable and disproportionate placement of LULU's and noxious facilities near to racialized communities and the working poor. Environmental racism also refers to the lack of democratic engagement of such communities in making such decisions.

**Environmental Justice**: the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income with respect to the development and implementation of environmental regulations or policies. The environmental justice movement emerged to challenge the unfair distribution of toxic and dangerous waste facilities, disproportionately located in low-income racialized communities.

**LULU's**: locally unwanted land uses refer to land uses that are seen as useful by certain populations, but undesirable or objectionable by communities who live nearby. These include industries such as landfills, industrial power generation stations, incinerators, sewage treatment plants, factories refineries, pulp and paper mills, oil/gas extraction and hazardous waste storage.

**Noxious Facilities**: industrial sites producing toxic waste or pollution detrimental to human and environmental health.

**Noxiousness**: the quality of being harmful to living things and injurious to human health.

**Toxic Waste**: hazardous material injected into the environment, often in chemical form, that can cause death or injury to living creatures. It usually is the product of industry or commerce, released into air, water, or land, and can pose a long-term risk to health or environment.

# APPENDIX # 2: HRM MEETING & CONVERGENCE WORKSHOP AGENDA JANUARY 11TH, 2014

# HRM & SURROUNDING AREA MEETING SCHEDULE (9:00AM—11:30AM)

Time	Activity Description	Lead(s)/ Facilitator(s)
9:00am—10:30am (90 min)	Breif Introduction on ENRICH Project Discussion Group: Identifying Key Issues in HRM	Ingrid Waldron Lynn Jones
10:30am—10:45am	Break	N/A
10:45am—11:30am <i>(45 min)</i>	Facilitated Discussion and Wrap-up	Lynn Jones
11:30am—12:00pm <i>(30 min)</i>	Individual Interviews: Opportunity for Halifax participants to have their stories/ experiences	Dawn Harwood-Jones & Pink Dog

# CONVERGENCE WORKSHOP FOR ALL REGIONS (1:00PM—5:45PM)

Time and Objective	Activity Description	Lead(s)/ Facilitator(s)
12:00pm—1:00pm (60 min)	Lunch for Halifax residents arriving regional participants	South Park Catering

# CONTINUED FROM PAGE 69...

Time and Objective	Activity Description	Lead(s)/ Facilitator(s)
	Opening & Introduction Introduction & Overview of Afternoon Activities:	
1:00pm—1:10pm (10 Min)	Summary of facilitated break-out session topics and activities; discussion on youth video contest; feedback forms for mapping portal presentation and	Ingrid Waldron Lynn Jones
<b>1:10pm - 1:30pm</b> (20 min)	Opening Ceremony	Joe Sylliboy & Josee Bourgeios
<b>1:30pm - 2:15 pm</b> (45 min)	Keynote Address (Mi'kmaw/African Nova Scotian): discussion on shared concerns in both communities and bridging gap between both communities/ moving beyond differences.	Alan Knockwood & Irvine Carvery Moderator: Lynn Jones
<b>2:15pm - 2:30</b> (15 min)	Bingo Exercise	Lynn Jones
<b>2:30pm - 2:45 pm</b> (15 min)	Presentation with Overview of ENRICH	Ingrid Waldron

# CONTINUED FROM PAGE 70...

Time and Objective	Activity Description	Lead(s)/ Facilitator(s)
<b>2:45pm - 3:30pm</b> (50 min)	Concurrent Facilitated Break -Out Groups/Sessions: Past, Current & Future Priorities & Advocacy Efforts See below for details *	Facilitators Lynn Jones Ingrid Waldron Swarna Weerasinghe Sheri Price Mikiko Terashima Shelina Gordon Dave Ron
<b>3:30pm - 3:45pm</b> (15 min)	Break	N/A
<b>3:45pm – 4:00 pm</b> (15 min)	Regroup: short wrap-up presentations from group 'delegate' on key points of break-out sessions.	Lynn Jones
4:00 pm -4:20 pm (20 min)	Screening of ENRICH documentary film, including "highlight reel" video documenting each of the regionally-focused workshops	Dawn Harwood- Jones and Pink Dog
4:20 pm - 4:45pm (25 min)	Presentation on Workshop Resources: Mapping Portal, Visualization Document, ENRICH Project Website.	Dave Ron

# CONTINUED FROM PAGE 71...

Time and Objective	Activity Description	Lead(s)/ Facilitator(s)
	Concurrent Facilitated Break-Out Sessions: Defining the Way Forward See below for details **	<u>Facilitators</u>
		Lynn Jones
		Ingrid Waldron
<b>4:45pm - 5:30pm</b> (45 min)		Swarna Weerasinghe
		Sheri Price
		Mikiko Terashima
		Shelina Gordon
		Dave Ron
<b>5:30pm - 5:45pm</b> (15 min)	Spoken Word Piece: "Toxic Legacies"	El Jones
<b>5:45pm - 6:00pm</b> (15 min)	Final Words & Closing	Ingrid Waldron



February 25, 2013

Ingrid Waldron, Ph.D. School of Nursing Dalhousie University 5869 University Avenue Forrest Building Room G 19 P.O. Box 15000 Halifax, N.S. B3H 4R2

Dear Dr. Waldron,

I wish to inform you that the Mi'kmaw Ethics Watch committee has reviewed and approved "In Whose Backyard? Exploring Toxic Legacies in Mi'kmaq and Indigenous Black Communities in Nova Scotia".

As your project moves forward with the approval of the Mi'kmaw Ethics Watch, I must note that individual communities have their own perspective on research projects and it is your responsibility to consult them to ensure that you meet any further ethical requirements. Governments, universities, granting agencies, and the like also have ethical processes to which you might have to conform.

When your project is completed, the Mi'kmaq Resource Centre at Unama'ki College would be pleased to accept the results in a form that could be made available to students and other researchers (if it is appropriate to disseminate them). Our common goal is to foster a better understanding of the Indigenous knowledges.

If you have any questions concerning the Mi'kmaw Ethics Watch review of your project please do not hesitate to contact me and I will forward them to the committee members.

Sincerely,

Stephen J. Augustine Principal/Dean Unama'ki College Cape Breton University

CAPE BRETON UNIVERSITY | UNAMA'KI COLLEGE

# REFERENCES

Abel, T.D. & White, J. (2011). Skewed riskscapes and gentrified inequities" Environmental exposure disparities in Seattle, Washington, *American Journal of Public Health*, Supplement 1, 101, No. S1: 246-254.

Allen, D. (2013). *Remember Africville*. Retrieved on September 7, 2013: http://www.web.net/sworker/En/SW2002/383-09-Africville1.html

Bain Lindsay, H. (2005, December 7). Race and waste in Nova Scotia, *the Dominion*, 41: <a href="http://www.povnet.org/node/1778">http://www.povnet.org/node/1778</a>

Been, V. (1993). What's fairness got to do with it? Environmental justice and the siting of locally undesirable land uses, *Cornell Law Review*, 78, 1001-1036.

Bharadwaj, L., Nilson, S., Judd-Henry, I., Ouellette, G., Parenteau, L., & Tournier, C. (2006). Waste disposal in First-Nations communities: The issues and steps toward the future, *Journal of Environmental Health*, 68(7), 35-39.

Boer, J.T., Pastor, M, Sadd, J.L. & Snyder, L.D. (1997). Is there environmental racism? The demographics of hazardous waste in Los Angeles County, *Social Science Quarterly* 78, 793-810. Bullard, R.D. (1993). *Confronting environmental racism: Voices from the grassroots*. Boston: South End Press.

Buzzelli, M. (2008). *Environmental justice in Canada – It matters where you live*. CPRN Research Report, Ottawa: Canadian Policy Research Networks.

Cape Breton Post (2003, June 17). *Membertou says toxic waste hurt fishing, wants compensation* 

http://www.safecleanup.com/jag/ps061703.htm

Community Tool Box (2014). *How to conduct research: An overview*: retrieved on January 31, 2014: http://ctb.ku.edu/en/table-of-contents/advocacy/advocacy-research/overview/main

Crowder, K. & Downey, L. (2010, January). InterNeighborhood migration, race, and environmental hazards: Modeling micro level processes of environmental inequality, *AJS*, 115 (4), 1110–1149.

Dei, G.J.S. (1996). Basic principles of antiracism education. In G. Dei (Ed), *Antiracism education: Theory & practice* (pp. 24-39). Halifax: Fernwood.

Downey, L. & Hawkins, B. (2008, December). Race, income, and environmental inequality in the United States, *Sociol Perspect*, 51 (4), 759–781.

East Coast Environmental Law (2013). Flawed fur farm bill too hasty, leaves watersheds open to pollution. Retrieved September 1, 2013: http://www.ecelaw.ca/environmental-law-alerts/flawed-fur-farm-bill-too-hasty-leaves-watersheds-open-to-pollution.html

Fraser, S. (2013). In whose backyard?, Between the Issues, 31 (2), 16.

Furgal, C., & Seguin, J. (2006). Climate change, health, and vulnerability in Canadian northern Aboriginal Communities. *Environmental Health Perspectives*, *114*(12), 1964-1970.

Harper, S.L., Edge, V.L., Wilcox, A.C. & Rigolet Inuit Community Government. (2012). Changing climate, changing health, changing stories Profile: Using an ecohealth approach to explore impacts of climate change on Inuit health. *Ecohealth*, 9, 89-101.

Hsieh, C. & Ben-Chieh, L. (1983). The pursuance of better quality of life: In the long run, better quality of social life is the most important factor in migration, *American Journal of Economics and Sociology*, 42, 431-440.

Hunter, L.M. (1998). *Population and Environment: A Journal of Interdisciplinary Studies*, 19 (3), 247.

Hunter, L.M., White, M.J., Little, J.S. & Sutton, J. (2003). *Environmental hazards, migration, and race*. Report, Boulder: Social Science Data Analysis Center, Institute of Behavioral Science.

Institute for Integrative Science & Health (2014). *Two-eyed seeing*. Retrieved on February 4, 2014: http://www.integrativescience.ca/Principles/TwoEyedSeeing/

Maantay, J. (2002). Mapping environmental injustice: Pitfalls and potential of geographic information systems in assessing environmental health equity. *Environmental Health Perspective*, 110 (supp 2), 161-171.

Mascarenhas, M. (2007). Where the waters divide: First Nations, tainted water and environmental justice in Canada, *Local Environment*, 12(6), 565-577.

Mitchell, J.T., Thomas, D.S.K. & Cutter, S.L. (1999). Dumping in Dixie revisited: The evolution of environmental injustices in South Carolina, *Social Science Quarterly*, 80, 229-243.

Saulnier, C. (2009). Poverty reduction policies and programs: The causes and consequences of poverty: Understanding divisions and disparities in social and economic development in Nova Scotia. Social Development Report Series. Commissioned by the Canadian Council on Social Development.

Sharp, D. (2009). Environmental toxins, a potential risk factor for diabetes among Canadian Aboriginals. *International Journal of Circumpolar Health*, *68(4)*, 316-326.

Statistics Canada. (2011, January 1) *Nova Scotia Community Counts, Census of Population and National Household Survey:* <a href="http://www.gov.ns.ca/finance/communitycounts/profiles/community">http://www.gov.ns.ca/finance/communitycounts/profiles/community</a>: Retrieved on August 17, 2013.

Statistics Canada (2008) *Earnings and Incomes of Canadians Over The Past Quarter Century, 2006 Census.*" Ottawa: Statistics Canada. [Electronic Version] Retrieved May 8, 2008, from, <a href="http://www12.statcan.ca/english/census06/analysis/income/pdf/97-563-XIE2006001.pdf">http://www12.statcan.ca/english/census06/analysis/income/pdf/97-563-XIE2006001.pdf</a>

Technology Student (2013). *Advantages and disadvantages of wind power*. Retrieved on September 1<sup>st</sup>, 2013: http://www.technologystudent.com/energy1/wind8.htm Teelucksingh, C. (2007). Environmental racialization: Linking racialization to the environment in Canada, *Local Environment*, *12*(6), 645-661.

Trainor, S. F., Chapin, S. F., Huntington, H. P., Natcher, D. C., & Kofinas, G. (2007). Arctic climate impacts: Environmental injustice in Canada and the United States. *Local Environment*, *12*(*6*), 627-643.

Waldron I (2012). Out from the margins: Centering African-centred knowledge in psychological discourse, *The Australian Community Psychologist* (Special Issue: Ignored No Longer- Emerging Indigenous Researchers on Indigenous Psychologies) 24:34–47.

Waldron, I. (2010, May). The marginalization of African indigenous healing traditions within Western medicine: Reconciling ideological tensions & contradictions along the epistemological terrain, Women's Health and Urban Life: An International and Interdisciplinary Journal, 9 (1), 50-71.

Waldron, I. (2002). African Canadian women storming the barricades!: Challenging psychiatric imperialism through indigenous conceptualizations of illness and healing", Ph.D. thesis, Sociology and Equity Studies in Education, Ontario Institute for Studies in Education, University of Toronto

Wlodarczyk, T. (2009). *Community well-being approach to socio-economic assessment*. Retrieved on January 5, 2014: <a href="http://www.oaia.on.ca/documents/09conf/Wlodarczyk%20Presentation%20Day%202%20-version%202%20(2003%20ppt).pdf">http://www.oaia.on.ca/documents/09conf/Wlodarczyk%20Presentation%20Day%202%20-version%202%20(2003%20ppt).pdf</a>



